



# The Metropolitan Water District of Southern California General Manager's Monthly Activity Report for December 2018

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.

DECEMBER 20, 2018

## WATER SYSTEM OPERATIONS

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

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

**Objective: Optimize Maintenance.**

Staff and a consultant inspected a geotechnical fault trench adjacent to the Casa Loma Siphon Barrel No. 1 along the Colorado River Aqueduct. The geotechnical information obtained will provide critical information to develop alternatives to replace the existing siphon and improve pipeline seismic resiliency. Casa Loma Siphon Barrel No. 1 was constructed in 1935 as part of the CRA. Over the past 83 years, there have been several incidences of cracks and leakage as a result of subsidence and ground movement along the Casa Loma fault. Earthquake-resistant ductile iron pipe, which can absorb relatively large ground displacements, may be used to replace this siphon. *(see photo below)*



Staff inspecting a geotechnical trench of the Casa Loma fault that crosses the CRA

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## ADMINISTRATIVE SERVICES SECTION

### CORE BUSINESS: Business Processes

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

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

The Technical Writing Team introduced Operating Policy Central at the December Group Managers' meeting. This is a new SharePoint collaborative workspace intended to create and update Metropolitan's operating policies. Developed in collaboration with the Information Technology Business Applications Team, OPC provides a central location to manage policies, enforce version control, automate workflows, and track electronic approvals. The SharePoint workspace will be ready for use in January 2019.

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

The second quarter newsletter distributed to employees highlighted The Eco-Innovation Movement at Met. This latest issue provided inspiring insights to current eco-friendly and innovative-minded programs, such as:

- The H2O Tech Connect Program
- Electrical Vehicle Charging Stations
- Web-based Mobile Software
- Eco-Innovators Showcase

## ANNEXATIONS

As a result of the 2018 annexations, Metropolitan's current service area increased over 785.3 acres (or 1.23 square miles) and is now approximately 5,180 square miles as reported to the State Board of Equalization on December 1, 2018.

Metropolitan Board-approved annexations completed in 2018 include:

- Calleguas Municipal Water District Annexation No. 102—added 0.74 acres, completed July 30, 2018, per the provisions of Metropolitan Resolution 9240, adopted May 8, 2018.
- 51st Fringe Area Annexation to Western Municipal Water District—added 78.5 acres, completed October 16, 2018 per the provisions of Metropolitan Resolution 9228, adopted July 11, 2017.
- 106th Fringe Area Annexation to Eastern Municipal Water District—added 457.89 acres, completed December 14, 2017 per the provisions of Metropolitan Resolution 9207, adopted April 12, 2016.
- 108th Fringe Area Annexation to Eastern Municipal Water District—added 6.94 acres, completed November 13, 2017 per the provisions of Metropolitan Resolution 9232, adopted November 14, 2017.
- Campus Park West Annexation to San Diego County Water Authority—added 241.26 acres, completed December 13, 2017 per the provisions of Metropolitan Resolution 9184, adopted December 9, 2014.

There were no Metropolitan city-approved annexations in 2018. Only one reorganization between member agencies of Metropolitan was completed. Reorganization No. 2017-04 of 2.05 acres to the Las Virgenes Municipal Water District from West Basin Municipal Water District recorded on October 25, 2018 as instrument number 20181087008.

As reported in the annual annexation report, the annexation fee increases to \$5,965 per acre for 2019.

## BAY-DELTA INITIATIVES GROUP

### GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

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

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

On December 7, the California Department of Water Resources withdrew the Certification of Consistency with the Delta Plan for the California WaterFix project. Despite DWR's firm belief that the project is fully consistent with the Delta Plan and the administrative record more than adequately supports its findings, DWR voluntarily withdrew its Certification of Consistency. In its letter to the Delta Stewardship Council, DWR requested that the Council dismiss all appeals of the California WaterFix Certification of Consistency that were deemed timely and filed on August 27, 2018. On that same day, the council's Executive Officer dismissed the appeals, encouraging DWR to re-engage with the council in consultation.

#### Joint Powers Authorities

The Delta Conveyance Finance Authority held a meeting on December 14. At the meeting, the Finance Authority considered and approved of a conflict of interest code and authorized an agreement with Michael Bell Management consulting, Inc., for continued Executive Director services.

### 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—Regulatory, Planning, and Legislative Support

#### State Water Resources Control Board

On November 7, 2018, the State Water Resources Control Board (SWRCB) held a meeting to consider adoption of changes to the Bay-Delta Water Quality Control Plan (WQCP). The SWRCB did not take action at that time, and the meeting was continued until December 12, 2018, to allow for the further development of a Voluntary Settlement Agreement (VSA). At the December meeting, DWR Director Karla Nemeth and California Department of Fish and Wildlife Director Chuck Bonham presented details on the VSA proposal. The VSA proposal provides a framework of flow, habitat, funding, and governance elements covering the Sacramento River, Feather River, Yuba River, American River, Mokelumne River, Tuolumne River, and the Friant Unit of the Central Valley Project. At this time, the Merced River and the Stanislaus River water users are not part of the proposed settlement. After receiving public comment and extensive deliberation by its members, the SWRCB approved amendments to the WQCP for the Lower San Joaquin River and Southern Delta, including amendments that update water flow objectives in the Lower San Joaquin River and its major tributaries, the Stanislaus, Tuolumne and Merced Rivers, and revised southern Delta salinity objectives. When adopting the Water Quality Control Plan amendments, the SWRCB indicated a willingness to consider the Voluntary Settlement Agreement proposal in the future and urged participants to continue their collaborative work.

## BAY-DELTA INITIATIVES GROUP

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

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

Staff is participating in the U.S. Fish and Wildlife Service Longfin Smelt Species Status Conservation Assessment. The process includes agency and non-agency experts on the biology and ecology of Longfin smelt. The assessment will produce a document that describes the Resiliency, Representation, and Redundancy of the species in the historical, current, and future context, and is expected to be concluded by July 2019.

Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). In December, the CSAMP Policy Group received presentations on preliminary results for Delta Smelt Resiliency Strategy actions implemented in 2018 and on a CAMT study evaluating sources of bias in Delta smelt surveys.

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

##### Delta Flood Emergency Management Plan

The Delta Flood Emergency Management Plan is undergoing final review at the Department of Water Resources. DWR has advised that in the event of catastrophic damage to Delta levees such as the Middle River Emergency Freshwater Pathway, levee breaches would be stabilized and deformed levees in jeopardy of failure would be immediately repaired, while broader state and federal strategies are developed. Technical approvals have been received to prepare contract documents for large sheet and pipe pile for closure of levee breaches. Following completion of the Delta Flood Emergency Management Plan, exercises will be planned to test strategies among local, state, and federal agencies.

## CHIEF FINANCIAL OFFICER GROUP

### CORE PRIORITY: Business Continuity

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

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

- Continued collaboration with Information Technology on application Disaster Recovery planning in accordance with the Business Impact Analyses requirements.
- Presented a Business Continuity Program update to the Finance and Insurance Committee, highlighting accomplishments over the past year and goals for the year ahead.
- Assisted the business units with updates to their Business Continuity Plans.

## 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 24 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 48 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

### CORE BUSINESS: Financial Management

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

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

The fiscal year ended June 30, 2018, and the 2017 Comprehensive Annual Financial Report will be submitted to the Governmental Finance Officers Association for their Certificate of Achievement for Excellence in Financial Reporting program. Metropolitan has received this certificate for 24 consecutive years.

Accounts payable processed approximately 3,600 vendor invoices in November, net of approximately \$9,600 in discounts.

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

November 2018: Federal Funds Rate: 2.19% SIFMA Index: 1.69% 1 Month LIBOR: 2.35%

In August 2018, Metropolitan entered into a Note Purchase and Continuing Covenant Agreement with Bank of America, N.A. (the 2018 BANA Agreement) to provide gap funding for costs related to California WaterFix. On November 1, 2018, Metropolitan drew \$7.8 million on the 2018 BANA Agreement.

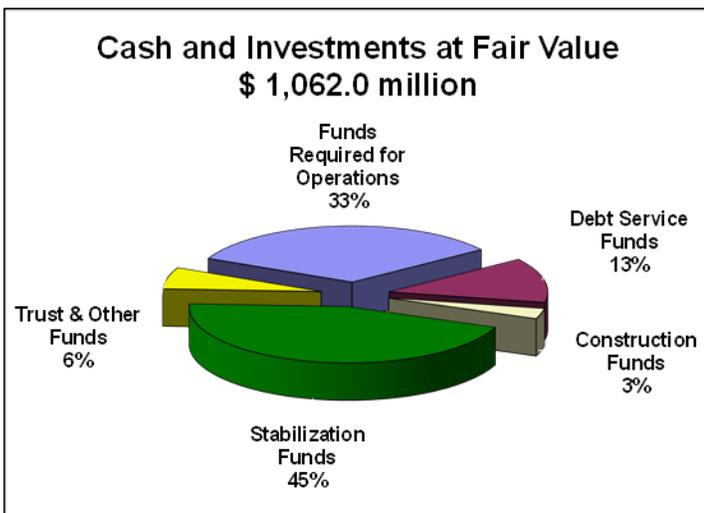
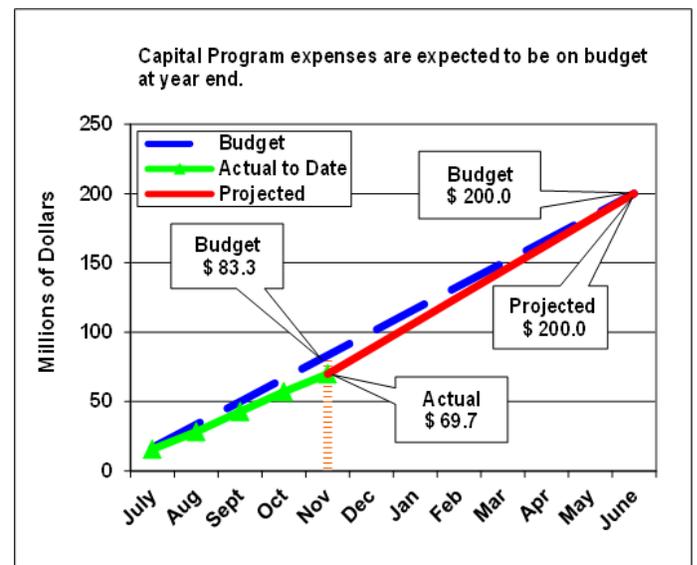
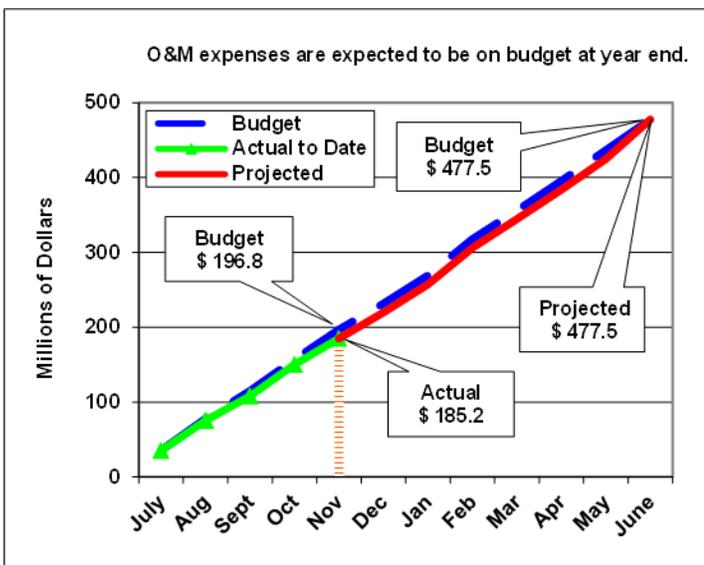
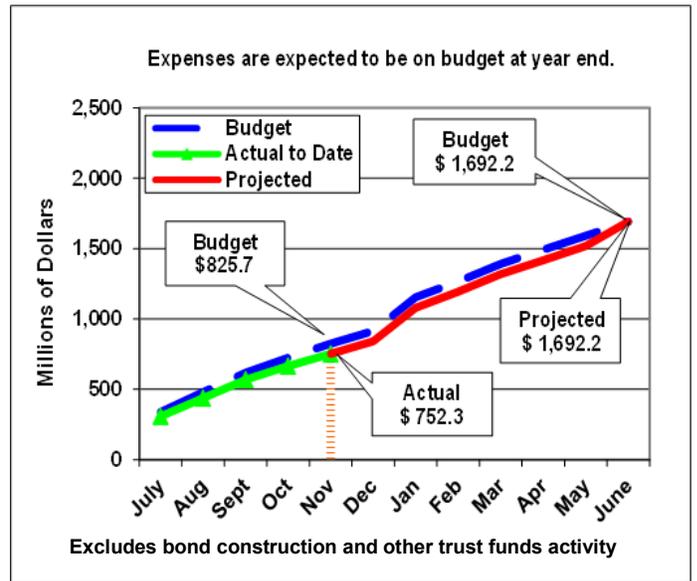
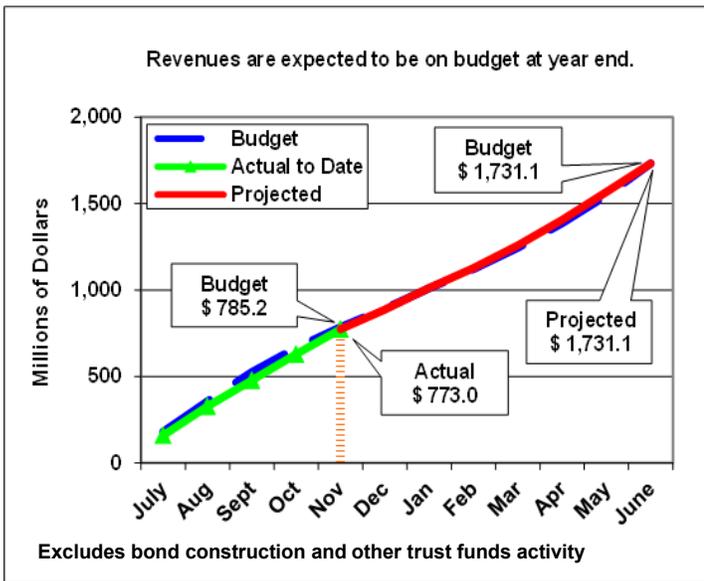
On November 27, 2018, Metropolitan priced \$137,485,000 Water Revenue Refunding Bonds, 2018 Series B. The bonds refunded outstanding water revenue bonds. The refunding will provide for total debt service savings of \$44.0 million over the next 20 years. Bank of America Merrill Lynch was the senior manager, and Loop Capital Markets and Siebert Cisneros Shank & Co., L.L.C., were co-managers on the transaction.

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

As of November 30, 2018, the balance in Metropolitan's investment portfolio was \$1.06 billion and Metropolitan's portfolio managers executed 109 trades in November.

During the month of November 2018, Treasury staff processed 1,487 disbursements by check, 20 disbursements by Automated Clearing House (ACH), and 63 disbursements by wire transfer; Treasury staff processed 78 receipts by check, 26 receipts by ACH, and 37 receipts by incoming wires and bank transfers.

FINANCIAL SUMMARY AS OF NOVEMBER 30, 2018



Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.47 x
Revenue Bond Coverage	> 2.00 x	1.62 x
Revenue Bond Debt / Equity Ratio	< 100.0%	61.5 %

Senior Lien Revenue Bond Credit Ratings

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

## ENGINEERING SERVICES GROUP

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

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

#### Distribution System Reliability Program

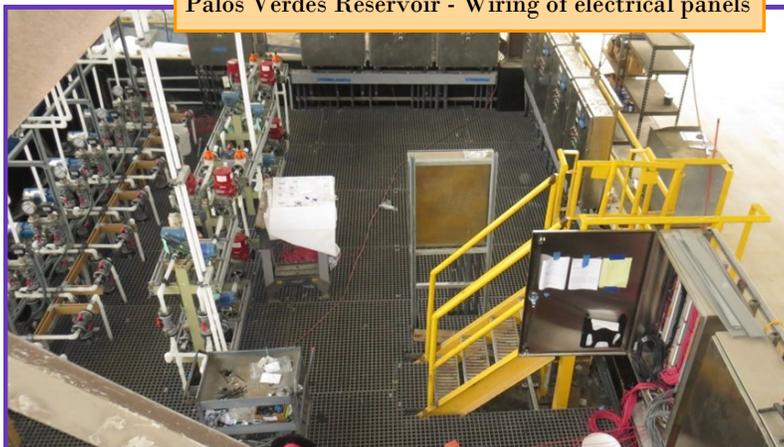
This program maintains reliable water deliveries through specific repair and rehabilitation projects on Metropolitan's pipelines, reservoirs, and control structures. Recent activities include the following:

- 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 75 percent complete and is scheduled to be complete by March 2019. Preliminary design of the Stage 2 improvements is 25 percent complete and is scheduled to be complete by July 2019.
- Red Mountain Hydroelectric Plan. This project refurbishes and/or replaces the turbine's mechanical components. Final design is 25 percent complete and is scheduled to be complete by May 2019.
- Lake Mathews Wastewater System Replacement. This project replaces the on-site wastewater collection system and connects the new system to a nearby municipal sewer line. Final design is 15 percent complete and is scheduled to be complete by June 2019.
- Rialto Pipeline CB – 12&16. This project replaces two service connection valves on the Rialto Pipeline. Construction is 10 percent complete and is scheduled to be complete by June 2019.
- Lake Perris Seepage Water Conveyance Pipeline. This project installs a 3,100 foot-long, 24-inch diameter pipeline to convey Lake Perris seepage water to the Colorado River Aqueduct. Preliminary design is 10 percent complete and is scheduled to be complete by May 2019.
- Etiwanda Pipeline Relining. This project will replace the mortar lining, which has become delaminated from the steel pipe, in three phases. Under Phases 1 and 2, the replacement of the mortar lining in 3.0 miles of pipeline has been completed. Based on the results of the inspection in September 2018,

final design for Phase 3 will reline the remaining 2.5 miles of pipeline. This work will include relining approximately 1,200 feet of the Etiwanda Pipeline with smaller diameter pipe, and recoating the remaining 12,000 feet of pipe with polyurethane as originally planned. Final design is 90 percent complete and award of a construction contract to reline the remaining portion of the pipeline under Phase 3 is scheduled for July 2019.

- Wadsworth Pumping Plant Yard Piping Lining Repairs. This project replaces the existing deteriorated coating within the yard piping at Wadsworth Pumping Plant. Construction is six percent complete and is scheduled to be complete by April 2019.
- Service Connections WB-2A and WB-2B Equipment Relocation. This project relocates piping and above-ground panels for Service Connections WB-2A and WB-2B on the West Basin Feeder in response to a street improvement project by the city of Lawndale. Construction was completed in December 2018.
- Palos Verdes Reservoir Rehabilitation. This project replaces the reservoir's existing floating cover and liner, and modifies the existing spillway, control tower, and outlet structures. Construction is 93 percent complete and is scheduled to be complete by January 2019, at which time the reservoir will be available to tie back into the Metropolitan's operating system. ([see photo below](#))

Palos Verdes Reservoir - Wiring of electrical panels



## 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...

#### **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, Calabazas 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. 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 five percent complete and is scheduled to be complete by November 2019. Final design of Reaches 2 was completed in December 2018. Reach 3 is 82 percent complete and are scheduled to be complete by April 2019.
- Second Lower Feeder Pipe Fabrication. Fabrication of steel liner pipe for the next two

reaches will provide approximately 21,100 feet of 75-inch-diameter welded steel liner pipe. Fabrication is 37 percent complete and the initial delivery of pipe for Reach 4 is scheduled to be complete by January 2019.

- 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 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. The remaining 66 valves will be delivered by September 2019.
- Sepulveda Feeder Urgent Relining. The scope of the construction contract includes lining approximately 400 feet of existing PCCP segments with a steel liner along Del Amo Blvd. A construction contract was awarded by the Board in December 2018 and construction is scheduled to be complete by February 2019.

#### **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 80 percent complete and is scheduled to be complete by April 2019.
- Intake Power Line and Communication Replacement. This project relocates a power

transmission line that serves Intake Pumping Plant and several remote CRA facilities. Construction is 16 percent complete and is scheduled to be complete by September 2019.

- CRA UPS Replacement. This project replaces the uninterruptible power supply (UPS) systems at the five CRA pumping plants. Each plant has a UPS system to prevent fluctuations in power quality and to serve as a backup in case of loss of power. Construction is 19 percent complete and is scheduled to be complete by November 2019.
- CRA Radial Gate Replacement. – This project replaces eight deteriorated radial gates along the aqueduct in two stages. Construction of Stage 1 to replace a radial gate at Eagle Mountain Pumping Plant is 45 percent complete and is scheduled to be complete by March 2019. Final design of Stage 2 to replace the remaining seven gates is 85 percent complete and is scheduled to be complete by February 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...**

- **CRA Cranes Rehabilitation.** This project replaces the overhead crane systems within each pump house and the portable pump-bay crane systems, including bridges, trolleys, hoists, drive trains, and system controls. Final design is 46 percent complete and is scheduled to be complete by April 2019.
- **CRA Circulating Water & Sump Discharge Piping Systems Rehabilitation.** This project replaces the 75-year-old pump house circulating water and sump pump discharge piping systems at all five CRA pumping plants. The systems include parallel pumps and piping that circulate cooling water and collect drainage water from several sources: return cooling water flows; washwater from plant maintenance activities; used backwash water from the plants' potable water treatment systems; and leakage from the main CRA pumps. A construction contract was awarded by the Board in December 2018.

#### 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:

##### 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 25 percent complete and is scheduled to be complete by May 2019.

##### Diemer Plant

- **Diemer Filter Outlet Conduit Seismic Upgrade Project.** This project constructs seismic restraints for the Diemer Filter Outlet Conduit. Construction is 90 percent complete and is scheduled to be complete by July 2019.
- **West Basin and Filter Building Rehabilitation.** This project performs rehabilitation of the west flocculation/sedimentation basins and filter building at the Diemer plant, including replacement of treatment basin equipment and filter valves, abatement of hazardous materials, and seismic strengthening of the filter building. Construction is two percent complete and is scheduled to be complete by December 2020.

##### Mills Plant

- **Electrical Upgrades, Stage I.** This project replaces electrical equipment, provides backup in the event of individual component failures, and upgrades the Mills electrical system to be consistent with current codes and industry practices. The work will be completed in three stages. Construction of Stage I is 45 percent complete and is scheduled to be completed by June 2019.

### GM STRATEGIC PRIORITY: Maximize Local Resources

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

#### Regional Recycled Water Program

- **Advanced Water Treatment Demonstration Plant.** This project constructs a 0.5 mgd demonstration facility on the grounds of the Los Angeles County Sanitation District's Joint Water Pollution Control Plant. The demonstration facility will collect data for regulatory acceptance of the proposed process train for a full-scale recycling plant, and will enable testing that will optimize the treatment process. Construction is 93 percent complete and is scheduled to be complete by January 2019. (see [photos next page](#))

## ENGINEERING SERVICES GROUP



Advanced Water Treatment Demonstration Plant - Loading membrane cassette into MBR-2 module (story previous page)

## ENVIRONMENTAL PLANNING SECTION

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

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

### CEQA/NEPA

- Coordinated with U.S. Bureau of Reclamation on the joint Environmental Assessment/Negative Declaration for the Dennis Underwood Conservation Project during the public review period ending November 9.
- Coordinated with Legal, Engineering Services, and Real Property regarding property rights acquisition and environmental impact avoidance and/or minimization for the Perris Valley Pipeline Project.
- Finalized for public review the Mitigated Negative Declaration for the West Valley Feeder No. 1 Stage 3 Improvements project.
- Continued biological, cultural, and paleontological surveys for the Sepulveda Feeder in support of the PCCP Reliability Program.
- Coordinated with Engineering Services on design of Prestressed Concrete Cylinder Pipe Second Lower Feeder Reach 9 and initiation of Supplemental EIR.
- Completed draft Addendum No. 3 to the PCCP Program EIR to provide CEQA coverage for the Second Lower Feeder Reach 2 project.
- Preparing Addendum No. 4 to the PCCP Program EIR to address the Second Lower Feeder Reach 3 project.

## ENVIRONMENTAL PLANNING SECTION

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

### Regulatory Permitting Support and Compliance

- Secured emergency permits to repair the Colorado River Aqueduct patrol road, recover exposed barrel in 33 places of an 8-mile section of the CRA, restore the drainage channel behind the CRA protective berm, and repair the berm along the same section. Emergency repairs were needed as a result of heavy storm activity. Staff is utilizing Metropolitan's Unmanned Aerial Vehicle program to assess damage, document habitat conditions, and determine impacts in preparation for regulatory agency negotiations.
- Submitted Special Conditions Compliance Package to the California Coastal Commission, as required prior to issuance of the Coastal Development Permit for the Orange County Feeder Blow-off Rehabilitation Project.
- Submitted SAA notification to CDFW for the Rialto Feeder shutdown and dewatering; CDFW determined that an SAA was not needed.
- Supported Water System Operations with vegetation and debris maintenance activities in Bull Creek and Weldon Canyon adjacent to the Jensen plant in compliance with CDFW long-term maintenance SAA.
- Preparing permit compliance report for vegetation maintenance activities completed at the Cajalco Creek Dam and Detention Basin and ensured that work was completed in accordance with regulatory permits.
- Completed monitoring of seeding and site restoration at the Whitewater CRA Siphons Erosion Protection project as required by the CDFW SAA. This was the final task for project completion; staff is preparing final regulatory reports.

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

- Provided input on biological resources impact minimization in support of a Safety of Dams guidance manual for dam and reservoir maintenance.
- Documented the Jensen Stormwater project to ensure it functioned as designed during a rainstorm. Staff assisted with design and implementation of this project to capture and transport stormwater to swales and native plants located at the Jensen plant entrance. *(see photo right)*

Stormwater Capture Project at Jensen plant. Documented that it is functioning as designed during recent rains. Project captures stormwater runoff and directs it to swales and areas with native plants.



## ENVIRONMENTAL PLANNING SECTION

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

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

### Southwestern Riverside County Multi-Species Reserve

Supported completion of the culvert wildlife undercrossing component of the Angler Avenue retrofit project. All construction is complete and the site will be revegetated during winter 2019 with coastal sage scrub vegetation to restore the site to pre-construction conditions.

### Lake Mathews Multiple Species Reserve

- At the October 17 Reserve Management Committee meeting, the Reserve Manager reported on implementation of previously approved management tasks including grassland restoration, cactus wren habitat mapping, and several predator surveys, which identified two distinct bobcats and many coyotes.
- Surveyed and evaluated biological resources value of potential acquisition properties in the Lake Mathews area.

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

- Attended site visit with consultant Engineer specializing in historic architecture to ensure design of Weymouth Administration Building Seismic Upgrades project retains the building's historic integrity consistent with Spanish Art-Deco style.
- Completed inventory and mapping of existing cultural resource data in Metropolitan files.
- Began inventory and mapping of known resources along 19 pipelines in Los Angeles County.

## 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.**

### WSO Support

- Coordinated with Conveyance and Distribution staff on regulatory permit conditions for the planned Foothill Feeder shutdown, and submitted species protection plans to California Department of Fish and Wildlife as required by permits in advance of the shutdown.
- Conducted biological surveys and monitoring in support of various operation and maintenance activities, including vegetation maintenance, road grading, and shutdowns at various facilities.
- Provided monitoring for and guidance on protection of sensitive biological resources, including desert tortoise habitat, during CRA emergency repairs.
- Monitored removal of inactive raven nest in hypochlorite facility at Jensen water treatment plant. *(see photo right)*



## 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 8 Water System Operations projects, 7 Real Property actions, and 13 board letters.

#### External Project Review

- Commented on 12 CEQA notices for various external projects that may impact Metropolitan facilities and/or operations.
- Facilitated meeting with County of Riverside staff and Painted Hills Wind Turbine Project proponents to address Metropolitan's concerns about the project's potential impacts to operations.

#### Engineering Support

- Reviewed and provided environmental sections to specifications packages for the PCCP Second Lower Feeder Reach 2, Jensen Chemical Feed Control Upgrades, Weymouth Admin Building Seismic Upgrades, Weymouth Water Quality Instrumentation, and seismic upgrades to the La Verne Water Quality Lab and Engineering Building.
- Attended the management exit briefing for the Stage 2 Value Engineering Constructability Review Workshop for the Headquarters Physical Security Improvements.

## 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.

Chairman Record; Chairwoman-elect Gray; Directors Blois, Dake, DeJesus, Butkiewicz, Lefevre, Peterson, Trevino, Vasquez-Wilson and Williams; and General Manager Kightlinger, Chief Operating Officer Upadhyay, Chief Administrative Officer Chapman, General Counsel Scully, and Metropolitan staff attended the Colorado River Water Users Association conference to discuss current issues and progress on the Drought Contingency Plan, transfers, and conservation. (December 12-14)

## 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

Staff conducted briefings and is working with Congressional staff, the U.S. Bureau of Reclamation, and representatives of the Colorado River Basin states about the need to advance federal legislation authorizing implementation of an interstate agreement on a Drought Contingency Plan.

### State

The 2019-20 legislative session convened on December 3. Both Governor Brown and the Governor-Elect Newsom attended the Senate swearing-in ceremony. Senate President Pro Tempore Atkins (D-San Diego) identified affordable health care, K-12 and higher education infrastructure, climate change and wildfires as top priorities. Assembly Speaker Rendon's noted the response to wildfires will dominate legislative deliberations and announced he does not foresee tax increases passing in the near future.

### Newsom Administration

Governor-Elect Newsom will be sworn into office on January 7. Early administration appointments include Ann O'Leary as his chief of staff, Ana Matosantos as cabinet secretary, Catherine Lhamon as chief counsel, and Anthony Williams as chief legislative secretary.

### Local

- Metropolitan staff attended Valley Industry and Commerce Association's Leaders Forum with Los Angeles' General Managers of Building and Safety, Convention and Tourism, Cannabis Regulation, and Recreation and Parks. (December 6)
- Metropolitan staff presented to the San Diego Regional Chamber of Commerce on water supplies conditions and provided an update on the California WaterFix. (December 6)
- Metropolitan staff participated in a Los Angeles County Business Federation (BizFed) Roundtable with Los Angeles City Councilmember Bob Blumenfield (D-San Fernando Valley). (December 10)
- Metropolitan staff attended Oxnard's Water Planning Committee at the Oxnard Chamber of Commerce to identify policy issues of importance in the coming year. (December 10)
- Metropolitan staff attended VICA's Annual Meeting at the Airtel Plaza Hotel and Metropolitan was reappointed to the VICA board along with 41 other business leaders. (December 14)
- Metropolitan staff attended a reception hosted by the President of Cal Lutheran University in Thousand Oaks. (December 15)
- Metropolitan hosted the Los Angeles County Business Federation (BizFed) board meeting. (December 18)

# EXTERNAL AFFAIRS GROUP

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

**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

- Coordinated with city of Beverly Hills to notify media and residents about a major leak and repairs to the Santa Monica Feeder, including the need for conservation during the shutdown.
- Arranged interviews with General Manager Kightlinger and Ryan Sabalow of the *Sacramento Bee*, Tony Kukulich of *Brentwood Press*, and Emily Dooley of *Bloomberg Environment* regarding the state's decision to withdraw the Certification of Consistency with the Delta Plan for California WaterFix.
- For stories on Metropolitan's action to support the Colorado River Drought Contingency Plan, arranged interviews for General Manager Kightlinger and Bettina Boxall of the *Los Angeles Times*, and between Colorado River Resources Manager Hasencamp and KPCC's Larry Mantle (for live Air Talk show), Ry Rivard of *Voice of San Diego*, and Ian James of *Arizona Republic*.
- Provided background materials on Colorado River and Intentionally Created Surplus program water costs to Matt Jenkins of the Lincoln Institute of Land Policy.

Press Releases

- Metropolitan Board approves Drought Contingency Plan to keep Colorado River supplies flowing to Southern California.

- Metropolitan aims to increase conservation in disadvantaged communities through new pilot program.
- Joint release with city of Beverly Hills on pipeline leak and conservation.

Social Media Activities

- Posted three holiday-themed rebate graphics, which also were used by member agencies and continued to be used during the holiday season. *(see photo below)*
- Highlighted the annual Student Water Art Celebration in December with Instagram stories.
- More than 30,000 users visited the English, Spanish, and Chinese versions of the BeWaterWise.com web pages.



Graphic used in advance of Black Friday/Cyber Monday to direct residents to rebates.

Artists, mascots, and program coordinator take one last group photo during the Student Art Reception (story next page)

## 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.

- Hosted the Northern Colorado Water Conservancy District during their Colorado River tour, providing tours of the Intake Pump Plant, Copper Basin, Diamond Valley Lake, and the Wadsworth Pump Plant. (December 3-5)
- Presented to the Republic Homes, Valley Adams, Centennial Park, Laurelhurst, and Shadow Run neighborhood associations in Santa Ana regarding the upcoming Orange County Feeder Relining Project. (December 5 & 13)
- Met with the City of Rolling Hills Estates to provide an update on construction progress and dam safety at the Palos Verdes Reservoir and followed up with outreach to the community. (December 5 and 18)
- Hosted the Reclamation Leadership Development Program at Gene Camp and provided a tour of the Intake Pump Plant and Copper Basin during the Lower Colorado Tour with the Water Education Foundation. (December 5-6)
- Provided a tour of the Weymouth plant, manufacturing services shops, and Water Quality Lab for the Joint Utility Vendor Audit Consortium. (December 6)
- Provided outreach to 300 residents and businesses for the upcoming Sepulveda Feeder Urgent Relining Project. (December 13)

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

### General Education

Chairwoman-elect Gray attended the annual Student Art contest reception at which Metropolitan honored the 36 students whose artwork was selected for the 2019 "Water Is Life" calendar. Also in attendance were parents, teachers, and representatives from member and retail agencies. (December 4) [\(see photo page 15\)](#)

### Event Sponsorships and Community Partnering Program

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

- California Science Teacher Association Conference (December 1) – figure #4
- California Endowment for California Safe Schools (December 4)

Metropolitan staff attended U.S. Green Building Council Los Angeles Chapter annual event. (December 6)

### Diamond Valley Lake Education Program

Metropolitan staff hosted nearly 400 visitors at the Visitor Center and guided more than 300 visitors to the Clayton Record Viewpoint.

### Solar Cup

The 2019 Solar Cup Technical Workshop was hosted by Metropolitan and held at Headquarters with 100 students and teachers (December 1) [\(see photo right\)](#)

Dr. Hightower, Education Unit Manager, welcomes students and teachers to the first 2019 Solar Cup Technical Workshop.



## 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 presentations, participation, and sponsorship of the following programs, conferences, and events including:

- Filipino American Chamber of Commerce's Awards Night (December 1)
- Larta Institute, the nation's leading commercialization engine for science innovation and entrepreneurship, VIP Reception 2018 (December 6)
- U.S. Veteran Business Alliance's Turning Construction Contacts into Contracts Conference (December 13)

Executive management and teams from Water System Operations, Engineering Services, Water Resource Management, Information Technology, Human Resources, Legal, and External Affairs participated in a global technology workshop to evaluate 37 new technology solutions for remote sensing, cyanobacteria, algae blooms, asset management, and cyber security. (December 5)

Metropolitan hosted the second Member Agency Innovation Council to continue discussions on the council's objectives as well as share innovation updates from respective agencies. (December 12)

Staff participated in a panel and met with German technology during the 2nd Germany California Water Symposium. (December 11)

## HUMAN RESOURCES

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

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

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

Class Five of the Metropolitan Management Academy focused on the *Art of Motivating and Engaging Employees, Motivating a Multi-generational Workforce* and a panel discussion with unit managers was held at Eagle Rock and included a tour of the control center.

- Staff facilitated a team-building session for a work team at Lake Mathews, using *Success Signals* as a platform to generate discussions on communication challenges. Staff also provided information on the Tuition Reimbursement Program and Career Planning at a Lake Mathews all-staff meeting.
- Staff facilitated separate Team Building workshops for the Procurement Team and the External Affairs Administrative Services Team at Headquarters.
- Staff delivered a *Success Signals* class and an *Interview Skills* class (with 21 participants) to employees at Weymouth plant.

## HUMAN RESOURCES

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

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

Recruitment filled 13 positions for the month of December and received 12 new staffing requisitions resulting in 154 positions currently in recruitment. Offers will be made for the Pre-Apprentice Recruitment targeting a start date of late January.

### 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.

- Cohort 7 of Metropolitan Management University for Team Managers completed the fifth of six Modules that focused on Interpersonal Effectiveness, which covered topics such as Emotional Intelligence, Leading with Communication, Leading Across Generation, and Identifying Personality Styles.
- Nine managers attended the Institute of Management Studies all-day seminar on *Critical Thinking: Managing Uncertainty and Anticipating the Unexpected*, presented by Dr. Kathy Pearson of the Wharton School.
- Staff continues to provide coaching for eight managers and administers contracts with seven external coaches doing the same. Staff also provided one-on-one coaching for employees seeking guidance on interview skills and resume preparation.

### HR PRIORITY: Provide Excellent Human Resources Services

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

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

- Staff participated as a panel member at the Chief Learning Officer Exchange in Carlsbad, California, to discuss the use of the Thoughtexchange electronic feedback technology to gather real-time attendee feedback using smartphones and Internet access.
- The new MyLearning system continues to be developed for easier access and use and more robust tracking of required training and outside training.
- The Human Resources Technology plan is being developed with a goal of simplifying HR processes using technology and ease of access to information. Implementing the new MyJobs recruiting system is the first step, followed by the update of MyLearning in early 2019.

## HUMAN RESOURCES

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

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

HR Benefits issued 2019 Benefits Confirmation Statements to all employees.

HR Benefits worked with Legal and outside counsel to consolidate and reduce Administrative Code sections 6780 and 6800, which govern the Deferred Compensation 401(k) and 457(b) plans, and developed standalone plan documents outlining the plan provisions and administration rules for the two plans.

HR Benefits coordinated and hosted the fourth quarter Deferred Compensation Advisory Committee meeting on December 12 that included representatives from each bargaining unit, Human Resources, Finance, and Legal, the Investment Consultant from the HYAS Group, and the Client Relationship Manager from Empower Retirement. The meeting reviewed third quarter plan and investment performance; regulatory, administration and legal updates; participant education; and plan enhancement opportunities.

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

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

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

Staff completed the Sexual Harassment training pilot and training is being rolled out to all managers.

### CORE BUSINESS: Comply with Employment Laws and Regulations

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

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

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

- Arranged 11 medical evaluations (DMV, medical surveillance, hearing conservation, etc.)
- Coordinated 1 random drug/alcohol test
- Addressed 2 Accommodation issues.

## 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 cyber security capabilities by deploying new and emerging technologies, and implementing enhanced security countermeasures.**

- Assessed cybersecurity risks associated with the use of personal email accounts from the Metropolitan provided networks and a determination was made to restore access to personal email accounts for Metropolitan employees.
- Continued efforts to enhance and upgrade Metropolitan's IT cybersecurity infrastructure through operational initiatives and long-term capital investments to better secure Metropolitan's environment against emerging cyber threats.
- Monitored local and national efforts aimed at enhancing security capability for the water sector to determine applicability to Metropolitan.
- Provided on-going security awareness training as part of new hire orientation.

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

Collaborated with Engineering Services Group on IT services in support of the Headquarters Improvement Program with the following activities:

- Continued to coordinate efforts between IT service providers (i.e., IT Networking, Telecommunications, Server Administration, Service Desk) and other key stakeholders necessary for relocation of staff, equipment, and technology infrastructure. Current efforts focus on technological needs and the preparation of employees work spaces and ancillary equipment (network printers, plotters, local printers/scanners) to support the early move phase affecting floors 2 through 6 within the high-rise building.
  - Participated in logistical meetings with Engineering Services project manager and consultants on the January 2019 early move phase.
  - Finalized coordination plans for IT service providers to facilitate network changes and other detail-specific configurations of equipment (i.e., fax lines, copiers, and plotters) before being disconnected in preparation for relocation.
  - Conducted meetings with IT staff who are impacted by the early move phase to work out logistical requirements to meet the relocation timeline defined by the HQ Improvement Plan.

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

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

- During the period, the IT Project Team completed Phase I of the IT Disaster Recovery project on time and on budget. This phase ensures that the most critical applications / services would be operational and available within the requirements defined by the Business Continuity Plan. A disaster recovery exercise is being scheduled with the key stakeholders.
- Subsequent phases of the project will address less critical applications from the Business Continuity Plan and is scheduled to complete in March 2019 (Phase 2) and June 2019 (Phase 3).

## INFORMATION TECHNOLOGY

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

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

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

- Completed evaluation survey of user preferences of the different PC models (desktops and laptops) from tier one vendors and initiated benchmark testing of PC performance.
- Continued development of a standard Windows image for the new PCs essential to establishing computing standards consisting of the operating system, applications, hardware configuration, and security required to operate within Metropolitan's computing environment.

## 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.

In support of the Prestressed Concrete Cylinder Pipe Rehabilitation Project, a three-month lease agreement for staging/storage was acquired from 1991 LLC for an urgent repair of the Sepulveda Feeder in the city of Torrance on Del Amo Boulevard.

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

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

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

- An Entry Permit was granted to Southern California Gas Company to allow non-exclusive use of Metropolitan's fee-owned property as a temporary work area for the inspection, excavation, and repair of their natural gas pipeline, in the city of Van Nuys, County of Los Angeles.
- An Entry Permit was granted to Soroptimist International of the Americas, Inc. to allow for an annual non-profit fundraiser event at Metropolitan's Diamond Valley Lake Western Center, this event serves to benefit the San Jacinto- Hemet community. This will be the 12th consecutive year that the event is held at DVL. Soroptimist International of the Americas, Inc. is a global volunteer movement that works to transform lives of women and girls.

## REAL PROPERTY

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

**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.**

- Valley-Wide Park and Recreation District has two park improvement projects under construction. Two new pickleball courts are being added to the two existing courts. In addition, a memorial wall is being added to the site and will be located near the soccer fields.
- Onboarding continues for two Facilities Housing Technicians to service Hinds and Eagle residential housing units as well as DVL Visitor Center and in-town housing units.
- Real Property representatives in combination with Water System Operations representatives conducted a quarterly update meeting and meet and greet with residents at all desert pumping plants. Management provided status update briefings to District housing residents regarding the status of the transition from WSO to Real Property.

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

Completed remodel of US2-413 to create a multifunctional meeting/conference room. Included installation of monitor with video conferencing capabilities.

## WATER RESOURCE MANAGEMENT

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

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

**Objective: Identify storage policies to improve response to extreme hydrology.**

Department of Water Resources Initial Allocation—The California Department of Water Resources issued an initial allocation of 10 percent for the 2019 calendar year. This initial estimate of the percentage of contractual Table A amounts deliverable by the state in 2019 assumes dry hydrologic conditions going forward and will be updated as hydrologic and water supply conditions develop over the coming year.

# WATER RESOURCE MANAGEMENT

## GM STRATEGIC PRIORITY: Ensure Imported Supply Reliability

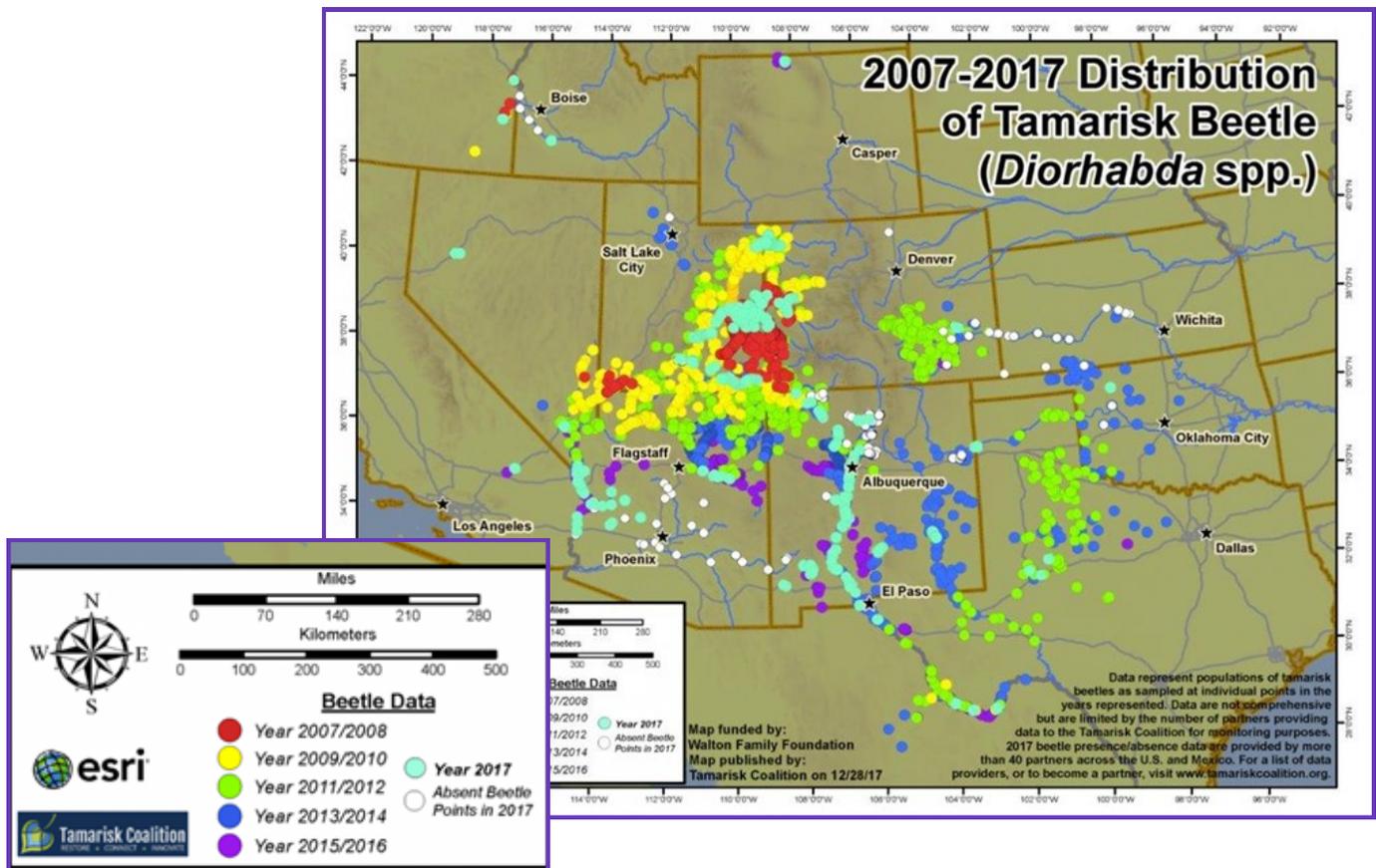
Southern California’s foundational water supply remains the Colorado River and the State Water Project and their ongoing reliability is critical for the region. Important decisions on both supplies need to be made over the next two years.

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

State Water Project Contract Extension—Water Resource Management staff, along with the Legal Department, reviewed the final contract documents for the State Water Project contract extension prior to Board approval. The contract extension ensures another 50 years of water deliveries from the SWP.

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

Tamarisk Leaf Beetle—Metropolitan staff attended a workshop on the status of the Tamarisk leaf beetle, and the second meeting of agencies considering forming a Restoration and Cooperative Weed Management Area for the Lower Colorado River. The beetle is evolving and its range spreading faster than anticipated by the Animal and Plant Inspection Service. The beetle was experimentally released in the wild by the Animal and Plant Inspection Service under a permit by the U.S. Fish and Wildlife Service to study its effects on tamarisk herbivory. This could have positive implications for Colorado River augmentation through tamarisk management. (see chart below)



## WATER RESOURCE MANAGEMENT

### GM STRATEGIC PRIORITY: Maximize Local Resources

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

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

Los Angeles WaterReuse Chapter Meeting—Staff led the Los Angeles WaterReuse Chapter meeting, including a discussion on proposed recycled water policy amendments and recycled water legislation. Approximately 75 local agency staff and consultants attended the meeting at the Las Virgenes Municipal Water District.

Southern California Salinity Coalition On December 6, staff participated in a Southern California Salinity Coalition board meeting. Staff updated the Coalition on current hydrological conditions and current salinity levels in Metropolitan's supplies.

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

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

**Objective:** Promote Metropolitan's technical capabilities and innovation efforts to advance the understanding of water resources management.

Staff attended a workshop on seasonal to sub-seasonal (S2S) forecasting and the water supply outlook for 2019. The weather services have very limited skill to predict sub-seasonal (two weeks to two months) precipitation, although short- and long-term forecasting is much more accurate.

## 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 85,000 acre-feet of water to member agencies in December. December deliveries averaged approximately 2,800 AF per day, a decrease of 2,300 AF per day from November deliveries. Treated water deliveries for December totaled 43,500 AF or 51 percent of total deliveries for the month. This was a decrease of about 26,500 AF from November treated water deliveries. The Colorado River Aqueduct operated at a 5-pump flow in the month of December. A total of 71,000 AF of Colorado River

water was pumped in December, averaging 2,100 AF per day. SWP imports averaged 1,100 AF per day, totaling 33,500 AF for December. The target SWP blends for the Weymouth and Diemer plants were 25 percent for most of December, and zero percent for a portion of the month to support a 10-day shutdown of the Rialto Pipeline. The Skinner plant maintained a 25 percent blend for the month of December.

#### 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 November 2018.

Staff participated in web-based meetings on guidelines for managing Legionella in water systems and the occurrence of microplastics in water. Participation in these meetings ensures that staff has up-to-date information to address emerging and future water quality challenges.

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

Staff continued repairs and refurbishment at Valley View Hydroelectric Plant in Yorba Linda. The work is part of a capital project that was approved by the Board earlier this year. This month, staff completed assembly of needle valve shafts, needle tips, and actuator assemblies. This project is expected to be complete in early 2019.

*(see photo below)*

Staff working on actuator assemblies at Valley View Hydroelectric Plant

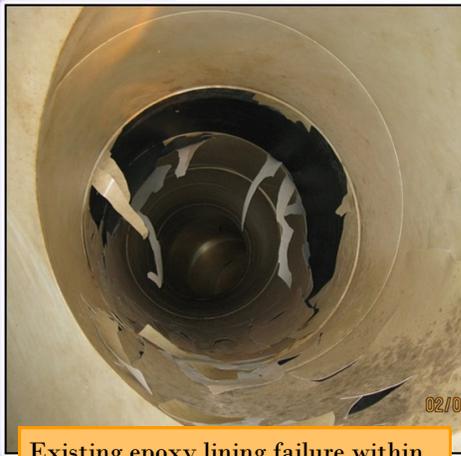


# WATER SYSTEM OPERATIONS

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

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

Staff began work on the Wadsworth Pumping Plant Yard Piping Lining Repairs capital project. The work includes relining approximately 2,200 feet of pipe ranging from 54 to 192 inches in diameter. The existing epoxy lining will be removed and replaced with a new polyurethane lining. Staff completed pipeline dewatering, valving, and isolation to establish a clearance on the Wadsworth yard piping system. Wadsworth yard piping is used to convey water into and out of Diamond Valley Lake.



Existing epoxy lining failure within Wadsworth yard piping



Contractor staging equipment for Wadsworth pumping plant yard piping repairs

In preparation for the Diemer West Basin Rehabilitation and Filter Building Seismic Upgrades capital project, staff took flocculation and sedimentation basins on the west side of the plant out of service for cleaning. This work includes the upgrade of all mechanical and operational equipment associated with the four flocculation and sedimentation basins on the west side of the Diemer plant, along with seismic strengthening of the filter building. The east basins were rehabilitated in 2016. This project will replace 50-year-old equipment and ensure reliable operation of the Diemer plant.

Staff cleaning sedimentation basin at the Diemer plant

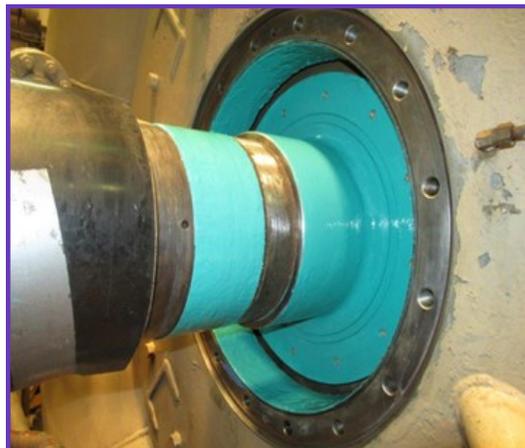


# WATER SYSTEM OPERATIONS

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

**Objective: Optimize Maintenance.**

Staff continued coatings of various equipment, structures, and pipelines throughout Metropolitan’s system. In December, staff performed coating work at the Wadsworth pumping plant spillway, Skinner plant, Perris and Coyote Creek hydroelectric plants, Lake Mathews tank farm, Lower Feeder, and the Inland Feeder access structure. Coyote Creek Hydroelectric Plant is located on the Lower Feeder and has a design capacity of 3.1 megawatts. Corrosion repair and recoating was completed on the draft tube, which is located on the downstream side of the turbine and receives water from the generation unit. This work helps to maximize the service life of the generator. *(see photos below)*



Draft tube at Coyote Creek Hydroelectric Plant before (left) and after (right) coating

Staff completed replacement of the existing 24-inch butterfly valve at service connection CB-14 located along the Rialto Pipeline in the city of Rancho Cucamonga. The existing valve was not sealing properly and was removed for repair. *(see photos below)*



Installation of air release vacuum valve piping

Installation of new 24-inch butterfly valve



# WATER SYSTEM OPERATIONS

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

**Objective: Optimize Maintenance. Continued...**

The La Verne Shops fabricated and coated various pipe segments, fittings, and valves for the dewatering piping system at the Palos Verdes Reservoir. Staff will install these pipe segments and fittings within the vault and energy dissipating structure at the outlet of the reservoir. This work is part of a project to simplify the dewatering process for the reservoir as the existing outlet configuration requires multiple off-site valves and interagency coordination. Work at the Palos Verdes Reservoir outlet includes installing 500 feet of 18-inch high-density polyethylene pipe, an 18-inch control valve, and piping inside the existing valve vault, and construction of the energy dissipating structure. *(see photo right)*

Preparing for slurry backfill at Palos Verdes Reservoir



Staff performed scheduled maintenance on high voltage equipment at the Skinner plant. As part of a five-year maintenance schedule, staff performed high voltage maintenance on circuit breakers, cables, and other electrical equipment to ensure reliability. This work included diagnostic and performance testing to gauge the current condition of the equipment and anticipate potential issues so appropriate maintenance can be performed.

Staff performed routine maintenance on patrol roads and around structures along the Foothill Feeder to provide equipment staging areas and safe access during the upcoming February 2019 shutdown. Metropolitan has several miles of patrol roads that provide access to Metropolitan facilities and structures. These roads erode over time due to normal use and adverse weather conditions. Work includes routine maintenance as well as the addition of base material to roads, parking and staging areas, and around structures.

Staff began installation of fiber optic communication wires at the Perris Pressure Control Structure, located along the Lakeview Pipeline. The Perris PCS is used to regulate flow in the local distribution system, and the facility also includes a hydroelectric power generator and pump station. Ensuring reliable communication to and from the Perris facility is essential. Staff replaced the aging communication wires with new fiber optic lines that are more reliable and provide expanded capabilities.

Installation of communication terminal at the Perris PCS



# WATER SYSTEM OPERATIONS

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

**Objective: Optimize Maintenance. Continued...**

Staff successfully completed a 10-day shutdown of the Rialto Pipeline in December. The pipeline was removed from service from the California Department of Water Resources’ Devil Canyon facility to Live Oak Reservoir. The primary purpose of the shutdown was to allow a contractor to replace two 48-inch butterfly valves at Inland Empire Utility Agency service connections CB-12 and CB-16, located in Rancho Cucamonga. Additionally, staff replaced one 24-inch butterfly valve and various smaller valves along the Rialto Pipeline. A visual and electromagnetic inspection of the prestressed concrete cylinder pipe sections was performed, along with a visual inspection of the welded steel pipe sections. Based on the visual inspections, staff completed a large number of mortar lining repairs along the pipeline. (see photo right)



Contractor setting the 48” butterfly valve at service connection CB-16



Staff performing mortar lining repairs inside the Rialto Pipeline



Staff repaired the outdoor perimeter lighting system at the Etiwanda facility. Approximately 3,000 feet of cable was damaged as a result of vandalism. Staff needed to quickly repair the lighting system as the facility was being used as a command center and equipment staging area for the Rialto Pipeline shutdown.

Staff installed a secondary air compressor, along with the associated transfer switch and conduit, at the Greg Avenue pump station. As pumps at the Greg Avenue facility are expected to be operating during the Foothill Feeder shutdown in February 2019, staff installed an additional air compressor for increased reliability. In the event that the existing air compressor fails, staff can switch to the secondary compressor by operating the transfer switch. The air compressor maintains an air pad in the surge tanks to absorb sudden pressure fluctuations and prevent system failure if the pumps trip offline.

# WATER SYSTEM OPERATIONS

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

**Objective: Optimize Maintenance. Continued...**

In December, staff responded to a leak along the Santa Monica Feeder in Beverly Hills. This portion of the feeder is comprised of 32-inch diameter cast iron pipe. Staff quickly mobilized to identify the leak location and perform emergency repairs. Work was conducted 24/7 and spanned a period of about 10 days. Staff worked closely with the affected member agencies to ensure water deliveries continued to the cities of Beverly Hills and Santa Monica while the feeder was shut down for repairs. Metropolitan also coordinated with Beverly Hills on conservation messaging to reduce water use during the emergency repair period. *(see photos below)*

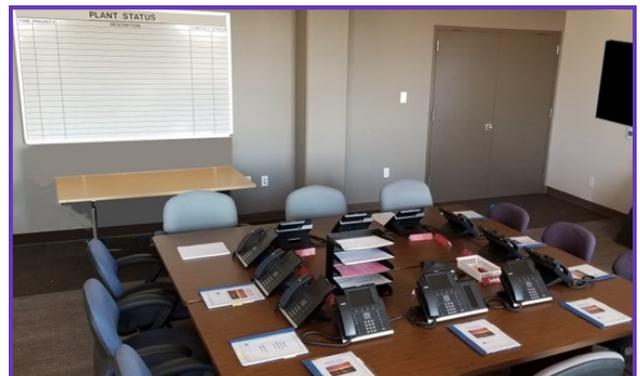


Santa Monica Feeder leak location in Beverly Hills and repairs

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

On December 13, staff attended the quarterly Board of Directors meeting for the California Utilities Emergency Association (CUEA). This was CUEA's first Board meeting since the recent wildfires that impacted the state, and the first meeting under a new Governor and administration. CUEA has signed an agreement with the Governor's Office of Emergency Services and supplies staff to the State Operations Center during a disaster.

Staff redesigned the Incident Command Center (ICC) at the Diemer plant following completion of the Diemer Administration Building Seismic Upgrades capital project. The new ICC provides the necessary tools and resources for emergency management activities at the Diemer plant. *(see photo below)*



Redesigned Command Center

# WATER SYSTEM OPERATIONS

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

Flow-weighted running annual averages for total dissolved solids from October 2017 through September 2018 were 449, 448, and 458 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Following Board approval in 2017, staff has been in the process of removing Skinner Plant 2 from service to better align the Skinner plant operating capacity with the system water demands in the Skinner region. Blind flanges are being installed at the influent to Plant 2 to prevent water from entering the decommissioned plant. Staff is fabricating flanges out of high-density polyethylene plastic, which costs less than purchasing steel flanges. Installation of the flanges is expected to be complete in March 2019.

Staff performed annual maintenance and testing of the Lake Mathews facility emergency generator system. Staff completed checks of all alarms and controls, including engine components, and completed facility transfer load testing required by the National Fire Protection Association.

Staff replaced the third and final pump and valve as part of the Washwater Tank Pump Replacement Project at the Weymouth plant. The original equipment was installed in 1983 and reached the end of its service life. Each new pump is capable of flowing 7,000 gallons per minute to fill the filter backwash water tanks. [\(see photos right\)](#)



Staff positioning valve (left) securing valve (right) to flange on the washwater tank pump at the Weymouth plant.

Several improvements are being made to the sodium hypochlorite tank farm at the Palos Verdes Reservoir. Sodium hypochlorite is needed for additional disinfection at the reservoir. Staff installed a new control box for tank level and alarm sensors, and completed wiring for input/output signals for the tank farm and feed system. These controls will allow staff at the Operations Control Center in Eagle Rock to remotely monitor and control the sodium hypochlorite feed system at Palos Verdes Reservoir. [\(see photo right\)](#)



Sodium hypochlorite tank at Palos Verdes Reservoir

## WATER SYSTEM OPERATIONS

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

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

Staff continues to provide member agency support for the planning and design of new service connections for Eastern Municipal Water District (EM-25) and West Basin Municipal Water District (WB-41). These service connections are located on the Inland Feeder and Second Lower Feeder, respectively.

### 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 December accounted for about 40 percent of Metropolitan's deliveries. Storage at Diamond Valley Lake is at 702,000 acre-feet or 87 percent full. Water reserves continued to be managed according to Water Surplus and Drought Management principles and the 2018 Annual Operating Plan, while considering the current 35 percent 2018 SWP allocation. Staff continues to manage storage to meet anticipated demands and end-of-year operational targets.

### 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 December 13, staff gave a presentation on the Regional Recycled Water Program at a Board meeting of the Los Angeles Regional Water Quality Control Board in Simi Valley. The presentation was given jointly with Los Angeles County Sanitation Districts staff. The presentation provided an overview of the program, the upcoming demonstration project, and ongoing technical studies.

### 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 December 13, staff participated in a stakeholder meeting in Henderson, Nevada regarding the perchlorate cleanup at the former Tronox site. The Nevada Environmental Response Trust presented key findings from a draft remedial investigation report to be distributed for review in March 2019. The report will document the investigation completed for the former Tronox site and adjacent offsite area. Staff continues to monitor current remedial operations, ongoing site investigations, long-term remedy plan development, and distribution of the Trust's funds for site cleanup.

Staff continues to monitor the Department of Energy's (DOE) progress in the removal of uranium mill tailings along the Colorado River near Moab, Utah. To date, DOE has removed approximately 9.4 million tons of the original 16 million tons of tailings. DOE expects to increase the tailings removal rate as the Fiscal Year 2019 federal budget increased to \$45 million, which is over \$6 million more than the FY 2018 allocation. Completion of the tailings cleanup is expected around 2030.

# WATER SYSTEM OPERATIONS

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

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

Metropolitan’s hydroelectric plants generated an average of 17 megawatts per hour for 9,570 megawatt-hours for December.

**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 6 vacant positions in November 2018.

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

The Water System Operations Apprentice and Technical Training Programs develop and train personnel to become qualified mechanics and electricians responsible for maintaining Metropolitan's water treatment and distribution systems. The Class of 2018 completed Demonstrated Proficiency Assessments (DPA) this month. The DPA is the final practical exam apprentices perform to achieve journey-level status. A ceremony to recognize apprentices' completion of the academic portion of the program is scheduled for January 15, 2019.

Human Resources began issuing offers to the top eight candidates from the Desert pre-apprentice recruitment. Offers were also made to the next eight candidates from the current in-town eligibility list established in 2017. The combined candidates will form the Class of 2023 and are slated to begin work in early February 2019. Apprenticeship Program maintains separate eligibility lists for desert and in-town regions. Eligibility lists remain active for two years.



Class of 2018 mechanical apprentice performs shaft alignment during the Demonstrated Proficiency Assessment.



Class of 2018 mechanical apprentice sharpening a drill bit during the Demonstrated Proficiency Assessment.

# WATER SYSTEM OPERATIONS

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

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

On December 6, staff hosted a meeting of the Joint Utility Vendor Audit Consortium. Presentations were given on audits conducted at a hazardous waste disposal facility and incinerator in Utah. The group toured the Weymouth plant and Water Quality Laboratory in La Verne. Staff provided an overview of Metropolitan’s water treatment facilities, water quality and treatment issues, and plant operations and maintenance activities. Metropolitan utilizes the Consortium audits to verify acceptance for Metropolitan’s hazardous waste disposal, treatment, and recycling needs.

Storage	As of 11/17/18	% of Capacity
DVL	702,152 AF	87
Lake Mathews	133,702 AF	73
Lake Skinner	37,009 AF	84

**Useful information:**  
**AF**=acre-foot, the volume of water to cover an acre of land, one-foot deep. Approximately 326,000 gallons of water, serves annual needs of two typical California families.  
**TAF**=thousand acre-feet.  
**MAF**=million acre-feet.  
  
**PPT**=One part per trillion (1 ppt) is a proportion equivalent to one-twentieth of a drop of water diluted into a two-meter-deep Olympic-size swimming pool.

Metropolitan’s Mission is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

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