



The GENERAL MANAGER Monthly Report

**Activities for the Month of
November 2020**

This report identifies the actions and activities taking place during the month that support the objectives of the General Manager's Fiscal Year 2020/21 Strategic Priorities and the Core Business of the GM's work groups.

DECEMBER 8, 2020



CRA Tunnel Construction

Content by Group

Administrative Services	3-4
Bay-Delta Initiatives.....	5-6
Chief Financial Officer	7-8
Engineering Services.....	9-14
Environmental Planning.....	15-18
External Affairs	19-25
Human Resources	26-28
Information Technology	29-33
Real Property.....	34-35
Security Management.....	36
Water Resource Mgmt.....	37-41
Water System Operations	42-61

ADMINISTRATIVE SERVICES SECTION/CAO

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 #2 - SUSTAINABILITY - Develop, promote, and support sustainable business practices.

Install a new single-port Electric Vehicle (EV) charging station at Diemer Filtration Plant. The new EV charging station and its designated parking spots are located near the Orange County Region Service Center.



Charging station at Diemer Filtration Plant

Objective #3 - INNOVATION - Use technology and best practices to implement innovative solutions in business processes to improve the customer and end user's experience.

The Warehouse Education and Resource Council (WERC) awarded Metropolitan's Contracting Services Unit and the Warehouse Team its Gold certification award for 2020. This is the second time the Warehouse team has achieved the Gold Excellence Award in Warehousing. To obtain the WERC award, Metropolitan was compared with other municipalities, private companies, and government agencies on implementing warehouse industry best practices, cutting-edge technology and innovation, practical and efficient processes (as measured by key metrics), employee development, and education.

ADMINISTRATIVE SERVICES SECTION/CAO *continued*

Accomplishments

The Contracting Services Unit was awarded the 2019 Achievement of Excellence in Procurement Award for the 14th straight year. A national award given to select agencies, Metropolitan is one of 42 agencies in California and one of 33 special districts in the U.S. and Canada to receive this award. This award acknowledges adherence to and implementation of procurement industry best practices, the use of cutting-edge technology and innovation, expedient and efficient processes (as measured by key metrics), and employee development and education.



2019 Achievement of Excellence in Procurement Award

BAY-DELTA INITIATIVES

GM STRATEGIC PRIORITY #1: Resiliency

Objective # 1 Pursue the development of adaptive management decision processes, governance, and funding mechanisms that would provide effective and stable means of meeting State Water Project (SWP) regulatory requirements.

In November, staff collaborated with others to review and provide input to the BiOp/ITP mandated Summer/Fall Action plan and the Monitoring and Science Plan, the Juvenile Production Estimate monitoring plan for spring-run Chinook salmon, steelhead monitoring plan for the San Joaquin Basin, and the ITP-mandated Longfin smelt Science Plan.

GM STRATEGIC PRIORITY #2: Sustainability

Objective # 1 Pursue completion of the planning and permitting process for the single tunnel Delta Conveyance Project (DCP).

Delta Conveyance

The California Department of Water Resources (DWR) is continuing to develop an Environmental Impact Report (EIR) under the California Environmental Quality Act. Current work is focused on formulation of alternatives to be analyzed in the EIR, descriptions of the existing conditions, and development of methods to analyze potential impacts on environmental resources. The U.S. Army Corps of Engineers (USACE) initiated compliance with the National Environmental Policy Act by issuing a Notice of Intent to develop an Environmental Impact Statement (EIS). The EIS scoping period closed on October 20, 2020, and the USACE received about 90 comment letters and emails.

DWR completed soil investigation activities in the Delta that were a part of previous efforts over the summer. DWR and the Delta Conveyance Design and Construction Authority (DCA) have started soil investigations under the Initial Study/Mitigated Negative Declaration for Soil Investigations in the Delta that was adopted on July 9, 2020. The DCA completed geophysical surveys and soil borings on Bouldin Island that started on October 5, 2020. Soil borings and cone penetration tests have started on a limited subset of sites on public rights of way. Additionally, DWR and the DCA are working to obtain temporary entry on private lands. A Streambed Alteration Agreement, in accordance with Fish and Game Code (Section 1602), has been executed, and DWR is continuing to pursue permits for sites that fall under the jurisdiction of the Rivers and Harbors Act (Section 408). Those sites are not included in the near-term efforts. Investigations at any given site will not occur until property owners have been notified and required permits and approvals for that site have been obtained.

On November 16, DWR released a survey to collect information on how low-income, minority, and other underserved communities rely on resources in the Delta. This information will help assess potential impacts and benefits to these communities. The survey is available in English, Spanish, and Chinese at www.YourDeltaYourVoice.org. The survey period has been extended from November 30 to December 11, 2020.

DWR is developing a conceptual approach for forming a Community Benefits Program and will be bringing ideas to the community, including the DCA's Stakeholder Engagement Committee, in December 2020. The objective is to work collaboratively with the community in the development of the program, and the first step will be to create a framework.

Beginning January 2021, funding for the Delta Conveyance Project (DCP) planning is anticipated to occur with the execution of Funding Agreements between DWR and DCP participating Public Water Agencies (PWA).

BAY-DELTA INITIATIVES *continued*

Joint Powers Authorities

In response to the current economic conditions, the DCA board approved the reduction of the existing fiscal year (FY) 2020/21 budget by \$7 million at the November DCA board meeting. The originally adopted FY 2020/21 budget of \$34 million was reduced to \$27 million. The DCA will continue to provide necessary technical analysis, geotechnical work, and continue to advance stakeholder outreach. The DCA will scale back, and in some cases, defer organizational management functions, engineering deliverables, and field services.

The focus of the November DCA Stakeholder Engagement Committee (SEC) meeting centered on DCA responding to various outstanding SEC questions that were deferred to future meetings. The November regular meeting of the Delta Conveyance Finance Authority Board of Directors was canceled.

Objective # 3 Engage in planning and permitting activities for the Sites Reservoir.

In their November meetings, the Sites Project Authority Board (Authority Board) and the Sites Reservoir Committee (Reservoir Committee) approved the Permitting Action Plan, which will guide implementation of the project's permitting efforts throughout the Amendment 2 Work Plan efforts.

GM STRATEGIC PRIORITY #3 Innovation

Objective # 1 Provide leadership through advancing scientific knowledge that promotes opportunities for the improvement of SWP supply reliability through the improvement and protection of estuarine processes, native species, and Delta ecosystem health.

Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). The November 17 CAMT meeting included a discussion of several salmon science topics.

In November, staff participated in the Interagency Ecological Program (IEP) Stakeholder meeting and reviewed and provided comments on the Interagency Ecological Program Long-term Monitoring Element Review Pilot Approach and Methods Development (2020) report. Staff also participated in the November 13 Delta Independent Science Board meeting, which focused on the impacts of non-native species in the Delta and the need to develop a food web model for the Delta.

CHIEF FINANCIAL OFFICER

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 #2 Manage risk to protect Metropolitan's assets against exposure to loss.

The Risk Management Unit completed 38 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills. Risk Management completed 36 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. Update Metropolitan's capital financing plans and work with rating agencies and investors to communicate Metropolitan's financial needs, strategies, and capabilities thus ensuring Metropolitan has cost effective access to capital markets and the ability to finance ongoing future needs. In addition, actively manage Metropolitan's short-term investment portfolio to meet ongoing liquidity needs and changing economic environments.

Objective #1 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.

- Water Transactions for October 2020 totaled 145.4 thousand acre-feet (TAF), which were 3.5 TAF lower than the budget of 148.9 TAF. This translates to \$130.8 million in revenues for October 2020, which were \$0.4 million higher than budget.
- Year-to-date (YTD) water transactions through October 2020 totaled 563.0 TAF, which was 36.4 TAF lower than the budget. YTD water revenues through October 2020 were \$504.4 million, which were \$33.1 million lower than the budget of \$537.5 million.
- In October 2020, Accounts Payable processed approximately 3,300 vendor invoices for payment and took advantage of about \$19,200 in discounts.

Objective #2 Ensure that internal controls are in place to provide assurance that assets are safeguarded, and financial information is fairly stated.

The annual financial audit was completed by KPMG in October 2020. As part of their risk assessment, KPMG reviewed the internal control relevant to the preparation and fair presentation of the financial statements. KPMG did not bring any concerns to the attention of management.

Objective #5 Prudently manage the investment of Metropolitan's funds in accordance with policy guidelines and liquidity considerations.

- As of October 31, 2020, Metropolitan's investment portfolio's balance was \$976.6 million; for the month of October 2020, Metropolitan's portfolio managers executed 32 trades.
- During the month of October 2020, Treasury staff processed 1,067 disbursements by check, 24 disbursements by Automated Clearing House (ACH), and 77 disbursements by wire transfer. Treasury staff also processed 67 receipts by check, 24 receipts by ACH, and 47 receipts by incoming wires and bank transfers.

Financial Summary - Charts & Graphics

Receipts

Expenditures

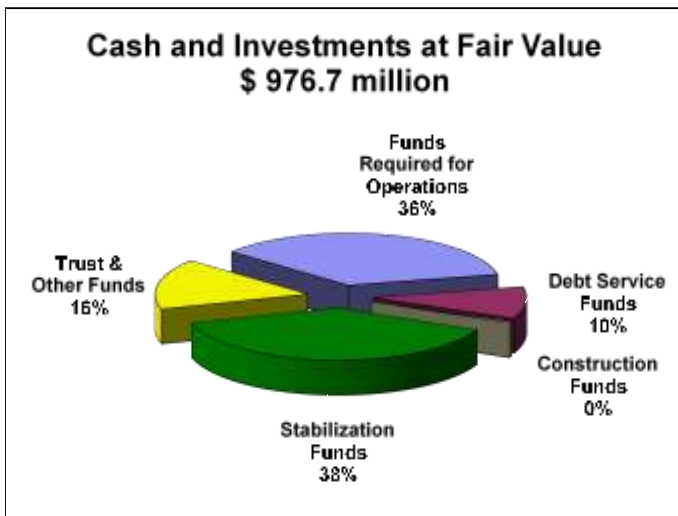
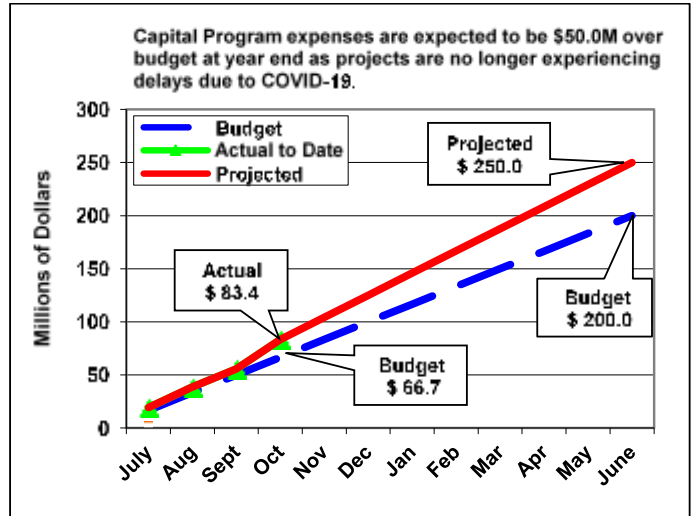
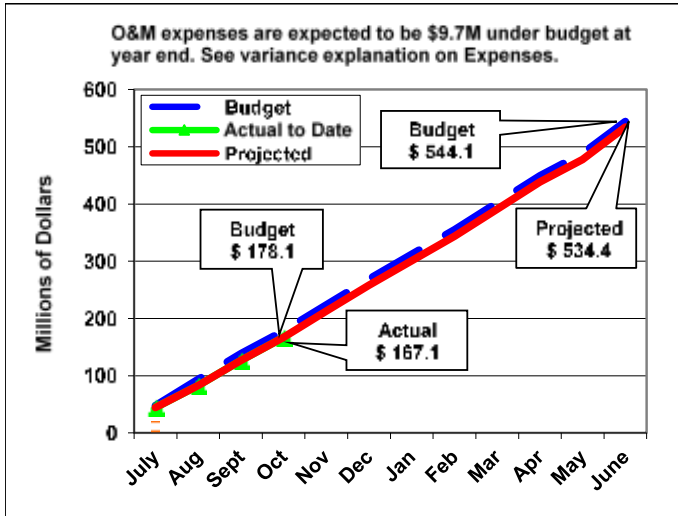
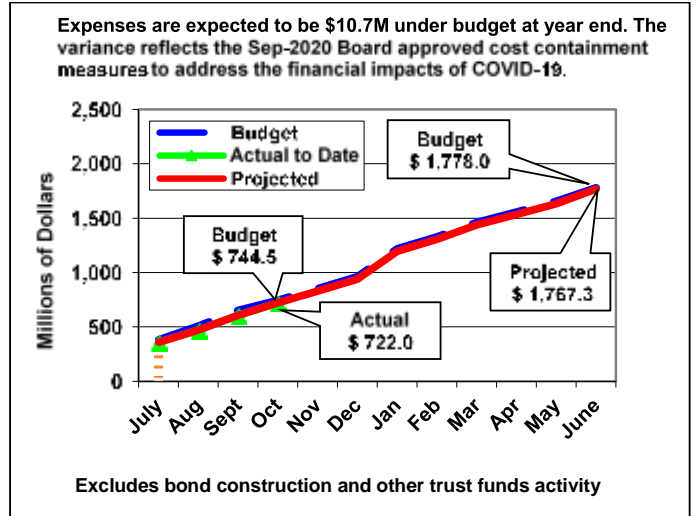
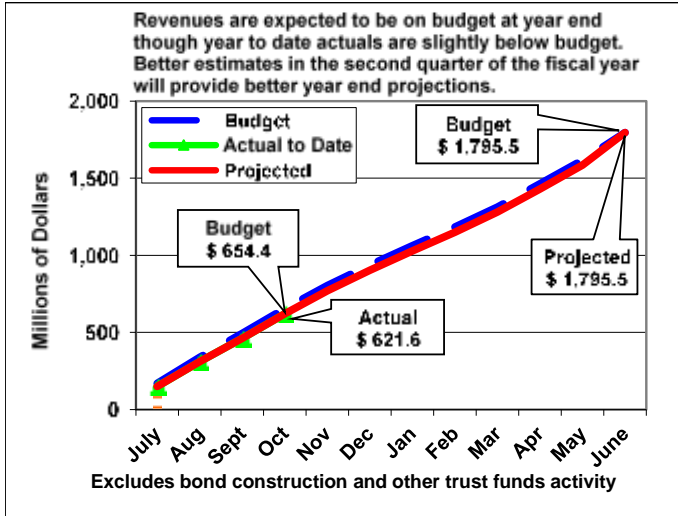
O&M Expenditures

Construction Costs

Cash and Investments

Summary of Financial Statistics

CHIEF FINANCIAL OFFICER *continued*



Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.49
Revenue Bond Coverage	> 2.00 x	1.51
Revenue Bond Debt / Equity Ratio	< 100.0%	57.2%

Senior Lien Revenue Bond Credit Ratings

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

ENGINEERING SERVICES

GM STRATEGIC PRIORITY #1: Resiliency

Objective #1: 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:

- **Greg Avenue Pump Station Rehabilitation**—The contractor is installing new electrical conductors for the new pump motors, testing the medium voltage switchgear, and continuing installation of the new piping and valves. Construction is 85 percent complete and is scheduled to be complete in the first quarter of 2021.
- **Garvey Reservoir Erosion Improvements Areas 6, 7, 8, 10, and 11**—This project will install a permanent drainage system and erosion control features including drainage piping, concrete ditches, stem walls, flow detention, and dissipation structures. The contractor is working on mobilization and preparation of contract submittals. Construction is 5 percent complete and is scheduled to be complete in November 2021.
- **OC Region Pipelines Right of Way Infrastructure Protection**—This project will address erosion, right-of-way, and security issues along pipelines and feeders within the Orange County Operating Region. Work is progressing in two stages. Under the current contract, Stage 1, the contractor is working on excavation, grading, and compaction of subgrade soils for the proposed roadway and concrete v-ditches. Construction is 7 percent complete and is scheduled to be complete in June 2021. For Stage 2, final design is 60 percent complete and is scheduled to be complete by March 2021.
- **East Orange County Feeder No. 2 Service Connection A-06 Rehabilitation**—This project rehabilitates a service connection on the East Orange County Feeder No. 2. Construction was completed in November 2020.
- **Yorba Linda Hydroelectric Power Plant Completion Project**—This project installs a rain protection enclosure for the hydroelectric generator at the Yorba Linda Hydroelectric Power Plant. Installation of the enclosure and the interior electrical work was completed in November 2020.
- **Lake Perris Bypass Pipeline Relining**—This project will reline approximately 1,500 feet of the Lake Perris Bypass Pipeline. Construction is 4 percent complete, with the contractor currently working on preparation of contract submittals and fabrication of the steel liners. Construction is scheduled to be complete by April 2021.
- **Lakeview Pipeline Improvements**—This project will reline approximately 450 feet of the Lakeview Pipeline and replace a 60-inch tee at the Lake Perris Control Facility. Construction is 4 percent complete, with the contractor working on preparation of contract submittals, and is scheduled to be complete by June 2021.



Greg Avenue Pump Station Rehabilitation—Installing (fourth) surge tank, view to the northeast

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. The priority pipelines included in the program are the Second Lower Feeder, Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and the Allen-McColloch Pipeline. A total of 100 miles of PCCP pipelines will eventually be relined with new steel pipe liners under this 20-year program. 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. A total of 8.4 miles of PCCP on the Second Lower Feeder has been relined. Final design of Reach 3 is 93 percent complete and is scheduled to be complete by January 2021.
- **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 inches 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 75 percent complete, and the valves are scheduled to be delivered by February 2021.

Colorado River Aqueduct (CRA) Reliability Program

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

- **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, whereas Stage 2 will replace the valve at Copper Basin Reservoir. Construction of Stage 1 is 10 percent complete and is scheduled to be complete by July 2021. The contractor is working on preparation of contract submittals, and early stages of on-site work including rock-scaling on the downstream side of the dam. Final design for Stage 2 is 38 percent complete and is scheduled to be complete by March 2022.
- **CRA Domestic Water Treatment**—This project installs new water purification systems for all five pumping plants and new sodium hypochlorite and activated carbon systems for all pumping plants except for Intake at the CRA. Procurement of the equipment is in process with expected first delivery in May 2021 and final delivery in January 2022. Final design is 70 percent complete and is scheduled to be complete by February 2021.
- **CRA Radial Gates Replacement**—This project replaces eight deteriorated radial gates along the aqueduct in two stages. A radial gate at Eagle Mountain Pumping Plant was replaced. Construction of Stage 2 is 48 percent complete, with the contractor currently fabricating the remaining radial gates, and is scheduled to be complete by March 2021.
- **CRA Overhead Cranes**—This project consists of replacing five overhead bridge cranes and retrofitting the support structures within the pump bays located at all five of Metropolitan’s Colorado River Aqueduct Pumping Plants. Construction is scheduled to be complete by October 2022.
- **CRA Storage Buildings**—This project replaces deteriorated storage buildings that are used to store equipment, spare parts, and maintenance supplies at the Hinds, Eagle Mountain, and Iron Mountain pump plants. Preliminary design is 99 percent complete and is scheduled to be complete by January 2021.



CRA Gene Wash and Copper Basin Discharge Valve Rehabilitation—Rock scaling at Gene Wash Dam

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 Chlorination System Upgrades**—Construction is 90 percent complete and is scheduled to be complete by June 2021. The contractor is currently installing electrical equipment, wire terminations, piping, fire sprinkler system, FRP duct work, and instrumentation.
- **Weymouth Domestic Water Upgrade**—This project upgrades the aging domestic and firewater loop at the Weymouth plant. Pump testing, commissioning, final adjustment of check valves, and punch list items were completed in November 2020.
- **Weymouth Water Quality Instrumentation Improvements**—This project will improve monitoring and rapid response to changing water quality conditions at the Weymouth plant, by adding required sample piping, pumps and housing for water quality analyzers. The contractor is working on door frames, wall studs, concrete door landings, cable trays inside the building, and sample pipe insulation. Construction is 60 percent complete and is scheduled to be complete by June 2021.

Diemer Plant

- **West Basin and Filter Building Rehabilitation**—This project rehabilitates 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 was suspended for six weeks because of COVID-19 and resumed in May. The contractor is currently removing and replacing basin and filter equipment, installing new electrical conduits and panels, and performing hazardous abatement activities. Construction is 88 percent complete and is scheduled to be complete by April 2021.
- **Diemer Water Sampling System Improvements**—This project upgrades the existing Diemer water sampling system, comprising 13 sample locations. At each location, the sample pump, piping, and field analyzers will be upgraded by Metropolitan staff working in micro-teams because of the COVID 19 pandemic. All materials and equipment have been procured for this project and Metropolitan staff is currently installing and commissioning water quality field analyzers. Construction is 72 percent complete and is scheduled to be complete by July 2021.

Jensen Plant

- **Jensen Electrical Upgrades, Stage 2**—This three-stage project upgrades the electrical system with dual power feeds to key process equipment to comply with current codes and industry practice. Stage 1 work is complete. Stage 2 improvements will upgrade UPC-7, UPC-9, and their associated motor control centers to support critical process equipment. Construction is 36 percent complete, with the contractor currently installing duct banks, power center foundations, medium voltage cable, and unit substation. Because of the COVID-19 work suspension, the Spring 2021 plant shutdown for this project has been rescheduled for Spring 2022. The anticipated project completion date is being re-assessed.
- **Jensen Module 2 and 3 Flocculator Rehabilitation**—This project rehabilitates the Modules 2 and 3 flocculators at the Jensen plant. Construction is 70 percent complete with the contractor currently installing rotating equipment and baffle walls in Basins 5 and 6. Construction is scheduled to be complete by March 2021.



**Diemer West Basin and Filter Building Rehabilitation –
Installing new baffle walls and flocculators at Basin 7 (looking south-east)**



Jensen Module 2 and 3 Flocculator Rehabilitation—Installing inlet baffle board in Basin 5

System Reliability Program

The System Reliability Program consists of projects to improve or modify facilities located throughout Metropolitan's service area to use new processes, technologies, or both, and improve facility safety and overall reliability. Recent activities include the following:

- **Metropolitan Headquarters Building Improvements**—This project provides seismic upgrades and other needed improvements to the Metropolitan Headquarters Building. Construction is 85 percent complete, and the contractor is currently working on Floors 6–8, as well as continuing installation of rain screens on the building exterior, and electrical rough-in for the power door assist devices. Staff is working with the contractor to advance additional work while the building remains lightly occupied. Construction is anticipated to be complete by December 2021.

ENGINEERING SERVICES *continued*

- **Board and Committee Room Upgrade**—This project upgrades audio/visual (A/V) systems in the Board and Committee rooms at the Metropolitan Headquarters Building. Engineering Services, IT and Facilities Management are working collaboratively on this technology replacement project.
- **Metropolitan Headquarters Building Physical Security Upgrades**—The comprehensive security upgrades for the Metropolitan Headquarters Building have been prioritized and staged to minimize rework and impacts on day-to-day operations within the building. The Stage 1 work enhances security related to perimeter windows and doors. Stage 2 improvements will provide security system upgrades inside the building with a focus on the main entry rotunda area, board room, executive dining lounge, and security control room. Stage 3 improvements will provide security system upgrades around the perimeter of the building. Construction of Stage 1 is 97 percent complete and is scheduled to be complete by August 2021. Construction of Stage 2 improvements is 5 percent complete, with the contractor preparing contract submittals, and is scheduled to be complete by April 2022.
- **Metropolitan Headquarters Building Fire Alarm and Smoke Control System Upgrades** – This project upgrades Metropolitan’s Union Station Headquarters fire life safety systems, which includes replacement of the fire detection and alarm system and HVAC system improvements for smoke control. Construction is 5 percent complete, with the contractor preparing contract submittals, and is scheduled to be complete by April 2022.

ENVIRONMENTAL PLANNING SECTION/CAO

GM STRATEGIC PRIORITY #1: Resiliency

Objective #1 Provide planning, California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and regulatory permitting support for programs and projects that focus on infrastructure reliability and redundancy.

Regulatory Permitting

Foothill Feeder

Conducted annual monitoring of Unarmored Threespine Stickleback populations within the Upper Santa Clara River Watershed in compliance with Metropolitan's Incidental Take Permits for the federally endangered and state fully protected fish.

Objective #2 Emphasize employee development and recruitment, knowledge capture, cross-training, management/leadership training, and succession planning.

Staff conducted Stephens' kangaroo rat surveys with the Riverside County Habitat Conservation Agency staff in order to gain survey hours and work toward obtaining an endangered species Recovery Permit (see photo).



Staff examining a Stephens' Kangaroo Rat during a night survey

GM STRATEGIC PRIORITY #2: Sustainability

Objective #2 Provide planning, CEQA/NEPA, and regulatory permitting support for projects and activities that address the challenges of sustainability, including aging infrastructure, contaminants of concern, and affordability of water supplies.

Delta Conveyance Project

- Represented Public Water Agencies and coordinated with the Department of Water Resources (DWR) on Regulatory Permitting efforts, including compliance with Section 106 of the National Historic Preservation Act. Provided comment on task orders related to geoarchaeology, ethnographic studies, and historic resources.
- Reviewed draft Work Plan submitted to U.S. Army Corps of Engineers (USACE) as part of the Clean Water Act Section 408 permitting process.

Objective #3 Continue to actively manage Metropolitan's more than 30,000 acres of conservation lands through cooperative relationships with public agencies and non-governmental conservation organizations to promote sustainability of reserve resources.

Lake Mathews Multiple Species Reserve

- Completed and submitted the updated Lake Mathews Vegetation Management Plan to CalFire.
- Conducted a biological survey of the lake's islands within the reserve that was accessible because of low lake levels.
- Treated invasive tamarisk, tobacco tree, and castor bean along South Shore Line Road with herbicide. California Conservation Corps will remove all trees too large for herbicide spray re-treatments.

Southwestern Riverside County Multi-Species Reserve

- Installed four wildlife cameras within the reserve. Mammals recorded include mountain lions, bobcats, coyote, mule deer, and striped skunk (see photos).
- Updated the Vegetation Management Plan with new potential prescribed burn units and updated existing burn unit data, including vegetation profiles.
- Coordinated with the National Audubon society to include the reserve in their annual Christmas Bird Counts.
- Repaired reserve boundary fencing and installed additional signage.
- Reserve Ranger responded to three hot air balloons landing near the reserve and conducted traffic control to allow balloon pilots to exit the Lake Skinner recreation area.
- Conducted maintenance on the Lake Skinner equestrian trail, including cleaning and filling horse water troughs.



California quails in the Southwestern Riverside County Multi-Species Reserve



Family of bobcats in the Southwestern Riverside County Multi-Species Reserve

ENVIRONMENTAL PLANNING SECTION/CAO *continued*



Mountain lion in the Southwestern Riverside County Multi-Species Reserve

GM STRATEGIC PRIORITY #3 Innovation

Objective #3 Partner and collaborate with regulatory and resources agencies, as well as other public agencies and external organizations, to build relationships and expedite/streamline environmental authorizations and clearances for Metropolitan projects.

- Under Metropolitan's Water Resources Development Act (WRDA) Memorandum of Agreement (MOA) with USACE, staff organized a Wetlands and Waters of the United States Regulatory Workshop.
- Organized and participated in annual meeting with USACE staff to discuss WRDA MOA and upcoming projects requiring regulatory support.
- Continued coordination with California Council for Environmental and Economic Balance (CCEEB) Natural Resources Task Force (NRTF) to develop strategies to streamline CDFW permitting of low-water crossings and participated in CCEEB NRTF Fall Planning Meeting.

CORE BUSINESS: Regulatory Compliance

Objective #1 Provide timely and professional environmental planning services and CEQA and regulatory permitting support to ESG, WSO, WRM, External Affairs, and Real Property groups.

Engineering Services

- Coordinated pre-construction surveys and environmental monitoring in support of the Orange County Feeder Blow-off Rehabilitation Project.
- Provided environmental and design phase support to the Battery Energy Storage System Project, Lake Mathews Paving Project, Jensen Vehicle Maintenance and Warehouse Building HVAC Rehabilitation Project, Headquarters Automation System Upgrades Project, Whitewater Tunnel No. 2 Portal Seismic Upgrades Project, CRA 6.9 kV Power Cables Replacement Project, CRA Pump Plant Domestic Water Treatment System Replacement Project, and Weymouth Sedalia Property Grading and Drainage Improvement Project.

Water System Operations

- Provided CEQA analysis and environmental planning clearances for 11 projects.
- Obtained regulatory permits for the CRA Exposed Barrel and San Diego Pipelines 1 and 2 Exposed Barrel emergency projects.
- Provided desert tortoise trainings for contractors and staff supporting the CRA Exposed Barrels repair.

ENVIRONMENTAL PLANNING SECTION/CAO *continued*

- Conducted biological surveys, environmental monitoring, or both in support of permitting for Upper and Lower feeders March 2021 shutdown and for the Diamond Valley Lake Forebay cleaning project.
- Coordinated pre-construction surveys and biological monitoring for annual tamarisk removal in support of the Lake Skinner vegetation maintenance SAA.
- Obtained CDFW SAA for the Yorba Linda Feeder Shutdown and conducted a pre-construction biological survey, reporting, and daily site monitoring to ensure that permit requirements were met.

Real Property Support

- Provided environmental review and support for installation of k-rails at Tin Mine Road to deter trespassing within the Lake Mathews Reserve and for installation of a new cable across the Lake Mathews Reserve by AT&T within their existing easement.

Construction Monitoring

- Completed environmental monitoring for the Lakeview Pipeline shutdown dewatering activities in accordance with the conditions of the CDFW SAA.
- Continued monitoring for the following projects: Gene Wash Reservoir Discharge Valve Replacement, CRA V-Dike Repairs, CRA 6.9kV Cable Replacement, CRA Overhead Cranes Replacement, and CRA Discharge Line Isolation and Couplings Repairs.

EXTERNAL AFFAIRS

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 #1 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, and informing key stakeholders, news media, businesses and the public on the need for sustained conservation actions, support for new water supply projects and continued investment in imported water systems to maintain water supply reliability and protect the environment.

Chairwoman Gray was a panelist for the Public Policy Institute of California's virtual event on Building a More Water Resilient California and spoke on issues related to "Funding Water Systems While Ensuring Affordability and Equity." (November 12)

California Department of Insurance Commissioner Ricardo Lara hosted a Diversity Summit, which featured Chairwoman Gray on a panel with other leaders to discuss increasing gender and diverse representation on corporate and public boards. (November 13)

GM Kightlinger was honored by the Southern California Water Coalition with the Harriett M. Wieder Award, which is presented annually to a leader who has demonstrated an extraordinary commitment to advancing California's water supply issues. Senator Feinstein (D-CA), former State Water Board Chair Marcus, Chairwoman Gray, and the event's keynote speaker USBR Commissioner Burman, were among many event participants who spoke to Kightlinger's success in resolving extremely complex water and environmental issues and his support of cooperative, voluntary approaches to managing shared resources such as the State Water Project and the Colorado River. (November 15) **(see image below)**



Chairwoman Gray along with San Diego County Water Authority's Board Chairman Croucher, addressed the San Diego regional Directors and General Managers on their priorities for 2021 at The Council of Water Utilities (CoWu) webinar. (November 17)

Chairwoman Gray was the keynote speaker at the Association of Water Agencies Ventura County's WaterWise symposium. She spoke about Metropolitan's history of ensuring regional reliability, ways to continue ensuring reliability for all agencies, and regional solutions to key issues, including climate change. (November 19)

EXTERNAL AFFAIRS *continued*

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

Engage the public, labor, business community, agriculture, government leaders, non-governmental organizations, and other stakeholders in California's water issues, communicating Metropolitan's interests and Board-adopted policies through federal and state legislative strategies, multimedia and multi-cultural communications, and educational and other outreach programs. Inform the public about Metropolitan projects, facilities, operations, and initiatives to gather input and support, foster competitive and diverse business opportunities, and facilitate innovation and technology sharing.

Objective #1 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

The House passed most FY 2021 appropriations bills in July, and the Senate reached agreement on its version of the appropriations bills on November 10, both of which include level funding for the water programs of interest to Metropolitan and member agencies. As the two chambers negotiate a deal to fund the federal government, Metropolitan staff will continue to advocate for increased investment in water infrastructure, as well as aid to public agencies impacted by the pandemic.

State

The Legislature reconvenes on December 7. Water affordability and the moratorium on shutoffs are likely to gain lawmakers' attention. The California Public Utilities Commission and State Water Resources Control Board convened a joint workshop to discuss water affordability and challenges during the pandemic. Directors Ortega and Solorio were on panels and shared ideas for best management practices and ways to aid low-income households and small public water systems. The State Water Resources Control Board has now launched a survey to better understand the financial impacts of COVID-19 on the public water agencies.

Local

Metropolitan staff provided a virtual presentation on the Regional Recycled Water Program to the Central/West/Gateway Agencies Caucus Meeting. (November 5)

Metropolitan staff presented to the San Gabriel Valley Council of Governments Water Policy and Technical Advisory Committee and spoke about the project's benefits to regional supply reliability and opportunities for public engagement. (November 10)

Metropolitan's staff moderated the Redondo Beach Chamber's Virtual Network Café update with Assembly Member Muratsuchi (D-Torrance) who provided an update on election results and discussed opportunities for state support to the business community in the wake of the pandemic. (November 12)

Director Ballin and Metropolitan staff attended the Valley Industry Commerce Association's Annual State Local Officeholders webinar. More than 200 business leaders and 23 elected officials attended. (November 12)

Metropolitan staff participated in webinars and events this month with chambers of commerce, business associations, councils of governments, and public affairs networks throughout the service area including:

- South Bay Association of Chamber of Commerce Board of Directors/Government Affairs Committee (November 3)
- LAX Coastal Chamber of Commerce Public Policy Group (November 5)
- Glendale Chamber of Commerce Business Advocacy/Legislative Review Committee (November 5)

EXTERNAL AFFAIRS *continued*

- Los Angeles County Business Federation (BizFed) Advocacy Committee (November 5)
- Irvine Chamber of Commerce Government Affairs (November 5)
- Orange County Business Council Government Affairs (November 6)
- Central City Association Virtual Policy Committee (November 6)
- Palos Verdes Peninsula Chamber of Commerce Legislative Affairs Committee (November 10)
- SGV Council of Governments Water Policy & Technical Advisory Committee (November 10)
- Orange County Business Council Infrastructure Meeting (November 10)
- South Orange County Economic Coalition (November 12)
- Regional Chamber of Commerce, San Gabriel Valley Government Affairs (November 12)
- Long Beach Chamber of Commerce Government Affairs Council (November 12)
- South Bay Cities Council of Governments Steering Committee Meeting (November 16)
- El Segundo Chamber of Commerce Government Affairs Committee (November 16)
- Orange County Forum (November 16)
- Huntington Beach Chamber of Commerce Health Summit (November 17)
- Pomona Chamber of Commerce Board (November 17)
- San Gabriel Valley Public Affairs Network (November 17)
- SGV Council of Governments Energy, Environment & Natural Resources Committee (November 18)
- Los Angeles County Economic Development Corporation Board of Governors (November 18)
- Building Industry Association of Southern California—Board and Committee Meetings (November 19)
- Anaheim Chamber of Commerce Government Affairs (November 20)
- Alhambra Chamber of Commerce Government Review (November 23)
- Gateway Chambers Alliance (November 24)
- Redondo Beach Chamber of Commerce—Government Affairs Committee (November 24)
- Association of California Cities—Orange County Government Affairs (November 24)
- Huntington Beach Chamber of Commerce Government Affairs (November 25)
- Construction Industry Coalition on Water Quality—Board of Directors/Regulatory Affairs Committee (November 25)

Objective #2 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.

Communication Activities

New informational resources, including an updated fact sheet and FAQs about the proposed Delta Conveyance project, were posted on Metropolitan's website and shared with directors, member agencies, community organizations, businesses, labor, and other stakeholders.

Metropolitan continued to promote the fall planting season with "We're California Friendly® Plants" social media GIFs and new gardening resources on bewaterwise.com. (see image below)

EXTERNAL AFFAIRS *continued*



Media Interviews

- Coordinated an interview between freelance reporter Nicole Larson and Water Resource Management's Guerrero for a story in Coastal San Diego Magazine (a San Diego Union-Tribune supplement) about gardening classes and other resources available to residents considering re-landscaping.
- Arranged a follow-up interview between David Marston of Writers on the Range and Colorado River Resources Manager Hasencamp regarding agricultural conservation programs along Colorado River.
- Provided written responses to questions from New Project Media writer Michaela Althouse regarding new battery energy storage systems.
- Provided information to Orange County Register/Southern California News Group reporter Teri Sforza on the impact of COVID-19 on Metropolitan and its member agencies.
- Provided old contract information to Press Democrat reporter Tyler Silvy regarding contract with Village Partners (for services related to DVL campus proposal) for a story on a new project that firm is exploring.

Press Release/Statements

- Metropolitan Board's approval to begin environmental planning work on the Regional Recycled Water Program.
- Launch of new digital marketing and social media campaign featuring whimsical, animated California Friendly® plant characters, which will run through the end of the year in digital advertising on YouTube and social media.
- Process to seek public input on selection of new general manager and executive search firm.

Online

- Created and launched a six-part series to promote fall as the optimal time to plant California Friendly® and native plants. Received nearly 210,000 page views on mwdh2o.com.
- Garnered more than 52,000 page views on bewaterwise.com, with rebates and the turf replacement program being the most popular destinations.
- Created eight online video modules to assist with new employee orientation. The series converts a half day in-person new employee orientation into an interactive, self-guided program that provide a high level of information for new and existing employees.

Social Media

- Posted short video tribute on Veterans Day, highlighting family members of Metropolitan employees who served in the military. The video received more than 1,300 view across all platforms. [Link](#)
- A tweet congratulating Chairwoman Gray for her re-election was the month's top performer, receiving nearly 5,000 impressions with 320 engagements. [Link](#)

EXTERNAL AFFAIRS *continued*

- Posted assets on social media platforms to increase awareness among and educate the general public about the need to modernize Delta conveyance and regarding the Board's vote on December 8.
- Posted several online and social media assets using original posts and sharing art by the California Native Plant Society to encourage residents to plant California Friendly® and native plants.



Objective #3 PUBLIC OUTREACH AND MEMBER SERVICES - Conduct public outreach to increase awareness and input on Metropolitan projects and initiatives and ensure impacted communities are aware of Metropolitan construction and maintenance activities. Enhance public awareness of Metropolitan's systems and facilities and the role they play in regional supply reliability while protecting environmental resources. Serve as liaison to Metropolitan's member agencies and facilitate their engagement with Metropolitan.

Metropolitan staff coordinated presentations on the Regional Recycled Water Program for ACWA's Region 8 Webinar, Developing a Recycled Water Supply through Regional Partnerships. (November 3)

Metropolitan provided virtual tours of the Regional Recycled Water Advanced Purification Center to the public and Achievement Rewards for College Scientists Foundation, Los Angeles Chapter. (November 5 and 19)

Metropolitan staff organized WaterReuse California Communications Collaborative meeting with Felicia Marcus as keynote speaker. (November 18)

Construction Projects Updates

- Distributed notices to the community regarding urgent repairs on the Second Lower Feeder in Placentia. (November 13)
- Presented to the city of Rancho Cucamonga staff in preparation for the Rialto Feeder Shutdown. (November 18)

Member Agency Support

Metropolitan met with member agency public information officers to share work projects on COVID-response in the communities, social media collaboration, conservation programs and outreach resources, Delta Conveyance, and education activities. More than 75 attendees participated in the webinar. (November 12)

Metropolitan met with the Member Agency managers to discuss 2021 legislative priorities and principles, IRP modeling for imported water supplies, 2020 UWMP and preliminary scenario analysis, Delta Conveyance project, and the proposed COVID-19 Member Agency Payment Deferral Program. (November 13)

Objective #4 EDUCATION AND COMMUNITY RELATIONS - Facilitate public engagement in and understanding of water resource issues through community relations activities and education projects. Build awareness of and appreciation among Southern California for the value of clean, reliable water supplies and the importance of good water stewardship.

EXTERNAL AFFAIRS *continued*

General Education

Metropolitan worked with member agencies and other organizations to address the evolving needs of students with online facility tours, scouting programs and customized class presentations. Education staff participated in Department of Water Resources Water Education Committee meeting and made presentations to the Los Angeles County Office Education's Career Technical Education webinar series, the University of Southern California's Engineering Department, the Las Virgenes Metropolitan Water District Tap-In 2020 webinar on Sustainable Education. Staff virtually interacted with nearly 2,000 teachers, students, and parents. (see image below)



Metropolitan hosted a virtual Girl Scout Water Protector Patch workshop. Scouts were provided with cardboard VR goggles to tour the Colorado River Aqueduct and the State Water Project, and learned about local water sources, distribution, treatment, and conservation efforts. (see image below)



Community Partnering and Sponsorship Programs

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

- Forestry Educators San Bernardino Forestry Challenge for high school students (November 4–7)
- Water Education for Latino Leaders Annual Conference (November 13)
- Downtown San Diego Partnership Installation Event (November 17)
- Southern California Leadership Network 2020 Visionaries Awards (November 18)
- River Los Angeles Water Awareness Education Event (November 18)

EXTERNAL AFFAIRS *continued*

Objective #5 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 and entrepreneurs throughout the region through its online participation and, in some cases, sponsorship of the following programs, online conferences, webinars, and events:

- Asian Business Association, Orange County BIZCON Event (November 5)
- SoCalGas Meet the Primes Virtual Supplier Showcase (November 18)
- San Diego Procurement Technical Assistance Center “How to Do Business with MWD” (November 19)

The monthly Innovation Hour showcased Metropolitan’s pilot projects in partnership with WaterStart, a Nevada nonprofit that provides funding to member utilities. (November 5)

HUMAN RESOURCES

GM STRATEGIC PRIORITY #1: Resiliency

Objective #1 Partner with Metropolitan leadership to support learning, development, and adaptive workforce planning initiatives.

Twenty-five managers attended a webinar on “Engaging Your Virtual Team,” which covered designing strategic meeting agendas, using empathy to connect to team members’ needs, and using Zoom features to actively involve team members during online meetings.

This month, 212 Metropolitan employees attended online classes, including Microsoft Teams, Dealing with Difficult People, Harassment Prevention for Managers, and Excel Pivot Tables.

LinkedIn Learning, Metropolitan’s online learning content platform, was accessed for 96 classes, including Communicating with Empathy, Mistakes You Should Avoid at Work, Project Leadership, and Prioritizing Effectively as a Leader.

Objective #2 Seek diverse, high-quality talent, and establish partnerships to discover additional outreach opportunities that aid in staffing positions.

Recruitment successfully filled 10 positions for the month of November. We received 17 new staffing requisitions resulting in 121 positions currently in recruitment. Recruitment continues conducting virtual interviews using Zoom. We have completed Zoom interviews for more than 62 positions.

Outreach efforts included hosting session two of the virtual web series “Steps to Landing Your Next Job,” which had over 100 participants and included a panel member from Amazon. This session helped participants learn about Metropolitan employment opportunities and provided tips to be successful during a virtual interview. One more session will follow in the series.

Metropolitan’s Diversity, Equity & Inclusion Council continued its work in November, wrapping up its Charter, reviewing bias training, and developing a microsite to help communications with the workforce. Further updates will be provided to the Board as the DEI Council continues to meet.

HR CORE BUSINESS: 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 #1 Administer all HR services with efficiency and a focus on customer service excellence, consistency, and flexibility.

HR management has continued to meet with Bargaining Unit Leadership on a regular basis during the pandemic to ensure that the Bargaining Units are aware of the latest information but also to ensure that the Bargaining Units share any concerns that they may have or have heard with Human Resources so they can be addressed.

HR continues to work with employees regarding their leave rights and options under the new Family First Coronavirus Response Act and have processed 131 leave requests to date under the temporary Emergency Paid Sick Leave Act and Extended Family Medical Leave Expansion Act.

HUMAN RESOURCES *continued*

HR 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 #1 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.

Staff developed and launched the workforce Self-ID survey for disability and protected veteran status as required by federal contractor obligations.

In November, ten new workers' compensation claims were received and seven were resolved. Three employees remain off work because of an industrial injury or illness. This reflects Metropolitan's effort to accommodate injured workers, while enabling them to be productive and on the job.

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

- Coordinated medical surveillance exams at one facility (Soto Street). The exams included respirator exams, Department of Motor Vehicle exams, and hearing tests.
- Initiated and completed six Medical Questionnaires in lieu of medical exams.
- Addressed three Accommodation issues.

HR Metrics	June 2020	November 2020	Prior Month October
Headcount			
Regular Employees	1,799	1,805	1,805
Temporary Employees	29	24	27
Interns	9	3	3
Recurrents	21	20	21
Annuitants	17	14	16

HR Metrics	November 2020	October 2020
Number of Recruitments in Progress (Includes Temps and Intern positions)	121	114
Number of New Staffing Requisitions	17	21
	November 2020	October 2020
Number of Job Audit Requests in Progress	11	10
Number of Completed/Closed Job Audits	1	1
Number of New Job Audit Requests	2	1

HUMAN RESOURCES *continued*

Transactions Current Month and Fiscal YTD (includes current month)			
<u>External Hires</u>	<u>FY 19/20 Totals</u>	<u>November 2020</u>	<u>FISCAL YTD</u>
Regular Employees	127	5	26
Temporary Employees	29	3	9
Interns	18	0	1
Internal Promotions	91	3	36
Management Requested Promotions	109	14	53
Retirements/Separations (regular employees)	124	5	26
Employee Requested Transfers	15	1	9

INFORMATION TECHNOLOGY

GM STRATEGIC PRIORITY #1: Resiliency

OBJECTIVE #1 Strengthen Metropolitan's cybersecurity capabilities by deploying new and emerging technologies and implementing enhanced security countermeasures

Continued to implement Cybersecurity projects and initiatives to improve Metropolitan's security posture and collaborate with stakeholders to further enhance network security capabilities for Metropolitan's computing environments.

- Partnered with business groups to perform on-going cyber improvements and software upgrades to mitigate evolving security risks to Metropolitan's business networks and applications.
- Provided cybersecurity requirements for new capital projects within the Capital Investment Plan to ensure compliance with Metropolitan standards.
- Continued upgrade to Windows 10 to maintain the current PC operating system and enhance Metropolitan's computing environment's security capabilities and mitigate cybersecurity risk and vulnerabilities.
- Continued multi-factor authentication testing and deployment planning. Once fully implemented, the multi-factor authentication tool will provide an additional layer of security protection for Metropolitan.
- Began testing new network anti-malware software (end-point-protection) for Metropolitan. Initial testing was conducted within the IT Group to fine-tune configuration and to refine the enterprise-wide deployment strategy.

OBJECTIVE #2 Manage Information Technology Projects within the Capital Investment Plan to ensure reliability of IT Systems and Infrastructure.

- Desert Microwave and Two-Way Radio project—Staff is currently working on the design phase to replace end-of-life equipment and enhance Metropolitan's communications networks' capacity and reliability.
- Water Information System (WINS) Upgrade—The current system is a ten-year-old custom-application using older technology and needs to be updated. The WINS team continued to partner with stakeholders from across the enterprise (CFO, WSO, SCADA, and IT) to collect and review detailed WINS business functionality as part of requirements gathering to develop an RFP.
- Budget System Replacement Project—IT supported work sessions with stakeholders to gather design and integration requirements. The project is in the design phase and is scheduled to complete by June 2021 to support the next biennial budget development.



Virtual Meeting

INFORMATION TECHNOLOGY *continued*

OBJECTIVE #3 Modernize Operational Technology and Control System Upgrades as part of the Capital Investment Plan.

- Automated Meter Reading (AMR) Upgrade—The AMR project will address equipment obsolescence as the current communication equipment used in the system is approaching end-of-life. During the period, Staff continued with the study phase of the project and continued to work on an innovative approach involving four radio frequency technologies as part of evaluating design alternatives.

OBJECTIVE #4 Improve Metropolitan's IT Disaster Recovery and Response Capability

- Conducted on-going IT disaster planning for future recovery exercises as part of validating Metropolitan's recovery capabilities in the event of a disaster.
- Partnered with WSO on continued evaluation of a public safety-grade network designed for disaster communications. Comprehensive testing is on-going to validate effectiveness due to Metropolitan's large geographical coverage area.

OBJECTIVE #5 Provide leadership, planning, and solutions in support of Metropolitan's Strategic Priorities.

- As part of the strategic priority to enhance Metropolitan's resiliency, IT Staff continued efforts to relocate Metropolitan's data centers to improve reliability, performance, and operational uptime of data center processing.
 - During this period, Staff began receiving shipments of equipment for the secondary site and will begin to prepare the hardware to support upcoming deployment.



Equipment for New Secondary Datacenter

- IT resources continued to work through internal and external logistical challenges associated with COVID-19 to relocate Metropolitan's data centers. In addition, significant detailed planning and preparatory work of on-premise systems are being made in advance of the upcoming physical move.

OBJECTIVE #6 Deploy solutions to improve operations, promote collaboration, and provide business value.

Continued the Personal Computer Replacement Project (PCRP) by deploying new laptops and workstations in a phased approach.

- Continued deployment of PCs while following COVID-19 safety protocols.
- With the substantial completion of deployment efforts at Headquarters, the PCRP team has shifted operations to the Weymouth Facility (La Verne) to continue deployment efforts at Weymouth and remaining field sites.
- To date, approximately 1080 units were deployed.

INFORMATION TECHNOLOGY *continued*

- Worked with business units to coordinate specialized hardware configurations, software, or system requirements.



PC Replacement Project

OBJECTIVE #7 Enhance workforce productivity by simplifying access to business information and deploy technologies to support our customers in making business decisions.

- **Service Desk Application**—The project team continued design workshops as part of phase one of the IT Service Management (ITSM) Project. This project aims to deploy an enterprise ITSM system for use by the IT Service Desk Team to manage service ticket requests generated by business users across Metropolitan. Once fully implemented, the new service desk software will centralize and modernize service management within the Information Technology Group. The service desk tool will provide a self-service portal for work requests and improve operational reporting capabilities.



GM STRATEGIC PRIORITY #2: Sustainability

OBJECTIVE #1 Provide IT services in support of the Headquarters Improvements Program.

- Provided IT support and services for equipment relocation of workstations, phones, printers, and network configuration changes during the seismic retrofit upgrades. The IT team continued with relocation planning and support of ESG and Facilities for the remaining floors of the high-rise building based on the current accelerated construction schedule.
- Current efforts are underway to return operations to the sixth-floor high-rise (from the 4th-floor wing) by the end of November, while logistical efforts continue to relocate the upper floors to the wing area to facilitate on-going construction activities.



INFORMATION TECHNOLOGY *continued*

GM STRATEGIC PRIORITY #3 Innovation

OBJECTIVE #1 Strengthen Metropolitan's cybersecurity capabilities by deploying new and emerging technologies and implementing enhanced security countermeasures.

- Initiated efforts to develop requirements and RFP to implement the Cybersecurity Operations Center project to improve Metropolitan's security posture and collaborate with stakeholders to further enhance network security capabilities for Metropolitan's computing environments.

OBJECTIVE #2 Manage Information Technology Projects within the Capital Investment Plan to deploy innovative solutions.

- Collaborated with ESG on the capital improvements project to upgrade the audiovisual (AV) technology systems at Metropolitan's Headquarters Building for the Boardroom Technology Upgrade Project. This project replaces end-of-life equipment with current technologies and AV equipment located in the Board and Committee rooms. The IT work is being closely coordinated with current construction activities at the headquarters building.



Main Board Room

OBJECTIVE #4 Provide leadership, planning, and solutions in support of Metropolitan's Strategic Priorities.

- Improved and expanded the use of cloud services at Metropolitan. During the period, Staff monitored and optimized cloud services while planning for future migrations of virtual servers. In addition to enhancing operational resiliency and efficiency, another realized benefit is the ability to decommission legacy and end-of-life servers.

OBJECTIVE #5 Deploy innovative solutions to improve operations, promote collaboration, and provide business value.

- IT Staff recently performed upgrades at Metropolitan's Sacramento Office by installing new networking equipment (i.e., router, communication equipment) vital to business communication.



Fiber Splicing - Field Location

OBJECTIVE #6 Enhance workforce productivity by simplifying access to business information and deploy technologies to support our customers in business decisions.

- **Maximo Mobile Computing Project**—This project replaces existing mobile devices used in Water System Operations (WSO) with the latest tablet technology.
 - As part of the pilot phase, tablets have been deployed to field staff to evaluate user requirements, performance, and functionality. The project team continues to work with WSO stakeholders to finalize account roles and processes and conduct training sessions for the WSO end-users and management.
 - Based on the initial pilot phase's success, WSO has requested additional iPad units, and efforts are underway to acquire, configure, and provision the units for field deployment as part of the Maximo Mobile pilot.

REAL PROPERTY

GM STRATEGIC PRIORITY #1: Resiliency

Objective #1 Provide right-of-way planning, valuation, and real property acquisition support services for the protection and reliability of existing infrastructure.

Staff obtained a five-month Entry Permit for construction staging area from the Irvine Community Development Company, LLC, to facilitate urgent repair work on the Allen McColloch Pipeline (AMP). AMP is the source of water supply to South Orange County; the repair would minimize the service interruption and ensure water deliveries to the area.

GM STRATEGIC PRIORITY #3 Innovation

Objective #1 Develop a centralized, strategic and structured approach to the planning, valuation, acquisition, management, and disposition of Metropolitan's real property holdings.

Staff and consultants continue to make significant progress with the configuration and product build phases of a new Real Property Business System. The Real Property Business System is a cloud-based product to manage the increasing volume of land management activities, such as temporary rights acquisitions and agricultural leases.

CORE BUSINESS: Real Property Acquisition, Management and Revenue Enhancement

Objective #1 In conjunction with our partners in WSO and Security, manage and protect Metropolitan's real property land holdings and permanent easements while ensuring that Metropolitan's core operations are protected.

Property Management staff has continued to work with WSO and Security staff to fortify problematic entry points that trespassers use to access the Eagle Valley property. The installation of additional signage and k-rail barriers are being undertaken, while the use of security cameras is being explored.

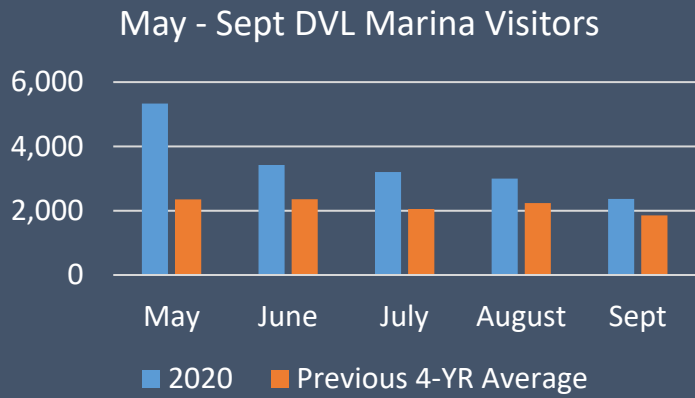
Objective #2 Provide valuation, land management, and real property disposition support services for the maximum return or use of Metropolitan-owned land and facilities.

An Entry Permit was issued to Leighton and Associates to conduct a geotechnical investigation involving up to six boring locations near San Diego Pipelines 4 and 5 for a one-week period.

Objective #3 Efficiently maintain and operate assets not related to the treatment and distribution of water.

The Diamond Valley Lake Marina has proven to be a popular destination for fishermen, hikers, and all those looking to recreate safely during a time when limited recreation opportunities are available. Since the marina reopened in May, after closing because of COVID-19, visitation has significantly exceeded prior years' numbers. Visitation has more than doubled in May in comparison to the previous four-year average. The proceeding months also saw substantial increases before beginning to taper off, heading into the fall.

REAL PROPERTY *continued*



SECURITY/CAO

GM STRATEGIC PRIORITY #1: Resiliency

Objective #1 Develop and Refine Security's Strategic Plan

On March 23, 2020, the Transportation Security Administration (TSA) published the final rule, "Security Training for Surface Transportation Employees." The final rule requires that Metropolitan provide TSA-approved security training to designated employees performing security-sensitive functions dealing with railcars containing "chemicals of interest" (COIs) in densely populated urban areas. Metropolitan has approximately 13 months to comply with the training requirement. The Security Management Unit is working closely with key staff in Water System Operations (WSO), Operational Safety and Regulatory Services (SRS), and Environmental Health and Safety (EHS) to ensure that all regulatory requirements are successfully and fully met throughout our operational areas.



Railcars containing COIs

Objective # 2 Improve Security and Emergency Response

The Security Management Unit recently collaborated with WSO and Engineering in a capital improvement project to design upgrades involving both valve components and physical security at the Washington Pressure Control Structure in East Los Angeles. The site has been heavily affected by a rapid rise in encroachment and criminal activity, resulting in numerous threats to the structure, including arson, power loss, illegal dumping, and vandalism.



Washington Pressure Control Structure physical security upgrades

WATER RESOURCE MANAGEMENT

GM STRATEGIC PRIORITY #1: Resiliency

Objective #4 Improve succession planning and staff development

Staff attended the three-day virtual conference, “Building a Water-Resilient California,” hosted by the Public Policy Institute of California (PPIC). The conference focused on current issues relating to California’s water landscape and sought to explore ways to boost resilience to multiple stressors while supporting economic recovery and workforce development.

Objective #5 Ensure reliable State Water Project (SWP).

Staff participated in discussions with the California Department of Water Resources (DWR) on the upcoming drawdown at Castaic Lake. Castaic Lake is the terminal reservoir of the State Water Project (SWP) West Branch. DWR is working on the seismic retrofit of the Castaic Dam tower bridge and needs to lower the reservoir level to implement the retrofit.



On November 6, 2019, coring work is being done on Castaic Dam's stream release chute as part of the Castaic Dam Modernization Program. (Credit: California Department of Water Resources)

Objective #6 Ensure access to sufficient water supplies to operate a full Colorado River Aqueduct in times of drought.

The U.S. Bureau of Reclamation (USBR) initiated a collaborative study (“Lower Colorado River Agricultural Water Savings Pilot Study”) to explore methods of quantifying agricultural water conservation savings. Metropolitan staff provided input on possible water conservation case studies. This study demonstrates commitments from Metropolitan and other Colorado River stakeholders to ensure the resiliency, reliability, and sustainability of Colorado River supplies.

Metropolitan staff attended a meeting with USBR to discuss Metropolitan’s 2021 Colorado River Diversion Request, which staff submitted to USBR in September. Metropolitan staff provided supporting information on Metropolitan’s water supply and demand management programs along with the diversion request.

WATER RESOURCE MANAGEMENT *continued*

GM STRATEGIC PRIORITY #2: Sustainability

Objective #2 Complete the 2020 Urban Water Management Plan.

Staff continues to develop Metropolitan’s 2020 Urban Water Management Plan (UWMP) and worked with member agencies to receive updated preliminary local supply projections for the 2020 UWMP reliability analyses.

Objective #3 Monitor development of climate science and incorporate updated information into Integrated Water Resources Planning approach.

Staff attended a series of webinar workshops related to climate science in the Colorado River Basin, including the Colorado River Hydrology Research Symposium, the annual Colorado River Basin Forecast Center Stakeholder Engagement Meeting, and meetings with the Colorado River Board and various academic groups on their recent publications.

Objective #4 Manage existing and develop new regional water management programs to maintain water supply reliability in the face of increasing water supply volatility.

Staff presented an overview of the Onsite Retrofit Program at Metropolitan Water District of Orange County’s (MWDOC) Water Use Efficiency Coordinator Workgroup meeting. The presentation topics included application instructions, incentive requirements, status of the program, and a timeline for receiving incentive payments

The Stormwater Recharge Pilot received six applications to date, consisting of two monitoring equipment installation projects and four new construction projects. The funding amount requested to date totals \$4.98 million of the \$7.5 million available for the pilot. To ensure a diversity of projects, the pilot limits five projects per Regional Board area and two projects per groundwater basin. Of the applications received, the limit for the San Fernando groundwater basin has been reached. Also, three out of the maximum five applications per Regional Water Quality Control Board have been received for the Los Angeles and Santa Ana regions.

Stormwater Recharge Pilot—Application Update 11/9/2020

Member Agency	Project Name	Funding Amount Requested	Regional Board Area	Groundwater Basin
<i>Monitoring Equipment Installation</i>				
Western Municipal Water District	Enhanced Monitoring of the Victoria Basin Stormwater Recharge Project	\$500,000	Region 8—Santa Ana	Arlington
Central Basin Municipal Water District	John Anson Ford Park Infiltration Cistern Project	\$500,000	Region 4—Los Angeles	Central Basin

WATER RESOURCE MANAGEMENT *continued*

<i>New Construction</i>				
Los Angeles Department of Water and Power (LADWP)	Fernangeles Park Stormwater Capture Project	\$1,000,000	Region 4—Los Angeles	San Fernando
LADWP	Whitnall Highway Stormwater Capture Project	\$1,000,000	Region 4—Los Angeles	San Fernando
City of Anaheim	State College Boulevard Stormwater Capture Project	\$980,000	Region 8—Santa Ana	Orange County
Inland Empire Utilities Agency (IEUA)	Montclair Basin Improvements Project	\$1,000,000	Region 8—Santa Ana	Chino

Objective #5 Support development of Regional Recycled Water Program (RRWP).

Staff gave a presentation on the Regional Recycled Water Program at the October meeting of the Southern California Water Committee Recycled Water Taskforce.

Objective #7 Participate in Federal, State and Local Water-Energy Nexus processes to support Metropolitan Energy Sustainability and Climate Action Plans

Staff participated in the National Alliance for Water Innovation (NAWI) annual workshop on November 18–19 to plan future research activities. Metropolitan is a member of NAWI and participates in several of its research planning efforts. NAWI members includes other DOE laboratories, universities, private companies, and water-related utilities.

Objective #8 Implement Regional Conservation Program.

Staff held a virtual Model Water Efficient Landscape Ordinance (MWELO) workshop series for landscape contractors, city permitting staff, and landscape designers. Fifty-three attended the four-session workshop series.

Metropolitan staff attended the three-part symposium, “Rain or Shine: Soaking up Success,” hosted by the Council for Watershed Health (CWH). Metropolitan’s Stephen Arakawa, the current CWH Board of Directors President opened the series with an introduction of the symposium goals and its focus on promoting the benefits of green infrastructure. The symposium also featured keynote speakers such as Los Angeles County Supervisor, Sheila Kuehl and California Secretary of Natural Resources Wade Crowfoot. Metropolitan’s general manager, Jeffrey Kightlinger was also invited as a panelist and represented Metropolitan’s effort in implementing regional conservation program.

Metropolitan staff attended the annual WaterSmart Innovations (WSI) Conference. Highlights of this month’s webinar include an evaluation of high-efficiency sprinkler nozzles and rain sensor rebates; a review of the new American Water Works Association (AWWA) free water audit software; a “Lessons Learned” from a system-wide water-loss analysis; and commercial and institutional water conservation auditor certification training and testing.

WATER RESOURCE MANAGEMENT *continued*

OBJECTIVE #9 Ensure cost-effective State Water Project supplies

Staff participated in DWR's Operations, Maintenance, and Engineering Committee (OME) and Dam Safety Committee (Dam Safety) meetings. Among many other topics, DWR staff presented information on a new waterborne vessel being used for the bathymetric survey of the California Aqueduct. This new method allows DWR staff to have a complete picture of the aqueduct without the need for emptying the aqueduct, saving time and money compared to manual inspections and lengthy shutdowns.

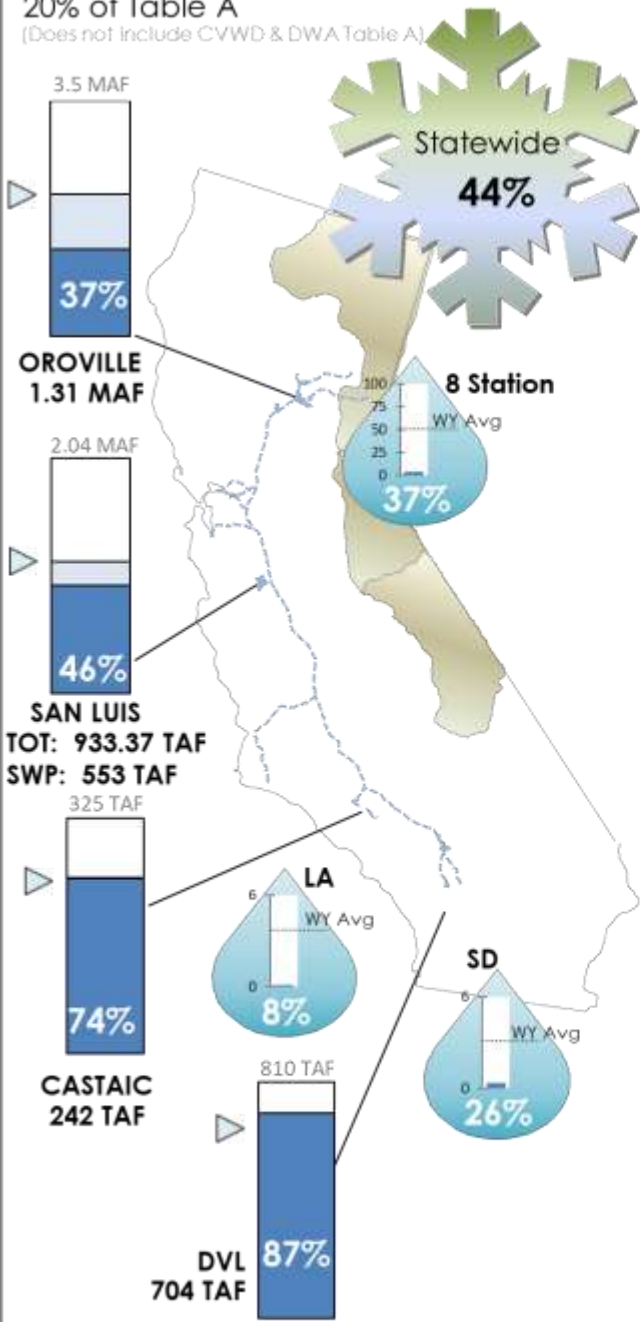


DWR staff lowers the waterborne vessel into the California Aqueduct with the help of a crane. (Credit: California Department of Water Resources)

WATER RESOURCE MANAGEMENT *continued*

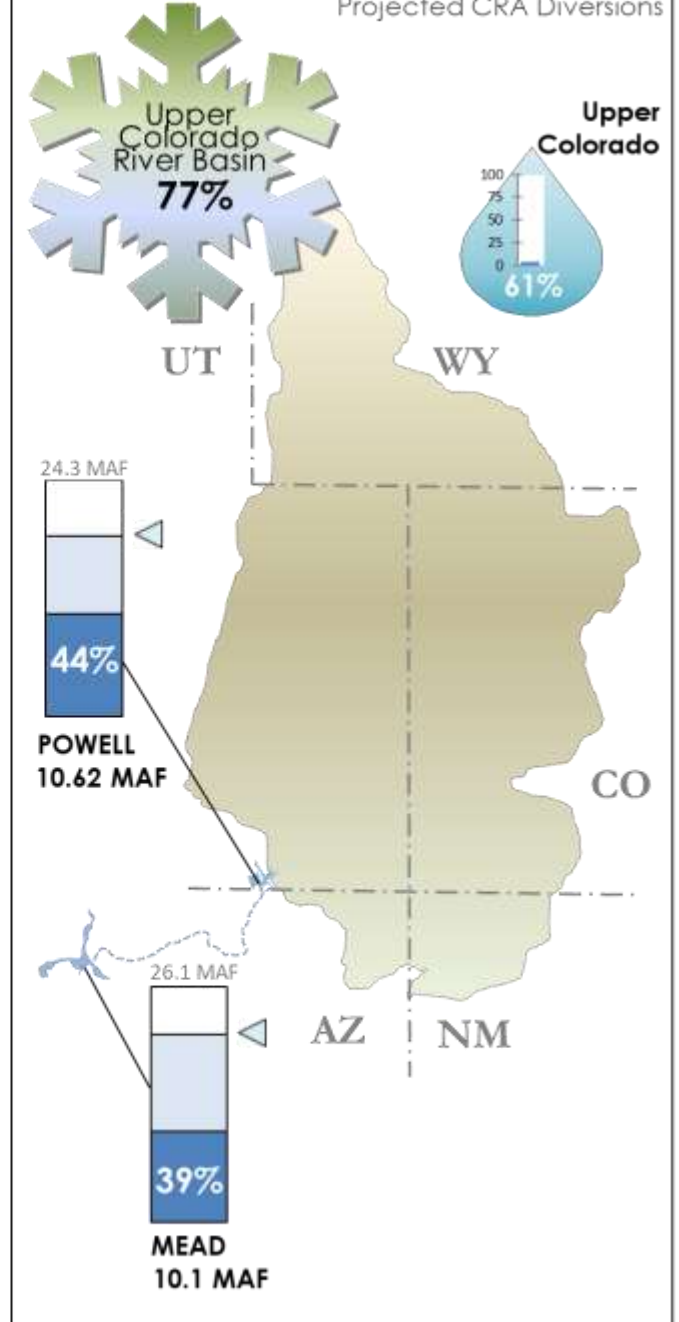
2020 SWP Allocation

382,300 AF
20% of Table A
(Does not include CVWD & DWA Table A)



2020 Colorado River

829,000 AF
Projected CRA Diversions



Regional Snowpack

WY Avg
% Normal
Rainfall to Date (in)

Capacity
Average EOM Storage
Current Storage (% Capacity)

Snow pack
% Normal

As of November 30, 2020

WATER SYSTEM OPERATIONS

GM STRATEGIC PRIORITY #1: Resiliency

Objective #1 Provide Reliable Water Deliveries.

Metropolitan delivered approximately 120,000 acre-feet (AF) of water to member agencies in November. November deliveries averaged approximately 4,000 AF per day, which was 990 AF per day lower than October's deliveries. Treated water deliveries for November totaled 57,580 AF, or 48 percent of total deliveries for the month. This was a decrease of about 12,320 AF from October's treated water deliveries. The Colorado River Aqueduct (CRA) was at a 7-pump flow, or 3,150 AF per day for the majority of November. A total of 94,500 AF was pumped on the CRA for the month. State Water Project (SWP) imports averaged 1,557 AF per day, totaling about 46,700 AF for the month. The target SWP blends remained at zero percent for the Weymouth, Diemer, and Skinner plants.

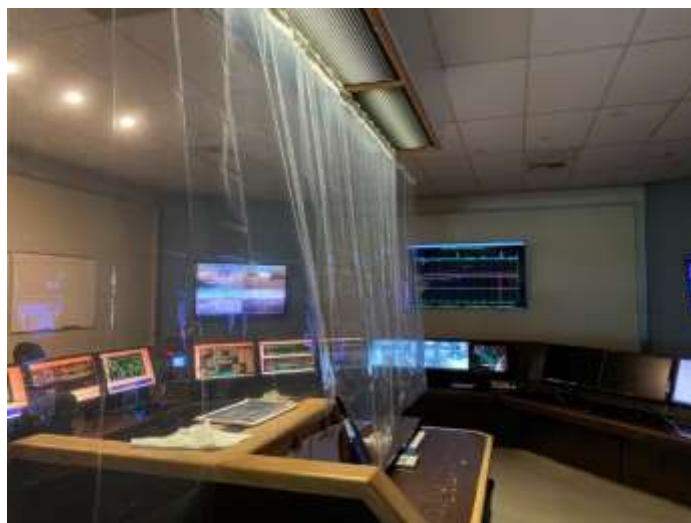
Objective #2 Ensure Water Quality Compliance, Worker Safety, and Environmental Protection.

Metropolitan complied with all water quality regulations and primary drinking water standards during October 2020.

Staff applied to renew a hazardous materials transportation permit with the Nevada Highway Patrol. The permit allows Metropolitan to continue to transport chlorine from Metropolitan's chlorine supplier facility in Nevada to Metropolitan facilities in Southern California in the event of an emergency where chlorine supply cannot be delivered by rail to Southern California.

Staff accepted an invitation to become a member of the Mojave Desert Air Quality Management Desert (MDAQMD) Technical Advisory Committee (TAC). The TAC is charged with providing technical advice on air quality related matters primarily related to MDAQMD's implementation of state and federal rules, regulations, and planning documents.

Staff conceived, designed, and installed innovative partition curtains in the control center at the Skinner plant as a COVID-19 prevention measure. Physical distancing within operations centers is critical for essential staff to continue working rotating shifts and maintain 24-hour coverage. It has been a goal to have operations staff working in separate rooms, but this degree of physical distancing has made it difficult at times for staff to communicate effectively. The new partition curtains add an additional layer of protection that allows two staff wearing face masks to be in the same room at the same time. This improves the ability for operators to communicate and interact while mitigating risk of exposure.



Partition curtain installed in the control center at the Skinner plant

WATER SYSTEM OPERATIONS *continued*

Objective #3 Actively Engage in Capital Project Planning and Execution.

Staff performed a shutdown of the East Valley Feeder (EVF) to support the Greg Avenue Pump Station Rehabilitation capital project. During the planned outage, staff replaced several valves and performed internal inspection of 4,100 feet of pipe. This 14-day shutdown was successfully completed five days ahead of schedule. The Greg Avenue pump station is expected to be operational in early 2021, and the improvements will ensure system flexibility by having a reliable facility that can pump Colorado River water to the western portions of the service area as needed.



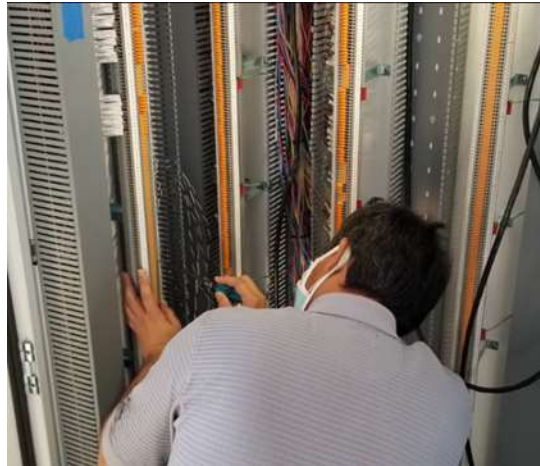
Staff installing a pipeline access flange (left) and surge valve (right) during the EVF shutdown



Installation of surge tanks at Greg Avenue pump station during the EVF shutdown

WATER SYSTEM OPERATIONS *continued*

Staff worked on the wiring installation for the new remote terminal unit (RTU) extension cabinet for the Weymouth Chlorine System Upgrades capital project. The RTU is in the new motor control center structure and is used to connect wiring from equipment to the SCADA system for remote monitoring and control. Hundreds of connections need to be secured and tested before the new chlorine system can be brought online in the summer of 2021.



Staff wiring connector cable bundles for the new RTU at the Weymouth plant

Objective #4 Optimize Maintenance.

High winds damaged the 2,300V distribution lines which provide power to Copper Basin Reservoir. The strong winds caused a large tree to fall and strike the line, knocking down one power pole and damaging the crossarms on two adjacent poles. The downed lines also temporarily blocked the access road to Copper Basin Reservoir. Staff repaired the damage by installing one new power pole and replacing crossarms on the adjacent poles. The damage occurred early in the morning, and staff had the lines repaired and back in service, as well as the access road open to traffic, by the end of the business day.



Staff replacing power pole and crossarms damaged by high winds near Copper Basin

Staff performed annual electrical maintenance on a 6.9kV circuit breaker at the Eagle Mountain pumping plant. This circuit breaker is part of the electrical circuit for the 12,500hp pump motors at the plant. Each pump is shut down at least once a year for preventative maintenance. Circuit breaker annual maintenance includes cleaning, inspection, and lubrication of the mechanism as well as electrical testing.

WATER SYSTEM OPERATIONS *continued*



Staff performing maintenance on 6.9kV circuit breaker at Eagle Mountain pumping plant

Staff changed the oil in a motor housing which contains both the thrust and guide bearings at the Eagle Mountain pumping plant. The guide bearing is used to control perpendicular movement while the thrust bearing takes the axial load (parallel to the shaft). This is part of the regular maintenance process which includes sampling and analyzing the lubrication oil for particulates and contaminants such as water.



Staff changing oil in a 12,500hp motor at the Eagle Mountain pumping plant

WATER SYSTEM OPERATIONS *continued*

Staff performed annual emergency power system (EPS) tests at several field locations. The emergency standby generators are connecting to load bank equipment that simulates an actual power system failure. This test simulates real-life conditions in the event of power failure that will ensure the integrity and reliability of backup power systems. Metropolitan has a no-failure goal for all backup power systems.



Staff testing the emergency generator at Live Oak Reservoir



Staff connecting load bank equipment to the standby generator at San Dimas PCS

Staff began rehabilitation of a 15-foot-wide dirt access road to a blow-off structure on the Orange County Feeder. The existing access road to the blow-off structure has become impassable because of erosion resulting from increased storm runoff from development in the surrounding area. The work will be done in two phases. Phase one will include roadway re-grading and drainage improvements. Phase two will include raising the blow-off structure and associated

WATER SYSTEM OPERATIONS *continued*

pipings above the flood elevation and will require a scheduled shutdown of the feeder. The Orange County Feeder conveys treated water from the Weymouth plant to six member agencies in Los Angeles and Orange counties.



Vegetation clearing to allow access to the worksite along the Orange County Feeder

Staff investigated a loss of signal at an Inland Feeder blow-off structure. The structure was vandalized with the incoming power cables missing. Staff is working with the local utility to restore power to the meter cabinet and repair damaged equipment.



Vandalized meter cabinet along the Inland Feeder

Staff installed custom-designed fabricated reinforcing components at joints in the piping system at the Perris Pumpback facility in the city of Perris. The reinforcements, manufactured at the La Verne Shops, allow the piping system to withstand higher surge pressures from starting and stopping the electric and diesel pumps when delivering water from Lake Perris to the Mills plant. After the pipeline was shut down and dewatered, a 54-inch-diameter butterfly valve was removed to allow access for staff to install the reinforcing components. After the reinforcing components were installed, staff performed an inspection of the piping and made minor mortar lining repairs at 40 locations. The planned 36-day shutdown was successfully completed 12 days ahead of schedule.

WATER SYSTEM OPERATIONS *continued*



Staff removing a large valve to allow for pipe access at Perris PCS

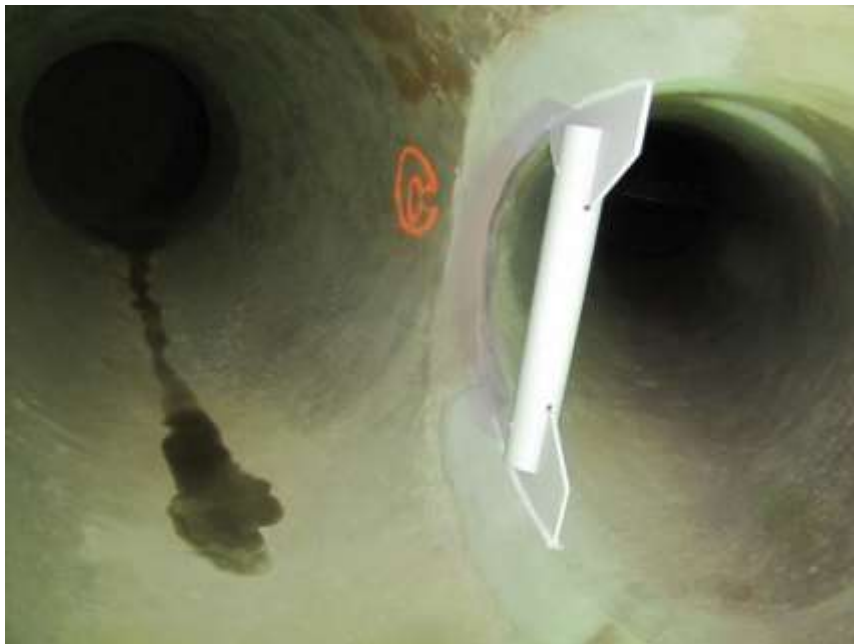


Staff welding prefabricated reinforcements into place at the Perris Pumpback facility

WATER SYSTEM OPERATIONS *continued*



Interior view of prefabricated reinforcements at pipe joints in the Perris Pumpback facility



Completed reinforcements at pipe joints in the Perris Pumpback facility

Staff completed interior repairs on the Maintenance Center breakroom at the Mills plant. This work is part of a remediation effort necessitated by prior rainwater intrusion. Staff overcame multiple challenges to complete this project by working in micro-teams while maintaining physical distancing and interfacing with outside contractors. The original breakroom cabinets and drywall were removed and replaced. This common space will be shared by all craft staff at the plant in accordance with the facility's COVID-19 Prevention Plan.

WATER SYSTEM OPERATIONS *continued*



Mills plant breakroom during remediation work



Mills plant breakroom after completion of remediation work

Objective #5 Manage the Power System.

Metropolitan filed comments with the California Independent System Operator (CAISO) on revisions to their Business Practice Manual that could impose requirements on Metropolitan's interruptible load program for the pumps at Gene and Intake pumping plants along the Colorado River Aqueduct. Metropolitan currently receives capacity credit for the ability to interrupt Gene and Intake pumps for short periods, if the reservoir levels at Gene Wash and Copper Basin are sufficient and Metropolitan's system demands permit. The CAISO is pursuing measures to increase control of interruptible load programs within its balancing area to meet peak load conditions.

On November 14, a 230 kV circuit breaker opened at Gene pumping plant, deenergizing one of the 230/69/6.9 kV transformer banks and causing the pumping at Gene and Intake to drop from a seven-pump to three-pump flow. Switching was performed and Gene and Intake were restored to a five-pump flow later that evening. Staff worked to troubleshoot and perform the necessary repairs. The bank was re-energized, and seven-pump flow was reestablished on November 17.

Staff completed testing of the CRA teleprotection relaying system that protects Metropolitan's 230 kV transmission system between the Western Area Power Administration's (WAPA's) Mead substation and Gene and Eagle Mountain pumping plants. The teleprotection system had been out of service since early 2020 and one 230 kV line between the Mead and Camino switching stations was removed from service to protect system equipment. Following successful completion of the testing, the teleprotection system was placed back into service and both Mead-Camino 230 kV lines were closed on November 19, restoring the 230 kV system to normal operation. Metropolitan staff along with counterparts at WAPA and Southern California Edison cooperated extensively during the testing and decision process.

WATER SYSTEM OPERATIONS *continued*

Objective #6 Improve Emergency Preparedness and Response.

Staff mobilized in response to the Blue Ridge and Silverado fires located adjacent to the Diemer plant and within the Orange County conveyance and distribution system, respectively. Emergency response plans were in place and staff were ready to activate Incident Command Posts if needed. Precautions were taken to ensure employee safety by minimizing outdoor work in areas affected by wildfire smoke and ensuring the necessary personal protective equipment was available. Additional staff were placed on call in the event the fires threatened operation of the plant or affected other facilities. As the fires spread, some distribution structures located in the burn areas temporarily lost communication functions that allow remote monitoring of the systems; however, there was no damage to Metropolitan equipment or interruption to service. Staff used WebEOC as a primary means of logging and disseminating information related to the fires. Metropolitan's Duty Officer was also in regular contact with area emergency response officials. Overall, staff used lessons learned from past wildfire events to effectively respond and ensure employee safety and continued operations during this emergency with minimal disruption.



View of the Blue Ridge Fire from the Diemer plant

Objective #7 Optimize Water Treatment and Distribution.

The State Project Water (SPW) target blend entering the Weymouth and Diemer plants was zero percent in November 2020. The SPW target entering Lake Skinner was zero percent in October 2020.

WATER SYSTEM OPERATIONS *continued*

Flow-weighted running annual averages for total dissolved solids from September 2019 through August 2020 for Metropolitan's treatment plants that can receive a blend of SPW and CRA water were 476, 474, and 398 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Staff replaced Programmable Logic Controllers (PLCs) for the solids thickeners and belt presses at the Skinner plant. The PLCs that were installed were obsolete, and parts were no longer available. The thickeners and belt presses are critical to extract water from the solids removed from the water treatment process. That extracted water is then recycled and returned to the head of the treatment plant, thereby keeping the loss of water used in the treatment process to a minimum.



Staff installing a new PLC for solids handling at the Skinner plant

During the Yorba Linda Feeder shutdown, staff completed repairs and upgrades to the Yorba Linda Feeder flow meter at the Diemer plant. This meter is used to measure water flows coming into the plant and to help control treatment chemical feed processes. The repairs and upgrades allow a greater degree of accuracy during a wider range of flow conditions, improving the reliability of the treatment process.

As part of Metropolitan's preventive maintenance program, staff removed debris from one of the eight sedimentation basins at the Weymouth plant. Basins are routinely removed from service to perform cleaning and maintenance, which helps to ensure reliability of the treatment process.

WATER SYSTEM OPERATIONS *continued*



Staff using a miner's bucket to remove debris in a sedimentation basin at the Weymouth plant

Staff replaced a failed valve on a sodium hypochlorite chemical feed system this month at the Weymouth plant. Before the start of this work, the system was de-energized and locked out. After donning the appropriate personal protective equipment, staff drained the chemical from a designed release point to safely remove product before replacing the valve. Sodium hypochlorite (bleach) is used in the treatment process to help manage the bio-growth in the filters to ensure optimal performance.

WATER SYSTEM OPERATIONS *continued*



Staff changing out a valve on the sodium hypochlorite chemical system at the Weymouth plant

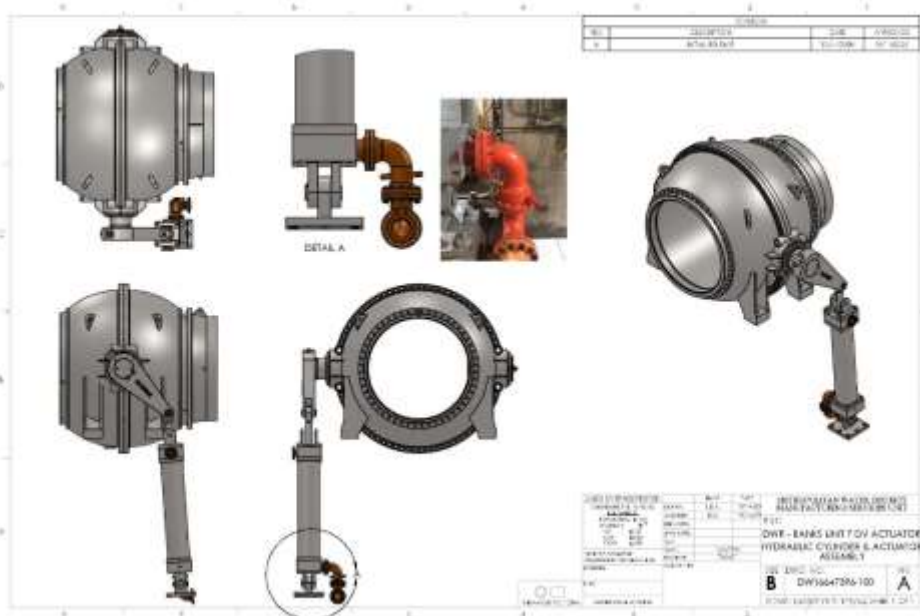
Objective #8 Manage Water Reserves.

State Water Project imports into the service area in November accounted for about 45 percent of Metropolitan's deliveries. Storage at Diamond Valley Lake was at 705,400 AF, or 87 percent full. Water reserves continued to be managed according to Water Surplus and Drought Management principles, the Annual Operating Plan, operational objectives, and the current 20 percent SWP allocation. Deliveries to the Desert Water Agency and Coachella Valley Water District exchange account continued this month to increase storage for future drought reliability. This action also allows the seven-pump flow on the Colorado River Aqueduct to continue, maintains appropriate storage levels in Lake Mathews for upcoming winter operations, and maintains additional put capacity to Lake Mead ICS storage to capture potential additional Colorado River supplies at the end of the year. Metropolitan's record high storage levels at the end of 2019 provided significant water supply reliability in 2020, under the low SWP allocation of 20 percent.

Objective #9 Support Imported Supply Reliability.

The La Verne Shops refurbished an actuator for an 84-inch discharge ball valve for the Department of Water Resources' (DWR) Banks Pumping Plant. An actuator is a large hydraulic cylinder that is used to operate the valve when cycling the pump. The Shops manufactured various parts, coated all components, assembled the cylinder and actuator, and performed functional and hydrostatic tests. In response to the pandemic, the La Verne Shops have worked with DWR to allow video record testing to witness key work as part of acceptance. This approach allows DWR-related projects to continue while managing the need to restrict travel and facility access.

WATER SYSTEM OPERATIONS *continued*



Staff-prepared shop drawing of 84-in spherical valve and hydraulic actuator assembly for DWR



Staff welding coupling (left) and completed machining of new front cushion (right) for hydraulic actuator for DWR



Staff performing functional test (left), hydrostatic test (center), and leakage test (right) of actuator for DWR

WATER SYSTEM OPERATIONS *continued*

Objective #10 Manage Vacancies.

WSO filled one vacant position in October 2020.

Staff conducted hands-on practical examinations for applicants using physical distancing and other COVID-19 prevention measures at the Skinner plant. Staff used plexiglass barriers to separate the applicants from the observers grading their performance. Each applicant was provided with personal protective equipment and all tools and materials handled by the applicants were sanitized between each examination. The hands-on testing for craft personnel is an important part of the evaluation process to ensure the most qualified applicants are selected for hire.



Staff evaluating hands-on practical examinations of applicants at the Skinner plant

Objective #11 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, conveyance, and distribution systems. Apprenticeship classes continue to be delivered via a hybrid model. Lectures are provided online, while hands-on practical training is delivered separately and in-person while observing COVID-19 guidelines. This month, instructors completed part one of a certification course for online instruction through the local education agency which provides accreditation for the Apprenticeship Program. Part one grants provisional credentialing to allow the instructors to continue online apprenticeship lectures for the next year. Instructors will complete part two in 2021 to receive permanent credentials. These credentials provide Apprenticeship with flexibility to deliver instruction online, via a hybrid model, or entirely in-person.

WATER SYSTEM OPERATIONS *continued*



Class of 2023 mechanical apprentices attend hands-on practical training

GM STRATEGIC PRIORITY #2: Sustainability

Objective #1 Prepare for Future Legislation and Regulation.

On September 21, the Transportation Security Administration's (TSA's) Security Training for Surface Transportation Final Rule (Security Training Rule) went into effect. While the rule affects Metropolitan's chlorine operations only in High Threat Urban Areas (i.e., Los Angeles/Long Beach and Anaheim/Santa Ana), Metropolitan has historically implemented the rule's provisions district-wide. Staff are evaluating the impacts of the rule on Metropolitan's training requirements and will update them accordingly.

On October 30, the State Water Resources Control Board (SWRCB) released the final draft of its Toxicity Provisions—a statewide program to implement numeric water quality objectives for both acute and chronic toxicity to inland surface waters, enclosed bays, and estuaries. Staff worked collaboratively with the Association of California Water Agencies (ACWA) and the California Municipal Utilities Association (CMUA) to ensure that water agencies do not need to conduct toxicity testing as part of their NPDES permit requirements for essential operations and maintenance activities (e.g., aquatic weed and quagga mussel control applications). Staff will continue to monitor the Toxicity Provisions, which are scheduled for final adoption on December 1, 2020.

On November 2, CMUA reported that the Las Virgenes Municipal Water District (LVMWD) and South Coast Air Quality Management District (SCAQMD) reached an agreement to reopen Rules 1470 and 1110.2 to help address maintenance and testing, as well as operational run time limits, for emergency backup generators during public safety power shutoff (PSPS) events. The rulemaking effort is in response to SB 1099 that was co-sponsored by LVMWD and CMUA but failed to advance in 2020. SCAQMD anticipates the first working group meeting to be held in December 2020 and the entire rulemaking process to take 6 to 8 months. Staff will actively engage in the rulemaking process.

Objective #3 Support the Regional Recycled Water Program

In November, staff concluded baseline testing, operations, and monitoring at the Regional Recycled Water Advanced Purification Center (RRWAPC) demonstration facility and began the transition to challenge testing. Challenge testing involves cutting membrane fibers and assessing pathogen removal of an intentionally damaged membrane system. Staff continued protozoa, virus, and indicator organism sampling and analyses to evaluate pathogen removal through the membrane bioreactor (MBR), routine sample collection to demonstrate water quality performance through the treatment process, as well as overall treatment system performance. Staff met with the Division of Drinking Water on

WATER SYSTEM OPERATIONS *continued*

November 30 to provide an update on revisions to the MBR testing and monitoring plan, based on experience from the baseline testing period, and inform them of testing progress.

Staff assisted with membrane cassette removal from both MBR systems at the demonstration plant for visual inspection and system maintenance before challenge testing. Staff discovered a substantial snail population in the membrane systems and began coordinating with consultants, sanitation districts, and membrane manufacturers on a mitigation strategy to address snail proliferation within the MBR tanks. Staff also completed several maintenance and improvement projects onsite to ensure proper operation and reliability of the demonstration plant.



Staff removing an MBR cassette for inspection at the demonstration facility



Staff inspecting a damaged membrane fiber

WATER SYSTEM OPERATIONS *continued*



Staff pouring concrete for a new access ramp at the demonstration facility



Staff repairing a leaking chemical injection fitting at the demonstration facility

WATER SYSTEM OPERATIONS *continued*

Objective #5 Manage Power Resources and Energy Use in a Sustainable Manner.

Metropolitan's hydroelectric plants generated an average of 15.3 megawatts or 11,360 megawatt-hours, and over \$663,860 in revenue, for the month of October 2020. Metropolitan's solar facilities totaling 5.4 megawatts of capacity generated approximately 670 megawatt-hours in October 2020.

Objective #6 Protect Source Water Quality.

A late season cyanobacterial bloom developed in Lake Skinner during November, producing elevated concentrations of the taste and odor compound geosmin. Staff across multiple operating units worked collaboratively to coordinate lake operations and a copper sulfate treatment to minimize the impact to downstream agencies that receive water from Lake Skinner.

WATER SYSTEM OPERATIONS *continued*


Monthly Update as of:

11/30/2020

<u>Reservoir</u>	<u>Current Storage</u>	<u>Percent of Capacity</u>
<i>Colorado River Basin</i>		
Lake Powell	10,629,000	44%
Lake Mead	10,100,000	39%
<i>DWR</i>		
Lake Oroville	1,309,546	37%
Shasta Lake	2,022,617	44%
San Luis Total	933,368	46%
San Luis CDWR	553,204	52%
Castaic Lake	241,632	75%
Silverwood Lake	58,251	78%
Lake Perris	121,655	93%
<i>MWD</i>		
DVL	704,242	87%
Lake Mathews	87,883	48%
Lake Skinner	38,748	88%



Hoover Dam



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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