



*The Upper Feeder  
Pipeline and New Slip  
Joint Delivered to Site*

# General Manager's Monthly Report



**Activities for the Month of August 2022**



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# Message from the General Manager

As I write this, we are asking millions of residents to stop outdoor watering for two weeks while Metropolitan staff work around the clock to repair a leak in a section of our Upper Feeder pipeline suspended above the Santa Ana River.

Meanwhile, all of California is enduring a record-breaking heat wave. While there's never a good time for a shutdown, the inconvenience of planned repairs is always better than suffering an emergency.

The difficulty of emergency repairs during a heat wave couldn't be a more apt metaphor for our larger climate crisis and water shortages. Deferring action increases risk as well as likely costs, with the upheaval of our climate making those risks and costs even greater.

Thankfully, the public understands that the stakes are high.

A poll conducted in August by UC Berkeley, in partnership with the *LA Times*, found that 94% of California voters consider the state's current water shortage to be serious. In fact, 71% describe it as "extremely serious." It's hard to find any issue that has such widespread agreement across region, gender, race, age and even political affiliations. You can find the poll at <https://escholarship.org/uc/item/7bw89676>.

We're fortunate that California's lawmakers have taken important action in the final weeks of the legislative session to assist in Metropolitan's drought response actions and future resiliency. That's in addition to significant programs and funding on the federal side that were approved this year. These actions bolster Metropolitan's dedicated workforce, who are working tirelessly during some of the hottest weather in our history.

Still, there is much more to be done.

With outdoor uses accounting for half of our residential water use, now is the time to rethink the traditional lawn and transform our landscapes with California friendly plants. In fact, 72% of poll respondents believe it is "important" for California homeowners to make permanent changes to their outdoor landscaping.

While we continue to achieve greater levels of conservation, we must also redouble efforts to reduce leaks and other water losses. We must protect and value the water we have by preventing pollution and cleaning up legacy contamination. We must invest in new, more sustainable water sources, like water recycling and storm water capture. We must be ready to store water when the clouds open up. And this urgency must be reflected in priorities, budgets and regulatory support, in the District and across every level of government.

None of this will be easy, and there is no time to lose. As Charles Dickens famously wrote in *David Copperfield*, "Procrastination is the thief of time. Collar him!"

Indeed, given the broad awareness and overwhelming consensus among Californians, failing to act now would be a disservice to the public who are taking the drought seriously. They have a right to expect leadership that faces up to the challenge with urgency and resolve and safeguards our water supply for the future.

We are one,

Adel



**“The best time to plant a tree was twenty years ago. The second best time is now.”**

**- Chinese Proverb**



# Strategic Priorities Update

The General Manager's Strategic Priorities guide actions in key areas of focus, investment, and transformation for Metropolitan.

## Empower the workforce and promote diversity, equity, and inclusion

Build a safe, inclusive, and accountable workplace where all employees feel valued, respected, and able to meaningfully contribute to decisions about their work.

The EEO Office has hired two Chief EEO Investigators, helping to build staff capacity in the new Office. The state audit and workplace climate recommendations are in varying phases of implementation with a next update to the state due in October. The iSight case-database system is getting established and is in the data migration phase.

Metropolitan has partnered with the National Safety Council (NSC) to conduct an independent review of Metropolitan's safety program. The NSC recently completed a draft Safety Culture Assessment Report. Once the report is finalized, staff will work with the NSC to develop a roadmap to implement its recommendations.

Prepare and support the workforce by expanding training and skill development and updating strategies to recruit and retain diverse talent at a time when Metropolitan's needs are evolving and employee expectations about the workplace are changing.

This month we held the second session of our organizational development program, Metropolitan Management University, for 15 newly promoted managers. Staff also worked with outside experts to prepare a recruitment document to comply with the State Audit recommendation, which includes best practices and recommended changes, and to provide grants administration training to 67 employees.

Metropolitan joined a consortium of local agencies, including LADWP, to work with engineering students from several Historically Black Colleges and Universities (HBCU). In a partnership between DE&I, Engineering Services, and SRI, HBCU students get introduced to the work of Metropolitan, gain some practical experience, and also are mentored by an engineer on staff. The initiative is grant-funded and a milestone for Metropolitan in HBCU outreach and engagement.

## Sustain Metropolitan's mission with a strengthened business model

Manage rate pressure on member agencies through attention to programmatic costs, organizational efficiencies and efforts to secure external funding for projects with broad and multi-purpose benefits.

We secured \$130M in state budget earmarks for Metropolitan emergency drought projects (\$50M) and Pure Water Southern California (\$80M), pending Gov. Newsom's signature.

We helped secure \$4B in programmatic funding in the federal Inflation Reduction Act for urban and agricultural conservation across the West. Staff intends to apply for conservation funding to reduce reliance on Colorado River supplies as well as for renewable energy and efficiency projects once eligibility criteria for these funding sources are established.

Staff completed review of district's Rio Mesa property for potential revenue opportunities including solar and/or environmental mitigation banking.

## Adapt to changing climate and water resources

Provide each member agency access to an equivalent level of water supply reliability through necessary adaptive implementation of the IRP findings.

Agencies in the SWP-dependent area continue to operate within the Emergency Water Conservation Program, remaining on target for total use of SWP supplies through August. The Board approved the Call to Action in support of reliable and equitable access to water and storage across the entire six-county service area, and staff made progress on planning for facility modifications to expand the use of Colorado River throughout Metropolitan's system.

Alongside ongoing Colorado River negotiations, Metropolitan collaborated with several urban water agencies in Nevada and Colorado to sign an MOU that commits to further water conservation and water efficiency efforts and to expand water reuse. The MOU has been transmitted to the Bureau of Reclamation with additional information to be provided in the coming months about specific steps to be taken by each organization.

Advance the long-term reliability and resilience of the region's water sources through a One Water approach that recognizes the interconnected nature of imported and local supplies, meets both community and ecosystem needs, and adapts to a changing climate.

Staff began a study to evaluate potential stormwater targets for the IRP and this month onboarded new Metropolitan staff who will focus on stormwater strategic planning efforts.

Southern California Edison approved a \$2.125 million grant reservation for our Weymouth battery energy storage system project.

Phase 2 has been initiated for the Delta Island Adaptation project to develop conceptual plans for alternative land uses on Metropolitan's Bouldin Island.

## Protect public health, the regional economy, and Metropolitan's assets

Proactively identify, assess, and reduce potential vulnerabilities to Metropolitan's system, operations, and infrastructure.

Staff coordinated with several outside agencies on emergency response training. This included (1) hosting a hazardous materials and emergency chlorine handling training with Riverside County Department of Environmental Health and CalFire Hazardous Materials Emergency Responders; (2) meeting with five member agencies along the San Gabriel foothills to discuss a joint earthquake exercise for the Great California ShakeOut in October 2022; and (3) meeting with Orange County emergency response agencies to plan a full-scale exercise at the Diemer plant in November 2022. Cybersecurity staff also presented on secure authentication environments at the annual national meeting of the Multi-State Information Sharing and Analysis Center (MS-ISAC).

We have initiated the design phase for several capital projects to improve physical security at Metropolitan facilities. These projects are a result of vulnerability assessments and recommendations by our security experts, independent consultants, and partners at the Department of Homeland Security and the Cybersecurity and Infrastructure Security Agency.

As part of the Data Center Modernization Project, staff completed physical relocation of Metropolitan-owned equipment (e.g., servers, storage, switches) from Union Station to the new primary data center, to help ensure security and operability during an emergency.



Apply innovation, technology, and sustainable practices across project lifecycles (design, construction, operations, maintenance, and replacement).

Staff has developed the Request for Proposals for the Enterprise Content Management system.

## Partner with interested parties and the communities we serve

Grow and deepen collaboration and relationships among member agencies, interested parties, and leaders on the issues most important to them and toward mutual and/or regional benefits.

We conducted two negotiation sessions with the Trade Councils toward a Project Labor Agreement (PLA). Board consideration of the PLA and of a consultant agreement for PLA administration is expected in October 2022.

Reach underserved communities and non-traditional interested parties to better understand their needs and ensure their inclusion in decision making.

As part of community engagement in the environmental planning for Pure Water Southern California, Metropolitan held an environmental listening session on the project and invited several community-based organizations active in underserved communities to assist with public outreach. The appointment of leadership and members to Metropolitan's newly established Underserved Communities Standing Committee, set to convene in October, adds momentum to addressing the needs of underserved communities.

# Executive Summary

*This executive summary is added to this report to provide a high-level snapshot of a key accomplishment from each area of the organization. Detailed information is reported in the pages following this summary.*

## **Administrative Services**

During the month of August, the Professional Services Contracting Team staff completed Request for Qualification (RFQ) No. 1316 to establish a list of pre-qualified firms for Geotechnical and Tunnel Design Engineering Consulting Services on an on-call basis to provide geotechnical and dam safety consulting services in support of various critical projects throughout Metropolitan's distribution system and service area.

The Procurement Team awarded a contract for a two-stage swing check valve for the Greg Avenue Pumping Station and East Valley Feeder. These new valves will provide adequate surge protection without requiring backflow through the pumps. The competitive bid process resulted in a contract award that came in approximately \$24,000 under budget.

## **Bay-Delta Initiatives**

Phase 2 of the Delta Island Adaptations project, funded by a California Department of Fish and Wildlife Proposition 1 Planning Grant, was initiated this month. This phase of the project includes development of conceptual plans for alternative land uses for the identified study island, Bouldin Island, based on land characteristics and other criteria. Potential land uses being considered include: paludiculture, floating marsh (floating peat), sustainable agriculture practices, rice farming, ecoculture, tidal wetlands (with setback levees), and flooded managed wetlands. The conceptual plans will be considered by stakeholders and the Technical Advisory Committee this fall.

## **Chief Financial Officer**

On July 7, 2022, Metropolitan issued \$279,570,000, Water Revenue Refunding Bonds, 2022 Series A. The bonds were issued at a True Interest Cost of 2.93% and achieved net present value debt service savings of \$40.1 million, or 12.66% of the refunded par bonds. The bond sale, which took place on June 22, 2022, was very successful, with \$2.1 billion in orders, from 72 different investors. Average annual debt service savings of approximately \$3.2 million per year will be realized over the 15-year term of the bonds. Bond proceeds were used to refund portions of outstanding revenue bonds, other debt obligations, and fund costs of issuance.

On July 27, 2022, Metropolitan issued \$253,365,000, Water Revenue Refunding Bonds, 2022 Series B, and \$282,275,000, Water Revenue Refunding Bonds, 2022 Series C (Taxable). The 2022 Series B bonds were issued at a True Interest Cost of 2.90%, the 2022 Series C bonds were variable rate bonds, and had an initial weekly rate of 1.60% (Series C-2), and 1.62% (Series C-1). The 2022 Series B and 2022 Series C bonds were priced on July 20, 2022, as part of an integrated plan of finance. The 2022 Series B bond sale received strong investor demand, with orders of \$1.14 billion, from 58 different investors. Similarly, the weekly variable rate, 2022 Series C bond sale received strong investor support. The 2022 Series C-1 bonds were fully subscribed, and the 2022 Series C-2 bonds were three times oversubscribed. On a combined basis, the refundings provided substantial expected net present value debt service savings of \$22.1 million, or 8.28% of the refunded par bonds. This will provide average annual debt service savings of approximately \$1.8 million per year over the 18-year term of the bonds. Bond proceeds were used to refund portions of outstanding revenue bonds, and fund costs of issuance.

## **Colorado River**

The Colorado River Basin States worked hard to develop a plan to reduce water demands on the Colorado River by 2 to 4 million acre-feet in 2023, but by the mid-August deadline given by the Bureau of Reclamation, a plan has not yet been developed. The Basin States will continue working to see if a plan can be implemented in 2023.

## Diversity, Equity & Inclusion

The newly formed Diversity, Equity & Inclusion Office is being resourced to properly address key areas of opportunity to advance Metropolitan's DEI commitment and usher in culture transformation for long-term, sustainable change. Even so, the Office successfully launched the first ever DEI Forum to set the right tone at the top around DEI commitment and to engage with a broad group of stakeholders, including the Board. We are also advancing key initiatives focused on better outreach and workforce development efforts and working cross-functionally to address State Audit concerns and advance key commitments such as the Equity in Infrastructure Pledge (EIP) and the future use of Project Labor Agreements (PLAs) in our key construction projects.

## Engineering Services

In August, ESG advanced three board actions for projects that will improve water supply equity. ESG also continues to partner with the communities we serve. This quarter's MetWorks meeting was attended by over 130 contractors and consultants. Representatives from two Small Business Enterprise (SBE) contractors discussed their experiences working with Metropolitan, and ESG staff presented upcoming contracts with a focus on smaller construction projects and opportunities for small businesses. Formal negotiations commenced between Metropolitan and the Southern California labor councils for the Project Labor Agreement. Metropolitan staff led a half-day workshop at the ASCE Pipelines Conference with water agencies and large valve suppliers addressing our common challenges regarding fabrication and quality. This discussion was initiated by CLEAN-17, a partnership of engineering managers from several large water agencies in the Western United States whose primary purpose is to learn from one another.

## Equal Employment Opportunity Office

The EEO Office continues to address the recommendations brought forth by the State Audit and Workplace Climate Report. EEO recommendations with a deadline of June 20, 2022, were timely submitted and accepted by the state auditor. In addition, EEO submitted a recommendation earlier than the next deadline of October 20, 2022. This recommendation was also accepted by the state auditor.

## External Affairs

Congresswoman Napolitano (D-El Monte) hosted Bureau of Reclamation Commissioner Touton, Carson Mayor Davis-Holmes and local dignitaries for a presentation and tour of the Pure Water Southern California Demonstration Facility. Chairwoman Gray welcomed the dignitaries and GM Hagekhalil provided a brief update on Metropolitan, water supply conditions and the One Water vision. (August 18)

## Human Resources

Human Resources staff is collaborating with IT to implement a new Workers Compensation claim management system designed by Ventiv Technology. Staff continue to work closely with our new Workers' Compensation Third Party Administrator, TRISTAR Risk Management, during the transition.

## Information Technology

In preparation for the newly adopted biennial budget, Information Technology has been working in collaboration with Finance to change the reporting function from accrual based to cash-based accounting in the enterprise financial system.

## Real Property

Acquired 110 gross acres (108 water toll acres) in the Palo Verde region from a private entity in support of Colorado River water supply reliability.

## Security Management

Dozens of C&D staff are turned into immediate responders and trained on how to deal with a bleeding emergency. Stop The Bleed, a nationally recognized course, is taught at no-cost by EMT-qualified Metropolitan Security proprietary staff.



## **Sustainability, Resiliency and Innovation**

CSRIO presented on the Climate Action Plan at Southern California Edison's Clean Energy Summit and provided the keynote address at Water Solutions 7, hosted by Sustain So Cal, for water managers and innovators. SRI also led negotiations with Colorado Basin urban water providers in development of a basin-wide Memorandum of Understanding on additional water conservation and efficiency commitments.

Environmental Planning continued work across the District including coordination with Department of Water Resources on regulatory permit applications for the Delta Conveyance Project, continued preparation of the Notice of Preparation (NOP) of a Draft Environmental Impact Report for Pure Water Southern California (slated for release in Sept. 2002), and emergency authorizations and permitting for the Upper Feeder Repair Project.

## **Water Resource Management**

WRM staff reported on continued coordination and success with implementing the Emergency Water Conservation Program. As a whole, the program continues to reduce use of Metropolitan's State Water Project water supply below the target for the SWP dependent areas. Staff also worked on ensuring successful programs to save water on the Colorado River system, recognizing the stress on the River and Lake Mead.

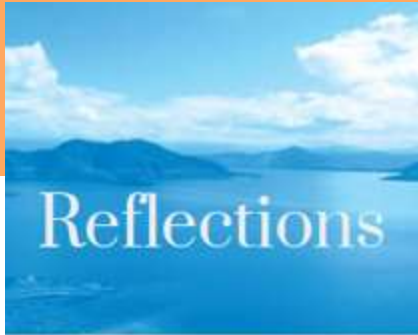
## **Water System Operations**

Metropolitan announced its first recruitment of an internal class of applicants for the Apprenticeship Program. Webinars and internal outreach are being planned to support a diverse applicant pool. The Apprenticeship Program is a four-year program that includes classroom and on-the-job training. Selected candidates are expected to begin working as electrical and mechanical apprentices in early 2023. Once an apprentice completes the program, they are certified by the state of California as a journey worker.

# Upcoming Board Items

ANTICIPATED KEY ITEMS OF FOCUS – NOT AN EXHAUSTIVE LIST  
SCHEDULE SUBJECT TO CHANGE

<b>October</b>	<ul style="list-style-type: none"><li>• Update on Delta Conveyance Public Draft EIR and Comments</li><li>• Seek Board Action to Declare approximately 650 Acres of Property in Riverside, San Bernardino and San Diego Counties as Surplus Land and not necessary for Metropolitan’s use and Authorize Staff to Dispose of the Properties</li><li>• Consider action to approve Project Labor Agreement Terms and Conditions and Authorize a Professional Services Agreement for PLA Administration</li><li>• Nomination and Election for Board Chair for two-year term effective January 1, 2023</li></ul>
<b>November</b>	<ul style="list-style-type: none"><li>• Nomination and Election for Board Secretary for two-year term effective January 1, 2023</li><li>• State Mandated AB 1234 Ethics Training (2-hour training following Board meeting)</li><li>• Department Heads Evaluation</li></ul>
<b>December</b>	<ul style="list-style-type: none"><li>• Board Report of the Benefits of Various Project Portfolios for State Water Project Dependent Areas following IRP Testing</li><li>• Update on Climate Action Plan Implementation</li><li>• Board Report on Budget Expenditure Trend for FY 2022/23 and Status of New Revenues and Grants</li><li>• Oral Briefing on Status of State and Federal Bay-Delta Regulatory Processes</li><li>• Authorize Colorado River Protection Volume Agreements</li></ul>
<b>January</b>	<ul style="list-style-type: none"><li>• Delta Conveyance Project Follow-up Workshop</li><li>• Update on Acceleration of Pure Water Southern California</li></ul>
<b>February</b>	<ul style="list-style-type: none"><li>• Board Report on Portfolio of Recommended Actions for State Water Dependent Areas</li></ul>



## PROGRAM DESCRIPTION

In April 2022, a leak was discovered on a bellows expansion joint on the Upper Feeder pipeline in the city of Riverside, where the pipeline spans the Santa Ana River along a truss bridge. Water System Operations and Engineering Services staff quickly jumped into action to address immediate needs and plan for a longer-term fix.

The Shops in La Verne manufactured an emergency repair fixture to temporarily address the leak, with the innovative design, manufacturing, and installation completed within a few days. For the longer-term fix, ESG and WSO staff collaborated to concurrently design and manufacture a 116-inch diameter, 10-ton slip-type expansion joint while meeting an aggressive repair schedule. Additionally, the Shops manufactured several critical components to help with installation of the expansion joint and provide safe access to the pipeline at this unique location.

## IMPORTANCE TO METROPOLITAN

The Upper Feeder is one of two major pipelines supplying Colorado River water from Lake Mathews to the region and delivers water to the Weymouth plant. Considering the region's severe drought condition and limited supplies from the State Water Project, this pipeline is critical to Metropolitan's drought operations. Repairing the pipeline as quickly as possible was essential to prevent a catastrophic pipeline failure. Metropolitan's in-house manufacturing capability was crucial to complete this work within a short time window and ensure the resiliency of our water system.

## MEMORABLE MOMENT

This effort highlighted Metropolitan's ability to adapt and respond to emergencies while demonstrating staff's high level of dedication, creativity, and collaboration under extreme challenges. The "One-Stop-Shop" capabilities at Metropolitan shined through on this project as staff adjusted to changing conditions, schedules, and supply chain challenges. With a successfully manufactured and robust slip joint the permanent repair work could begin, showing once again how staff's commitment and dedication ensured Metropolitan can continue to meet its mission of providing safe and reliable water deliveries to Southern California.



**"To see several MWD teams working as one to develop a conceptual design and then have our La Verne Shops bring it to life is something that I'm always proud to be a part of."**

**Andrew Whitt,**  
**Production Planner**

# Water Resources and Engineering

## Water Resource Management



### Ensure Reliable State Water Project (SWP)

The Department of Water Resources (DWR) hosted a two-day workshop to discuss the path forward on the A. D. Edmonston Pumping Plant (Figure 1) discharge valves. DWR staff gave a detailed technical overview of the 14 valves, their existing design, and challenges to maintenance. DWR then presented five options for consideration, with the recommendation to replace all 14 valves with new valves that include design improvements. The workshop attendees participated in a site visit to inspect the current state of the valves and observed physical challenges to the current location of the valves. The workshop concluded with participants concurring with DWR to replace all 14 valves in sequence without affecting deliveries for more than 10 years. This project is estimated to cost over \$70 million, including 20 percent contingency.



Figure 1—Annotated photo indicating the 1,926-ft lift that the 14 pump units at A. D. Edmonston Pumping Plant have to achieve.

### Ensure Access to Sufficient Water Supplies to Operate a Full Colorado River Aqueduct In Times of Drought.

The 2022 Following Seasons for the Bard Water District Seasonal Following Program and the Quechan Tribe of the Fort Yuma Indian Reservation Pilot Seasonal Following Program officially ended on August 15, 2022. One thousand, four hundred and twenty six acres were enrolled in the Bard Following Program and 118 acres were enrolled in the Quechan Following Program. Because of unseasonably cool temperatures, some parcels were not ready for following on April 1, 2022. Metropolitan and farmers agreed to shift the following period to begin following on those parcels on April 15 and end following on August 15. All other parcels began following on April 1 and ended following on July 31. The verifications of the fallowed lands were completed by Metropolitan's consultant, Bard Water District's General Manager, and Quechan Water Technician on July 31, 2022 and on August 15, 2022. All of the lands were verified to be fallowed during this time.



# Water Resources and Engineering

(continued)

## **Manage Existing and Develop New Regional Water Management Programs to Maintain Water Supply Reliability in the Face Of Increasing Water Supply Volatility.**

On August 16, the Board adopted a resolution recognizing the varied impacts the historic drought and water system limitations have had on the region. The resolution outlines potential remedies to address the situation by building infrastructure, increasing local supplies, expanding partnerships, advancing water-use efficiency, and planning for the escalating impacts of climate change.

## **Support Development of Regional Recycled Water Program (RRWP).**

Staff is reviewing potential State and Federal funding to support Pure Water Southern California and identifying new requirements of Federal funding and potential hurdles. Staff anticipates reviewing the FY 2023 Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF) Intended Use Plans scheduled for release in August and providing comments in September.

## **Implement Regional Conservation Program**

Staff submitted an application to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grant Program for Fiscal Year 2023, seeking \$5 million in supplemental funding to support residential and commercial turf replacement. A resolution of support completing Metropolitan's application was approved by the Metropolitan Board at the August One Water Committee Meeting. USBR intends to notify selected applicants by the end of 2022.

Staff attended several conferences and joined panel discussions to promote water efficiency and regional conservation:

- **Southern California Golf & Water Summit:** Assistant General Manager Deven Upadhyay provided a keynote address on Southern California's current water supply picture and efforts Metropolitan has been undertaking to meet current and future water supply challenges. Water Efficiency Team staff participated in a panel discussion providing more detail on Metropolitan's drought response activities, including water efficiency incentives and development of the Pure Water regional recycled water project. The Southern California Golf & Water Summit recognizes that water is indispensable to the Southern California golf community, and scarcity and higher costs pose challenges the game must meet if it expects to remain a vital part of Southern California's recreational landscape. The summit was attended by golf course managers, local and regional water utility workers, and golfing enthusiasts.
- **Sustain Southern California Water Solutions 7 Water Conference:** The conference focused on exploring real life strategies and innovations in reuse, desal, energy nexus, contamination, investor and policy trends, big data, and more in Southern California. Metropolitan's Chief Sustainability, Resiliency and Innovation Officer Liz Crosson gave the keynote address. Water Efficiency Team staff participated on a panel titled "Efficiency and Innovation in Irrigation" to promote water efficiency.
- **World Water Week Conference:** Staff participated on a panel focusing on global water issues, being held both online and in person in Stockholm, Sweden. The panel, The Power of Unlikely Alliances: Public-Private Partnerships for Water Efficiency, discussed collaboration among Metropolitan, the Pacific Institute, and several private corporations on water use efficiency. The panel specifically shared the story of successful collaboration to implement water efficiency pilot projects spanning three sites in Southern California and saving over 24 million liters of water per year. The innovative technology was deployed in the City of Los Angeles and received water efficiency incentives from both the Los Angeles Department of Water and Power and Metropolitan via its Water Savings Incentive program.



# Water Resources and Engineering

(continued)

## **Collaborate with Member Agencies, Water Agencies and Associations, and Provide Leadership for Policy Development, Advocacy, Outreach and Education**

Staff assisted the Los Angeles WaterReuse Chapter by providing a recycled water legislation and regulation presentation to approximately 50 members of the Chapter at West Basin Municipal Water District. Staff highlighted draft legislation, regulations, and funding that may affect development of new recycled water projects. Staff also attended an inspection of the West Basin facility and learned about their education program and proposed facility upgrades.



**Caption: Inspection of the West Basin facility**

Staff continued implementation of the Emergency Water Conservation Program (EWCP) to address severely limited SWP system water supplies. Since the June 1 start date, there has been a positive demand response across the SWP-Dependent Area. The affected member agencies continued to show reductions in purchases from Metropolitan compared with historical and projected levels, indicating consumer responsiveness with demand-cutting measures. Path One watering day limit compliance requirements remained at one day-per-week watering restrictions. Staff is continuously monitoring and reporting water use performance to the affected member agencies to ensure that SWP water usage stays on track to remain within the available supplies.

Staff continued ongoing technical collaboration with member agencies with the 2022 Annual Local Production Survey, which was sent out to all member agencies on May 5 with a request for surveys to be returned by June 10. The local supply survey data are crucial for Metropolitan's regional planning efforts, including estimating retail-level per capita water usage and tracking trends in local supply development.

Staff participated as a facilitating partner at Inland Empire Utilities Agency's (IEUA) Chino Basin Program Expo on August 17. The Chino Basin Program (CBP) is an innovative water exchange and reliability program where advanced treated recycled water stored in the Chino Basin would be exchanged for an equivalent amount of State Water Project

# Water Resources and Engineering

(continued)

supply. The exchanged State Water Project supply would be used for pulse flows into the Feather River to benefit Chinook salmon and the surrounding ecosystem. The Expo was attended primarily by IEUA's local agencies and other interested stakeholders. Metropolitan participated in the Expo to answer questions about Metropolitan's role, expected operations, and the regional benefits of the program.

Staff participated in CalDesal's Executive, Regulatory, Legislative, Communications and Officer Nominating committees in August. A key action taken was forming teams to engage state agencies implementing the desalination elements of the governor's newly released "California's Water Supply Strategy." The Executive Committee also discussed a recent Public Policy Institute of California poll which revealed widespread support for seawater desalination in California.

## **Implement Future Supply Actions Funding Program**

Staff hosted and moderated a Future Supply Actions Funding Program (FSA) webinar on August 31. The webinar covered the San Diego County Water Authority's (SDCWA) demonstration study of wedge-wire screen intake cleaning systems for the Claude "Bud" Lewis Carlsbad Seawater Desalination Plant. The results are applicable to other member agencies considering seawater desalination. The presentations, prior webinar recordings, and final reports of completed FSA studies are now available on Metropolitan's website under "Funding Programs."

## **Promote Metropolitan's Technical Capabilities and Innovation Efforts to Advance the Understanding of Water Resources Management**

Staff participated in two Peer-2-Peer (P2P) meetings on cyber security best practices and drought management. The cyber security briefing featured a summary of innovative approaches and lessons learned from Southern Nevada Water Authority, Tampa Bay Water, Mekorot, Singapore PUB, and other peer utilities. On August 1, Dr. Uri Shani, a globally recognized drought expert, briefed executive management on Israel's approach to managing extreme drought. Staff also launched new P2P engagements on: (1) Olympic games preparation with utilities from Tokyo, Paris, and Australia and (2) Delta island management with peer utilities in the Netherlands with expertise in managing similar levee-protected islands.

Staff reviewed three new technology proposals during meetings in August: (1) Solar desalination technology with inland applications; (2) Brine treatment technology focused on extracting renewable energy and useful materials using salt-tolerant "halophytes," and (3) AI-driven data management system with the potential to streamline wholesale agency water budget data collection and state-agency reporting. During the meetings, staff provided feedback and suggested potential resources available from Metropolitan's innovation partners. Staff will further review the AI water budget software with internal experts.

## **Position Metropolitan as a leader in Open Water Data**

Several Water Resource Management (WRM) staff attended the California Data Collaborative's 7th Annual Water Data Summit at UC Irvine on August 17–18. Attendees were able to sharpen their skills in technical coding sessions and learn from experts on various topics such as non-functional turf removal, climate change modeling for water supply planning, Western state open data initiatives, and hiring data scientists for the water sector. A staff member from WRM's Implementation Projects and Studies Unit delivered an event-favorite presentation on "Hunting for Signals in Your Data." Metropolitan's Manager of Colorado River Resources participated in a panel on "Data Availability in a Drought" to discuss water management challenges and opportunities for the Colorado River. In addition to participating on the event planning committee, Metropolitan staff connected with peers from other water utilities as well as water data leaders from state agencies, academia and non-profits, and the private sector.



**Caption: Staff Presenting at the Water Data Summit**

# Water Resources and Engineering

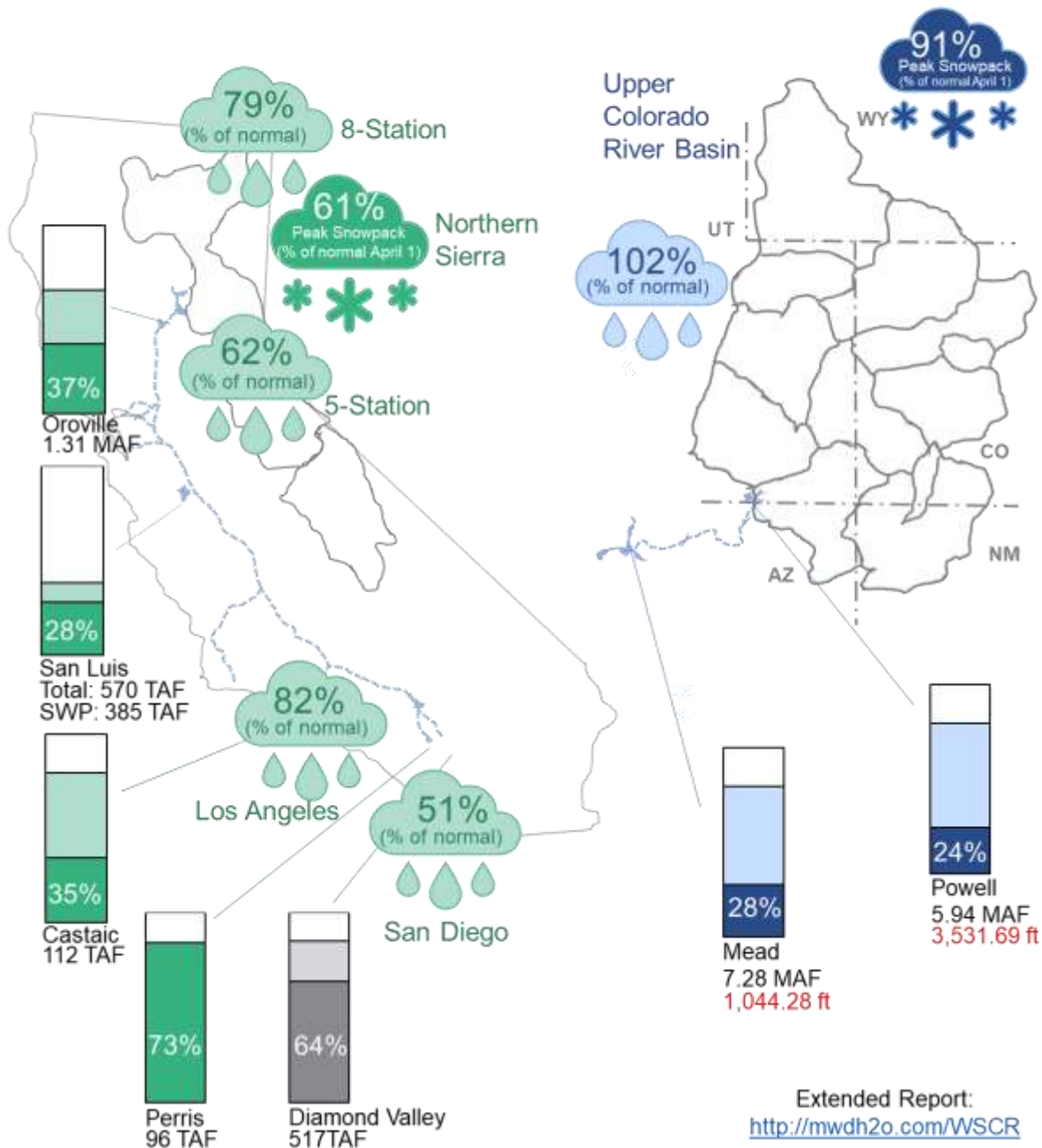
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## State Water Project Resources

SWP Table A – 5% - 95,575 AF

## Colorado River Resources

Projected CRA Diversions – 1,116,000 AF



As of August 31, 2022

## Bay-Delta Initiatives

### Resiliency

#### Delta Islands Adaptation Planning Grant

Staff is managing the Delta Island Adaptations project funded by a California Department of Fish and Wildlife Proposition 1 Planning Grant. The project's overall goal is to make progress toward improving resilience and sustainability of Metropolitan's Delta islands by: (1) reducing subsidence, (2) limiting or reversing greenhouse gas emissions, while (3) providing additional wildlife habitat, (4) maintaining economically viable agriculture, and (5) receiving and incorporating public input. Phase 1 of the project is complete, which included preliminary assessment of the islands and selecting one of the islands for more developed island-wide study, assessment, and planning. The use of a structured decision-making tool was beneficial for identifying Bouldin Island as the location to begin and the focus for further study for Phase 2.

The grant team began Phase 2, which includes development of conceptual plans for alternative land uses for the identified study island based on land characteristics and other criteria. Potential land uses being considered include paludiculture, floating marsh (floating peat), sustainable agriculture practices, rice farming, ecoculture, tidal wetlands (with setback levees), and flooded managed wetlands. Concept plans for pilot projects are currently being developed to test the viability of these alternative land uses. The seven draft landscape alternatives are being developed for further discussion and input by stakeholders and the Technical Advisory Committee at its next scheduled meetings in the fall.

### Sustainability

#### Delta Conveyance

The Department of Water Resources (DWR) released the public Draft Environmental Impact Report (EIR) under the California Environmental Quality Act for the Delta Conveyance Project (DCP) on July 27, 2022. It describes project alternatives, potential environmental impacts, and identifies mitigation measures to help avoid or minimize impacts. The Draft EIR is available for public review and comment through October 27, 2022.

The U.S. Army Corps of Engineers, as part of its permitting review under the Clean Water Act and Rivers and Harbors Act, is preparing an Environmental Impact Statement (EIS) to comply with the National Environmental Policy Act and is planning to release a draft EIS for public review later this year.

#### Joint Powers Authorities

During the regularly scheduled Board of Directors meeting on August 18, the Delta Conveyance Design and Construction Authority (DCA) Board of Directors approved a resolution to extend virtual board and committee meetings pursuant to AB 361. The DCA also released the final draft Engineering Project Reports (EPRs) for the DCP options on its website ([www.dcdca.org](http://www.dcdca.org)) in the DCA document library. The EPRs are detailed conceptual engineering design narratives that helped to inform DWR as it crafted official project descriptions for its environmental review process. The EPRs are separated into four sections:

- Narrative Report: highlights the key findings and conclusions of the Technical Memoranda and focuses primarily on describing the proposed facilities and the key drivers for their configuration and siting.



- Technical Memoranda: provide the basis of design criteria, design assumptions, siting analyses, and planned siting and configurations based upon existing physical information.
- Engineering Concept Drawings: include final site plans, construction phase site plans where locations of features would be substantially different than final site plans, site ingress and egress layouts, and major cross sections through the structures of key facilities.
- Map books: display the proposed facility sites and features in the context of the region. The EPRs also evaluate two fish screen options, a cylindrical tee screen fish screen and vertical flat plate fish screens.

There was no regularly scheduled Delta Conveyance Finance Authority meeting in August.

## **Sites Reservoir**

In their August meetings, the Sites Project Authority Board (Authority Board) and the Sites Reservoir Committee (Reservoir Committee) approved moving the Terminal Regulating Reservoir (TRR) from the previously identified east site location to the more suitable west site location, which is on the west side of the Glenn-Colusa Irrigation District Main Canal. It was found that the TRR west site location would have fewer real estate impacts, approximately the same environmental impact, and that the geotechnical data indicate more favorable subsurface conditions.

## **Innovation**

### **Science Activities**

Staff continued to participate in the collaborative groups called for in the 2019 Biological Opinions (BiOp) for the State Water Project (SWP) and Central Valley Project (CVP), and in the 2020 Incidental Take Permit (ITP) for Long-term Operation of the SWP, to address science needs and to inform management and operation of the water projects. In August, staff presented the results of a modeling study regarding contaminant effects on Delta smelt and associated management actions to the Delta Coordination Group. The 2022 Summer Fall Habitat Action (SFHA) Plan included the use of Expert Elicitation and Relative Risk Modeling to identify the effects of contaminants and changes in those effects with the two proposed actions for the 2022 SFHA. Results suggesting contaminant impacts will be evaluated using field studies.

Staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). At the August CAMT meeting, staff provided comments on the draft CSAMP Triennial Report and provided input on next steps for the CAMT Monitoring Assessment and planning for an adaptive management discussion. Staff efforts also focused on key CSAMP collaborative science projects including the Delta smelt Structured Decision-Making Project and the Salmon Recovery Initiative.

### **Delta Levee Stability and Monitoring Efforts**

Delta levee stability and monitoring efforts are ongoing with implementation of an instrumentation pilot project on Metropolitan's Bouldin Island to evaluate the effectiveness of detecting real time changes in levee conditions. This type of capability could provide both long-term levee management benefit, as well as the ability to quickly assess conditions in the event of an earthquake in the region. Efforts also include the storage of real-time data produced from the instrumentation network in a manner that can be easily accessed by Metropolitan for immediate evaluation, which includes real-time alerts following a seismic event within the Delta region. Staff is working with consultants to finalize the draft Investigation, Instrumentation and Monitoring Assessment—Delta Islands Levees (Bouldin Island Pilot) Report, which could be completed as early as fall 2022.

## Colorado River

### Status of Colorado River Protection Volume Discussions

In June of this year, Bureau of Reclamation (Reclamation) Commissioner Camille Touton identified the need for Colorado River Basin water users to reduce their use by two to four million acre-feet of water per year to address critical reservoir elevations at Lake Powell and Lake Mead, starting in 2023, and gave a deadline of mid-August to come up with a plan. The Lower Basin States met almost weekly to see if a consensus-based plan could be developed to meet the Commissioner's call by the deadline, and while they made significant progress, a plan was not ready when the Colorado River Basin August 2022 24-Month Study (24-month study) was released. The 24-month study determined a level 2 shortage of the Colorado River Basin, which affected Arizona, Nevada, and Mexico. California was not affected by the determination. At that time, Reclamation acknowledged the significant work of the Basins States and committed to continue working with the Lower Basin to see if a plan could be completed to be rolled out in 2023. Additionally, Reclamation states that they would refine options that the federal government could take if needed to reduced demands to protect the Colorado River Basin reservoirs. Those options include sharing system and evaporative losses by all Lower Basin States and developing new definitions for what constitutes a beneficial use of water. Metropolitan staff has actively participated in the process and is committed to working with our partners to see what actions could be implemented next year to reduce the decline of Lake Mead. That plan may include a recommendation to take additional conservation actions in our service area to conserve water to reduce Metropolitan's Colorado River deliveries in 2023.

## Engineering

### Core Business Function – Execute Capital Investment Plan projects

Engineering Services manages and executes projects within the Capital Investment Plan (CIP) to maintain infrastructure resiliency, ensure regulatory compliance, enhance sustainability, and provide flexibility in system operations to address uncertain water supply conditions.

#### 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:

- **Garvey Reservoir Hypochlorite Feed System Replacement**—This project replaces the existing chemical feed pumps, reconfigures the feed pipe system, upgrades the existing control systems and automatic process controls, and implements remote feed control from the SCADA system. Construction was completed in August and the new sodium hypochlorite feed system is now in service.
- **Garvey Reservoir Erosion Improvements Areas 6, 7, 8, 10, and 11**—This project will install a permanent drainage system and erosion control features to mitigate and control storm runoff from the site. The contractor completed drainage and erosion improvements in Areas 7, 8, 10, and 11, as well as all drainage connections through residents' properties to the city street. Site grading and earthen berm compaction in Area 6 are also complete. The contractor is currently installing new fences and curbs in Area 6 and completing hydro-seeding. Construction is 98 percent complete and is scheduled to be complete in September 2022.
- **Lake Mathews Wastewater Replacement**—The project consists of replacing the existing septic tank system with a wastewater collection system at Lake Mathews. The new wastewater system connects to a nearby off-site Western Municipal Water District main wastewater line. The contractor continues to install the sewer line. Construction is approximately 38 percent complete and is scheduled to be complete in March 2023.
- **Upper Feeder Expansion Joint Replacement**—This project replaces the damaged bellows expansion joint on the Upper Feeder with a new slip joint at the Santa Ana River crossing. An emergency contract to replace the joint was awarded by the General Manager in June 2022. The contractor is preparing for a September 6, 2022, shutdown start. Construction is approximately 25 percent complete and is scheduled to be complete by September 20, 2022. Regular reports on progress have been made to the Board in July and August and will continue in September. A request for board ratification of the emergency contract is tentatively scheduled for October 2022.

#### 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 and will enhance delivery reliability to member agencies. Long-term rehabilitation of this pipeline is being staged over a period of 15 to 20 years, with multiple construction

and procurement contracts. Metropolitan's Board awarded a construction contract in May 2022 for Reach 3A and the Notice-To-Proceed was issued in June 2022. The contractor is currently in the submittal phase of the project, and construction is scheduled to be complete in August 2023. Reach 3A is located at the westernmost portion of the feeder, spanning 1.1 miles through the City of Rolling Hills Estates. Final design of the adjacent Reach 3B, a 3.7-mile-long portion of Second Lower Feeder that traverses the cities of Lomita, Los Angeles, and Torrance is complete and scheduled for board award by December 2022. Study efforts continue for Reach 9, an approximately 0.8-mile-long portion of the feeder in western Long Beach that crosses the Los Angeles River.

- **Second Lower Feeder Isolation Valve Procurement**—This fabrication contract provides 13 conical plug valves for the Second Lower Feeder PCCP rehabilitation. These valves, which include three 48-inch and ten 54-inch diameter, provide primary isolation for maintenance activities, inspections, and repairs required to maintain reliable water deliveries within Metropolitan's distribution system. Fabrication of these valves is approximately 70 percent complete. All three 48-inch conical plug valves have been delivered. Fabrication of seven 54-inch valves is in progress. Delivery of the first two 54-inch valves, expected in March 2022, has been rescheduled to September 2022, because of delays at the shipping port. Two additional 54-inch valves are scheduled to be delivered in November 2022. The next three 54-inch valves will be delivered between May 2023 and July 2023. Fabrication of three remaining 54-inch valves started in June 2022 and will be completed in late-2023.
- **Sepulveda Feeder PCCP Rehabilitation**—This project rehabilitates 35 miles of PCCP segments within the Sepulveda Feeder and will enhance delivery reliability to member agencies. Long-term rehabilitation of the Sepulveda Feeder will be staged over multiple years with multiple construction and procurement contracts. Final design of Reach 1 and Reach 2 are occurring simultaneously. Final design of Reach 1 is 65 percent complete and Reach 2 is 93 percent complete. Both are scheduled to be complete by February 2023. Preliminary design for the northern 20-mile reach of Sepulveda Feeder has been re-prioritized to support the West Area Water Supply Reliability Improvements Program. In August 2022, a board action was approved to initiate preliminary design for the North Reach.
- **PCCP Rehabilitation Valve Storage Building**—This project constructs an 18,160 square-foot pre-engineered metal building on reinforced concrete slab at Lake Mathews for valve and equipment storage. The final submittal for the pre-engineered metal building was approved in July 2022 and fabrication of the buildings scheduled to be completed by the end of September 2022. The contractor completed installation of storm drain basins and piping around the site in August 2022. The contractor began construction of the concrete building pad in August. Overall, construction is 25 percent complete and is scheduled to be complete by September 2023.

## Colorado River Aqueduct (CRA) Reliability Program

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

- **CRA Domestic Water Treatment System Replacement**—This project replaces the membrane filtration system and associated water treatment equipment at the five Colorado River Aqueduct pumping plants. Procurement of water treatment equipment is underway with expected deliveries in two shipments, in mid-2022 and early 2024. The contractor has mobilized at Intake Pumping Plant and is continuing excavation of electrical ductbanks and installation of electrical conduits. Construction is 9 percent complete and is scheduled to be complete by March 2025.

- **CRA 69 kV and 230 kV Transformers Replacement**—This project replaces 35 transformers at the five Colorado River Aqueduct pumping plants that step down incoming voltage from the transmission lines to the voltage at which the main pumps operate. Preliminary design is 50 percent complete and is scheduled to be complete by April 2023.
- **CRA Conveyance System Flow Sensor Installation**—This project installs 11 water level gauging stations at remote sites along the Colorado River Aqueduct and raises five accessways on Sand Hill Conduit. Final design is 40 percent complete and is scheduled to be complete by February 2023.
- **CRA Conduit Structural Protection Project**—This project provides protection over the Colorado River Aqueduct's unreinforced conduit sections at 24 locations where structural damage due to increased volume of heavy vehicle and equipment loading related to maintenance activities is experienced. Final design is 97 percent complete and a request to the Board for award of a construction contract is planned for June 2023.



**Garvey Reservoir Hypochlorite Feed System Replacement**—New stairs for access to the containment area.

## 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 Basins 5-8 and Filter Building No. 2 Rehabilitation**—This project rehabilitates major mechanical and structural components including the flocculation/sedimentation equipment, sludge pumps, baffle boards and walls, launders, inlet gates, and outlet drop gates. Other improvements included in this project are seismic upgrades of basin walls and inlet channel, abatement of hazardous materials in the basins, and replacement of filter valves and actuators in Filter Building No. 2. The contractor has mobilized and is preparing submittals for the equipment and critical materials required for the upcoming half-plant shutdown in December 2022. The project baseline schedule is under review. Construction is 4 percent complete and is scheduled to be complete by May 2025.



## Mills Plant

- **Mills Electrical Upgrades, Stage 2**—This project upgrades the electrical system with dual-power feeds to key process equipment to comply with current codes and industry practices; improves plant reliability; and enhances worker safety. Stage 1 construction is complete. Stage 2 improvements will add a second incoming 12 kV service from Riverside Public Utilities (RPU), reconfigure the existing 4160-volt switchgear, and replace the standby generator switchgear and the emergency generator programmable logic controller. The contractor completed the installation of second incoming 12 kV service manhole structure and duct banks and is currently installing the switchyard. Construction is 15 percent complete and is scheduled to be completed by December 2024.

## 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 and/or technologies and improve facility safety and overall reliability. Recent activities include the following:

- **Headquarters Physical Security Upgrades**—This project implements comprehensive security upgrades for the Metropolitan Headquarters Building. These upgrades are consistent with federally recommended best practices for government buildings. This work has been prioritized and staged to minimize rework and impacts on day-to-day operations within the building. Stage 1 work is complete and provides enhanced 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, boardroom, executive dining lounge, and security control room. The contractor completed commissioning of security equipment on Floors 2–12 and equipment installation in the rotunda. Construction of Stage 2 improvements is complete except for the additional exterior door latch-bolt monitoring on the first floor. Stage 3 improvements will provide security system upgrades around the perimeter of the building. Design for Stage 3 improvements is complete, the project is currently in advertisement for bids, and board award of a construction contract is planned for November 2022.
- **Headquarters Building Fire Alarm and Smoke Control System Upgrades**—This project upgrades The Metropolitan Headquarters Building fire life safety systems, which includes replacement of the fire detection and alarm system and HVAC system improvements for smoke control. The fire alarm and smoke control systems in the Metropolitan Headquarters Building provide detection, notification, and control of building functions so that occupants and visitors can safely exit in the event of a fire. The contractor completed the fire alarm system cutover from the parking levels through the tenth floors and is currently working on the eleventh and twelfth floor. Construction is 57 percent complete and is scheduled to be complete by September 2023.
- **SCADA System Upgrade Project**—This project will gradually upgrade Metropolitan's entire control system, spanning the Colorado River Aqueduct, the five water treatment plants, and the conveyance and distribution system. The Mills plant is the first facility that will have its control system replaced. One of the plant's remote terminal units will be upgraded as a pilot effort to demonstrate the proposed technology and the consultant's approach. The pilot project is anticipated to be complete by January 2023. The full system upgrade at the Mills plant is anticipated to be complete by January 2026. Staff is currently finalizing the consultant agreements for project execution.



**Headquarters Building Improvements—3<sup>rd</sup> Floor Heat Pump Installation**

## **ESG Cooperative Education Program**

Engineering Services is celebrating 20 years with its Cooperative Education Program for college students. This year-round program provides opportunities for engineering college students to augment their studies with practical work experience in the water industry and provides Metropolitan with a future pipeline of entry level staff. Currently, a total of 11 year-round student interns were recruited from various universities to support design, program management, and construction management activities for fiscal year 2022/2023. About 262 students have participated in the program since its 2002 inception. Recently, the student interns participated in a tour of Metropolitan's Weymouth treatment plant where they learned about safety training, water quality, ozone, materials and soils, and corrosion engineering.



**Interns in front of Admin. Building at the Weymouth Plant**

# Water Resources and Engineering

(continued)



**Interns learning about PCCP**



**Interns with Ric Johnston at the Weymouth ozone building**



**Intern wrap-up meeting with Michael Thomas**



## Water System Operations

### Core Business Objectives

#### Prepare Employees for New Opportunities

The Water System Operations Apprentice and Technical Training Programs develop and train personnel to become qualified mechanics and electricians responsible for maintaining Metropolitan's water treatment and distribution systems. This month, Metropolitan announced its first recruitment of an internal class of applicants for the Apprenticeship Program. Webinars and internal outreach are being planned to support a diverse applicant pool. The Apprenticeship Program is a 4-year program that includes classroom and on-the-job training. Selected candidates are expected to begin working as electrical and mechanical apprentices in early 2023. Apprentices who complete the program and meet all of the requirements are certified by the state of California as a journey workers.

#### Manage Vacancies

WSO filled five vacant positions in July 2022.

#### Provide Reliable Water Deliveries

Metropolitan member agency water deliveries were 165,300 acre-feet (AF) for August with an average of 5,332 AF per day, which was 307 AF per day higher than July. Treated water deliveries increased by 1,936 AF from July for a total of 82,200 AF, or 50 percent of total deliveries for the month. The Colorado River Aqueduct (CRA) continued operating at an eight-pump flow with a total of 105,840 AF pumped for the month. State Water Project (SWP) imports averaged 1,145 AF per day, totaling about 35,500 AF for the month, which accounted for approximately 21 percent of Metropolitan's deliveries. The target SWP blend remained at zero percent for Diemer and Skinner plants. The Weymouth plant began transitioning to 100 percent SWP blend on August 30, in preparation for the 15-day Upper Feeder shutdown scheduled to begin on September 6.

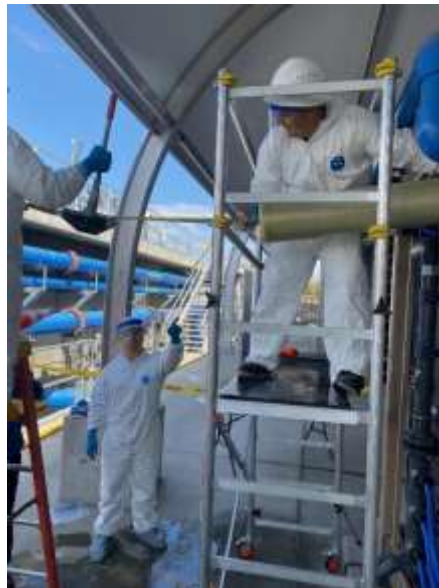
#### Manage Water Reserves

Water reserves continued to be managed according to Water Surplus and Drought Management (WSDM) principles, operational objectives, and the current 5 percent State Water Project (SWP) allocation. Deliveries of SWP supplies were minimized to preserve SWP Carryover and Flexible Storage. Releases from DVL through PC-1 to connections on the Lakeview Pipeline, as well as the DVL to Mills plant operation, continued in August to conserve SWP use in that area. Returns from the Semitropic and Kern Delta SWP Banking Programs also continued in August. Staff continued Greg Avenue pump operations to minimize SWP usage by about 3,300 AF per month. In addition, staff continued coordination with member agencies, shifting their deliveries from SWP connections to Colorado River water connections, when possible. Staff continue to develop additional drought mitigation actions to help with the low SWP allocation in 2022.



## Support the Pure Water Southern California Program

Staff replaced membranes in the Reverse Osmosis (RO) system, the last major equipment maintenance needed before the start of secondary membrane bioreactor (sMBR) testing at the Pure Water Southern California demonstration plant. Staff also performed major overhauls on instrumentation to improve RO system monitoring and control, to ensure that appropriate actions can be taken to respond to performance anomalies. Additionally, an important milestone was reached with the South Coast Air Quality Management District issuing a permit for the demonstration plant, allowing staff to increase the facility flow to 0.7 million gallons per day to support upcoming sMBR testing.



**Staff extracting reverse osmosis membranes for replacement at the Pure Water Southern California demonstration plant**



**Staff troubleshooting instrument alarms (left) and calibrating pressures switches (right) at the Pure Water Southern California demonstration plant**



## Manage Power Resources and Energy Use in a Sustainable Manner

Because of the historically low SWP allocation and operational constraints on the conveyance and distribution system, the Red Mountain Hydroelectric Plant was the only HEP unit operating in July 2022, generating 1,753 MWh in energy and over \$152,260 in revenue. This situation is likely to persist until the Upper Feeder leak on the bellows expansion joint at the Santa Anita River crossing is repaired in September 2022 and the minimum operating envelopes at the HEPs can be met for generation purposes.

Metropolitan's solar facilities totaling 5.4 megawatts of capacity generated approximately 1,174 megawatt-hours in July 2022.

## Ensure Water Quality Compliance, Worker Safety, and Environmental Protection

Metropolitan complied with all water quality regulations and primary drinking water standards during July 2022.

Because of the removal of permanent residences from the Whitsett Intake pumping plant village, the Intake domestic water system is no longer classified as a state small system, as approved by the County of San Bernardino Division of Environmental Health Services on July 29. As a result, Metropolitan is not required to comply with regulatory requirements for domestic water treatment and distribution at this facility. However, Metropolitan will continue to operate and routinely monitor the Intake domestic water system to ensure continued safe and reliable drinking water at the pumping plant.

Staff updated the 2022 Environmental, Health and Safety (EHS) Performance Chart with the second quarter information and posted the update to the IntraMet. The chart measures the Water Systems Operations Group's performance over 10 EHS performance measures.

Date of Last Update:		8/11/2022	
Includes Data Up To:		2nd Quarter 2022	

		Leading Indicators																Lagging Indicators																Regulatory Inspections - Count <sup>7</sup>							
		Safety Inspection Completion Rate (N <sup>o</sup> )				Training Completion Rate (Running % for CY) <sup>8</sup>				Toolbox Completion Rate (N <sup>o</sup> )				Safety Committee Meeting Rate (N <sup>o</sup> )				JH Checklist Completion Count <sup>1</sup>				Near Miss Submission Count <sup>2</sup>				Recordable Injury Count <sup>3</sup>				Reportable Chemical Release or Spill Count <sup>4</sup>						Regulatory Inspection Findings - NON Cause <sup>5</sup>				Regulatory Inspection Findings - RTC Cause <sup>6</sup>	
GOAL		90%				90%				90%				90%				Year-Over-Year Improvement				Year-Over-Year Improvement				0				0				0				N/A			
QUARTER		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>				
WT - Denver Unit		100	100			95	95			100	100			99	100			5,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
WT - Jensen Unit		100	100			91	91			100	100			99	100			1,000	10,000	100	100	5,000	10,000	100	100	1	1			10	10			0	0			1	1		
WT - Mills Unit		100	100			91	91			100	100			99	100			5,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
WT - Skinner Unit		100	100			95	95			100	100			99	100			5,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
WT - Weymouth Unit		100	100			95	95			100	100			99	100			5,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
C&D Desert - Philip Specteliana Unit		100	100			90	90			91	90			100	100			5,000	10,000	100	100	5,000	10,000	100	100	1	1			10	10			0	0			1	1		
C&D Desert - Support Services Unit		100	100			95	95			100	100			99	100			5,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
C&D East & West - Eastern Region Unit		100	100			95	95			100	100			99	100			10,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
C&D East & West - Western Region Unit		100	100			90	90			100	100			100	100			10,000	10,000	100	100	5,000	10,000	100	100	1	1			10	10			0	0			1	1		
OES - Construction Services Unit		100	100			95	95			100	100			99	100			10,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
OES - Fleet Unit		100	100			95	95			91	90			100	100			10,000	10,000	10,000	10,000	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
OES - Manufacturing Services Unit		100	100			95	95			100	100			100	100			1,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
OES - Power & Equipment Reliability Unit		100	100			95	95			100	100			100	100			10,000	10,000	10,000	10,000	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
Water Quality Section - All Units		100	100			95	95			100	100			100	100			10,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		
WQPS - System Operations Unit (Single Rock)		100	100			97	90			N/A	N/A			100	100			1,000	10,000	100	100	5,000	10,000	100	100	5	5			10	10			0	0			1	1		

WSO's EHS Performance Metric Chart with 2022 2<sup>nd</sup> Quarter Results

## Optimize Maintenance

This month, staff performed concrete repairs identified during a routine inspection on the Lake Skinner spillway. Staff removed the loose concrete material, prepared the concrete surface, and completed the concrete repairs.



**Staff removing loose and unstable material (left) and hoisting a man lift into the spillway channel (right) at Lake Skinner**

Staff began installing the replacement tanks at the Lake Mathews sodium hypochlorite tank farm. The two sodium hypochlorite storage tanks reached the end of their service life and are being replaced individually to minimize impacts to operations.



**Staff using a crane to place the new sodium hypochlorite tank at Lake Mathews**

Staff realigned approximately 1,100 feet of patrol road on the San Diego 1 and 2 pipelines in the city of Temecula. The new road alignment moves the vehicle traffic away from the pipelines, protecting infrastructure and removing limitations of vehicle weight due to the shallow soil coverage in the area.



**Staff completing road realignment for the San Diego 1 and 2 patrol road in Temecula**

Staff completed maintenance and valve timing at the Etiwanda Hydroelectric Plant (HEP). Needle valves are used to control flow and regulate the power output of the turbine generator.



**Staff inspecting a needle valve at Etiwanda HEP**



**Staff adjusting the needle valve timing and control system at Etiwanda HEP**

Staff inspected a local motor shop performing rewinding of CRA pump motor armatures. The motor armatures sit atop the CRA motors and help regulate the speed, power, and efficiency of the motors. The rewinding fully refurbishes the armature, restoring it to like-new condition. Staff perform shop inspections at key points during the work to ensure quality and reliability.



**Staff inspecting a CRA motor armature coil prior to vendor installation**



**An armature at a local motor shop before machining for the CRA**

Staff built and installed an innovative monitoring system for the Upper Feeder Santa Ana River crossing expansion joint. This equipment monitors the temporary repair and operation of the current bellows expansion joint that will soon be replaced. The temporary joint repair has performed well. The monitoring system will also be installed on the replacement joint to provide continued and long-term remote monitoring of the joint to ensure its reliable performance.

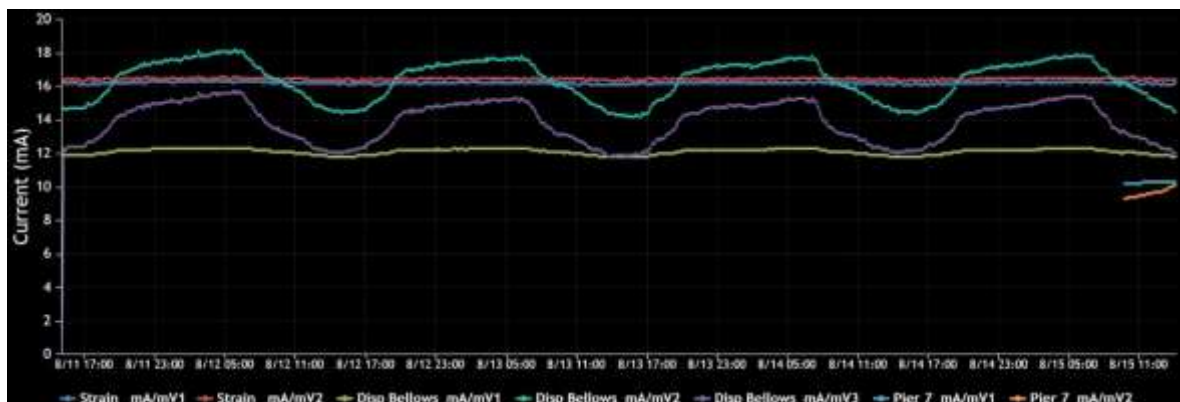




Equipment monitoring sensor installed at the Upper Feeder's Santa Ana River bridge crossing



Solar panels for providing power to equipment monitoring sensors on the Upper Feeder's Santa Ana River bridge crossing



Equipment monitoring graph of displacement and strain vs. time for the Upper Feeder's Santa Ana River bridge bellows expansion joint



The La Verne Shops completed fabrication of the replacement expansion joint to address a leak discovered in April on the Upper Feeder pipeline in the city of Riverside where the pipeline spans the Santa Ana River along a truss bridge. The Shops also fabricated carbon steel butt-straps to aid with the installation of the slip joint.



**Carbon steel follower after fabrication (left) and finished coating (right) for the Upper Feeder pipeline**



**Staff welding flanges to upstream thimble (left) and downstream thimble (right) for the Upper Feeder repairs**



**Blasting of the upstream thimble (left) and completed blasting of the downstream thimble (right) for the Upper Feeder repairs**



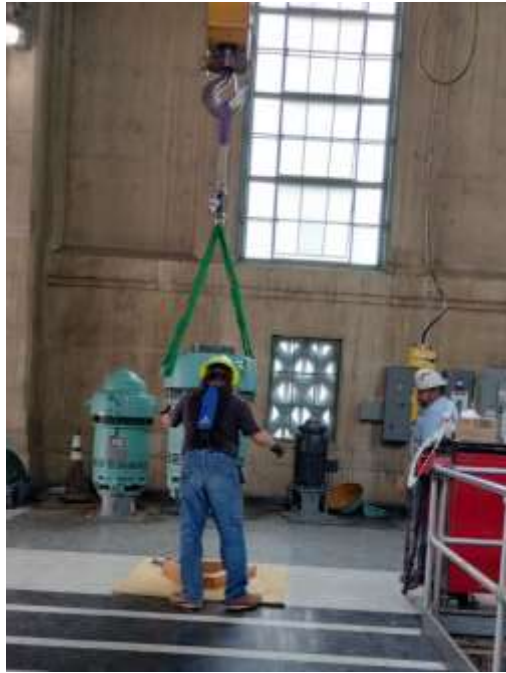
**Coated upstream thimble (left) and downstream thimble (right) for the Upper Feeder repairs**

Staff replaced an air compressor in the Iron Mountain head gate structure. The head gate structure houses the three delivery line head gates that provide the only means of modulating flow from the Iron Mountain pumping plant.



**Staff replacing the air compressor at Iron Mountain pumping plant**

Staff disassembled and repaired a circulating water pump at the Eagle Mountain pumping plant. The circulating water pumps often operate continuously during the hot summer months. When the circulating water pumps are offline, the pumping plants use a back-up system that supplies water directly from the delivery lines.



**Staff repairing a vertical turbine pump at Eagle Mountain pumping plant**

Desert staff repaired a domestic water line at the Iron Mountain pumping plant. The water line leak was identified, and multiple teams worked together to complete the work over a weekend. Staff excavated, repaired, disinfected, and returned the line to service to ensure that the reliable water supply was quickly restored.



**Staff repairing the domestic water line at Iron Mountain pumping plant**

Staff installed a new electrical service pedestal at the Shenandoah Pressure Relief Structure (PRS) on the Culver City Feeder after the existing pedestal had been struck by a vehicle. Staff safely removed the damaged unit and installed a new unit. While power was de-energized to perform this work, staff provided temporary power to the metering equipment and structure for continued operation.





**Staff preparing pedestal base (left) and new electrical service pedestal (right) at the Shenandoah PRS along the Culver City Feeder**

Jensen plant staff installed a new water quality panel at the influent to Palos Verdes Reservoir. Previously located underground at the bottom of steep stairs, the new water quality panel is at ground level, which makes it safer to access and service. The self-cleaning and newly reagent-less equipment requires less maintenance and fewer consumables, saving overall costs in labor and materials.



**Obsolete underground water quality panel (left) and new ground-level water quality panel installed (right) at Palos Verdes Reservoir**

## **Optimize Water Treatment and Distribution**

The State Water Project (SWP) target blend entering the Weymouth plant was less than 5 percent in August 2022, because of a small flow from Live Oak Reservoir to refresh the La Verne pipeline in preparation for the Upper Feeder shutdown in September. The SWP target blend entering the Diemer plant and Lake Skinner was zero percent in August.

Flow-weighted running annual averages for total dissolved solids from June 2021 through May 2022 for Metropolitan's treatment plants capable of receiving a blend of supplies from the SWP and the Colorado River Aqueduct were 594, 590, and 585 mg/L for the Weymouth, Diemer, and Skinner plants, respectively.

Staff replaced a failed gearbox on a sludge thickener clarifier at the Weymouth plant. After nearly 20 years of service, the gearbox bearings failed. An exact replacement was no longer available, requiring staff to remove the support base and machine new mounting locations for the new gearbox. The sludge thickener clarifier is an essential component of the sludge removal process at the treatment plant.



**Failed (left) and new (right) gearbox at the Weymouth plant**

Staff added four additional communication signals for the new ammonia analyzers installed within the new water quality instrumentation building at the Weymouth plant. The work included installing new cabling from the instruments to the remote terminal unit (RTU) and working with the SCADA team to assign software points to the new additional hardware. The ammonia analyzers provide real-time data, allowing the plant operators to ensure the proper total chlorine residual entering the distribution system.



**Staff installing sample line tie-ins to ammonia analyzers at the Weymouth plant**

Staff installed two chemical feed flow meters at the Skinner plant to replace units that failed because of their service age. The flow meters, located within the chemical tank farms, measure the amount of chemical required for the flow of water being treated. Software programs written for Automatic Process Control allow chemical feed rates to be adjusted in accordance with the water flow. Staff don appropriate personal protective equipment when working within the chemical tank farms.





**Staff installing a magnetic flow meter for measuring sodium hypochlorite at the Skinner plant**



**Staff performing electrical testing on a chemical flow meter at the Skinner plant**

Staff installed new water sample piping for the Plant 1 combined filter effluent (CFE) at the Skinner plant. This sampling location is used to measure the turbidity or clarity of the water for regulatory purposes. The previous sample line experienced numerous false turbidity spikes caused by air entrainment, requiring various water quality response actions. A new gravity-fed water sample line was installed to improve reliability, produce a representative sample, and reduce false turbidity spikes.



**Staff saw cutting asphalt in preparation for pipe trench at the Skinner Plant**

Staff replaced the Lake Mathews junction shaft manual gate controls. The work included designing, building, testing, and commissioning new controls. This upgrade provides a robust and reliable system, addressing many past operational issues which have required after-hours and weekend callouts for repairs. This in-house project used Metropolitan forces across several disciplines and work locations.



**Staff pulling cabling for new gate controls at the Lake Mathews junction shaft**



**Finished control panel at the Lake Mathews junction shaft**

Staff installed and tested new analyzer sample ports and sealed the hatch covers at the Diemer ozone contactor afterbays. This work is critical to safely calibrate ozone analyzers, which monitor ozone levels in the contactors for compliance purposes. This improvement required multidisciplinary craft personnel to design, procure, and install the upgrades. With these improvements, routine troubleshooting of the analyzers can be performed without shutting off ozone.



**Ozone contactor afterbay gate hatch with a welded sample port at the Diemer plant**

Staff tested a recently installed remote-control pendant for the west backwash header valve at the Diemer plant. The new control feature will allow operators to control the header valve from anywhere in the filter gallery or on the filter deck. This allows for better observation of the filter backwash cycle. This improvement was initiated in response to a water hammer incident on the Diemer west backwash header line in June 2022.



**Staff verify wireless signal transmission of newly installed remote-control pendant for a backwash header valve at the Diemer plant**

## **Improve Emergency Preparedness and Response**

On August 17, staff hosted a hazardous materials area tour and chlorine emergency “C-Kit” training at the Skinner plant for the Riverside County Department of Environmental Health and CalFire Hazardous Materials Emergency Responders. A C-Kit includes specialized devices and tools to contain potential leaks at chlorine railcars or trailers. This event helps satisfy Metropolitan’s emergency action plan outreach, which was postponed because of the COVID-19 pandemic. Staff resumed in-person coordination and planning meetings in May 2022 to increase interagency hazardous materials response plan awareness and enhance communication with Metropolitan’s local emergency response agencies.



**Staff training emergency responders on procedures associated with chlorine handling**

On August 15, staff met with personnel from the Orange County Fire Authority, Sheriff's Department, Health Care Agency, City of Yorba Linda, and Water Emergency Response of Orange County to continue planning for a full-scale exercise at the Diemer plant in November 2022. On August 16, staff met with member agency staff from the cities of Pasadena and San Marino as well as Foothill, Three Valleys, and Upper San Gabriel Valley Municipal Water Districts. These agencies will be participating in a joint exercise during the Great California ShakeOut Earthquake Exercise scheduled for October 20.

On August 24, a severe thunderstorm affected much of Metropolitan's desert region. Metropolitan's Emergency Operations Center (EOC) staff responded to inquiries about flash flooding and washed out portions of the I-10 freeway near Desert Center. The EOC Duty Officer assembled incident information from various outside agencies, including Cal Trans and the Riverside County Emergency Management Department, and shared it with Metropolitan staff in the area. There were no reports of direct impacts on Metropolitan operations in the area but travel in the area was affected by this severe weather event.

### **Actively Engage in Capital Project Planning and Execution**

Staff participated in a series of preliminary design workshops throughout August for the Water Quality Laboratory Improvements capital project. The preliminary design contract for upgrading this essential facility involves a hybrid effort of consultants and Metropolitan staff. Participants discussed approaches to optimizing laboratory, office, and meeting spaces; current and future analytical needs; and sustainability considerations.

Staff are conducting preliminary operations for the Ozone Programmable Logic Controller (PLC) Replacement capital project at the Mills plant. Multiple disciplines have assisted with pulling new fiber optic cable throughout the plant and installing server racks in anticipation of this important upgrade. The current PLC system has been discontinued making repair parts difficult to source. The Mills plant will be transitioning to a new control platform, which is faster and easier to integrate with communication protocols. The hardware deployment and PLC upgrade is anticipated to be performed over approximately two months in early 2023. During this time, chlorine will be used as the primary disinfectant at the Mills plant.

### **Protect Source Water Quality**

On August 3, staff participated in the quarterly stakeholder meeting on perchlorate cleanup at the former Tronox site in Henderson, Nevada. The Nevada Environmental Response Trust reviewed the remedial program status, which includes completion of remedial investigation and risk assessment reports in 2023 and 2024 for the Operable Units that represent the most significant source of perchlorate contamination at the site. Staff continues to monitor the overall development of the long-term remedial plan and distribution of the Trust's funds for site cleanup to ensure continued protection of Colorado River water quality.

### **Manage the Power System**

Given the current continuing drought conditions, the CRA is expected to maintain a planned eight-pump flow through September 2022. Sufficient Resource Adequacy (RA) capacity to meet CRA pumping operational needs is forecast through September.

Staff continues to monitor the cost and operational impacts of reduced hydropower generation at Hoover Dam and continued turbulence in the electricity and natural gas markets. After spiking in early 2022 following the invasion of



Ukraine and subsequent disruption of energy markets worldwide, natural gas and electricity prices in the western US markets have trended downwards, which has resulted in a reduced energy cost forecast for the CRA for 2022.

## **Prepare for Future Legislation and Regulation**

On July 22, the SWRCB released a new draft Statewide Construction Stormwater General Permit (CGP) for public comment. Metropolitan's construction projects are subject to the requirements of the CGP. The draft CGP updates monitoring and reporting requirements and introduces total maximum daily loads (TMDLs) and passive treatment technologies. The permit is set for adoption in September 2022, with an effective date one year later. Staff will continue to monitor further updates to assess impacts of the anticipated permit.

On July 29, Cal/OSHA released a 45-day public comment draft on a permanent COVID-19 Prevention Standard. The permanent COVID-19 standard is a simplified and reduced version of the existing COVID-19 emergency temporary standard. Key updates include requiring employers to address COVID-19 procedures in an Injury and Illness Prevention Plan (IIPP), simplifying notification requirements, updating procedures for dealing with "outbreaks," and adding a new section for aerosolizing procedures. Staff will continue to review the latest draft and work with external health and safety organizations to draft comments.

On August 16, Metropolitan's Board took an oppose-unless-amended position on SB 1020: Clean Energy, Jobs, and Affordability Act of 2022. Among other provisions, SB 1020 accelerates the requirement for the State Water Project to be reliant on 100 percent clean energy from 2030 to 2045. If passed, staff estimates the accelerated clean-energy goal could add up to \$130 million annually to Metropolitan's SWP costs. Staff recommended a series of cost-containment provisions; however, several were not accepted by the author's office. Staff will continue to track progress of SB 1020 through the end of session through August 2022.

On August 17, staff contributed to the American Water Works Association, California-Nevada Section's (CA-NV AWWA) oral testimony presented to the State Water Resources Control Board (SWRCB) workshop on the proposed Notification Level (NL) of 2 nanograms/liter and a corresponding Response Level (RL) of 20 ng/L for perfluorohexane sulfonic acid (PFHxS), one of the PFAS group of chemicals. These levels are non-regulatory, health-based advisory levels for potential contaminants. The proposed NL is at or below the reliable detection limit for current analytical methods and less than the Consumer Confidence Report Detection Limit of 4 ng/L. Setting such a low NL may diminish consumer confidence in public water systems, regardless of actions taken by the drinking water system; therefore, CA-NV AWWA's comments request careful consideration of the feasibility and affordability of potential mitigation actions.

Monthly Update as of:

8/31/2022

<u>Reservoir</u>	<u>Current Storage</u>	<u>Percent of Capacity</u>
<b><i>Colorado River Basin</i></b>		
Lake Powell	5,931,000	24%
Lake Mead	7,277,000	28%
<b><i>DWR</i></b>		
Lake Oroville	1,311,511	37%
Shasta Lake	1,590,192	35%
San Luis Total	570,426	28%
San Luis CDWR	385,161	36%
Castaic Lake	112,372	35%
Silverwood Lake	67,881	91%
Lake Perris	96,262	73%
<b><i>MWD</i></b>		
DVL	517,808	64%
Lake Mathews	99,370	55%
Lake Skinner	36,895	84%



Hoover Dam

## Information Technology

### Project Highlights

#### Fuel Management System Upgrade

Major accomplishments have been made in the efforts to upgrade the Fuel Management System that enables management controls over fuel inventories, dispensing, and security to ensure operability, vendor support, and system reliability. After completing the site visits to gather requirements for project planning development and to identify site-specific requirements, the team has successfully upgraded from the Ward Fuel System to the Syntech Fuel Master System at Jensen, Soto Street, Diemer, La Verne, Skinner, and Diamond Valley Lake. The project team is scheduled to complete six additional sites in the coming months.



#### Maximo Mobile Computing Project

The Information Technology Group continued the Maximo Mobile Computing project to replace existing mobile devices used in Water System Operations with the latest tablet technology and to deploy additional devices to other business units. This effort will reduce the need for desktop computers at field sites and vastly increase the functionality of the existing Maximo mobile devices. The team has procured the next batch of 40 iPads and is in the process of configuring the devices to prepare them for deployment.

## Real Property

### Project Highlights

#### Staff Training and Development.

Gave a presentation on Real Property Group for WSO's Annual Shutdown Meeting. Topics covered included an overview of RPG, functions of Acquisition & Disposition and Land Planning, and main WSO support activities.

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

Acquired a license amendment from the Riverside County Transportation Commission in support of the Perris Valley Pipeline project in Riverside County. This amendment covers the new construction schedule for the permanent location of the pipeline and the temporary construction laydown and storage areas.

#### **Provide right-of-way planning, valuation, and real property acquisition support services for the sustainability and reliability of both imported and regional water supplies, and protection of water rights.**

Acquired 110 gross acres (108 water toll acres) in the Palo Verde region from a private entity in support of Colorado River water supply reliability.

#### **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 has been issued to the City of Pasadena Department of Water and Power for construction laydown and staging purposes comprising 7,150 square feet of land within the Palos Verdes Feeder right-of-way in Eagle Rock. The one-year permit will support the City's equipment upgrade project at its Ross Booster Station.

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

The Diamond Valley Lake Marina Concessionaire completed a canopy and signage replacement project at the marina facility. Traffic and informational signs were replaced because of fading, and additional signage was added to direct visitors to the restroom facilities. The project included the replacement of all the shade canopies located at rest stops along the Lakeview Trail.



Facility management performed an emergency repair replacing approximately 28 feet of 6-inch fire water sprinkler piping in US-1-205. This piping supplies fire water to stairwell #1 riser of the tower section at the Metropolitan Headquarters Building. The pipe developed a small leak which, over the course of three days, became a steady stream requiring the shutdown of the sprinkler system until the repair could be performed. The leak was identified at an elbow caused by corrosion located at the east-most section of piping.



## **District Housing Maintenance and Management.**

Facilities Management—Eastern Region completed 38 work orders for this reporting period. Eight of these work orders were Tenant Requested Work Orders that included repairs to air conditioning units, replacement of non-functioning electrical receptacles, replacement door locks, repairing plumbing leaks, and a replacement exterior door.

Facilities Management—Eastern Region also completed occupancy preparations of six houses. Many of these houses required significant cleanup work, painting touch-ups, installation of new appliances, cabinets, electrical outlets, and light switch change-outs as well as yard and garage cleaning, and irrigation repairs.

With the completion of these houses, six new rental agreements were issued to new employees that have been assigned to the desert.



## Security

### Project Highlights

#### Security and Emergency Response

A surprise weekend law enforcement sweep was conducted at Metropolitan's Eagle Valley, a fee property located west of Lake Mathews. The undeveloped property has been experiencing a high volume of trespassing, illegal dumping, target shooting, off-roading, fires, and encroachment.

Metropolitan's Security Specialists and Real Property management facilitated access and worked with multiple public safety agencies including:

- Corona Police Department
- Corona Fire Department
- California Highway Patrol
- San Bernardino County Sheriff

The area was scouted with drones for potential violators on the property. The task force effected 14 successful contacts with multiple trespassers and issued written warnings.

The operation was well planned, conducted safely, and deemed an overwhelming success in deterring future encroachments.



**Security Specialists assist law enforcement to safeguard Metropolitan property and neighboring communities**

## Employee Readiness for All Hazards and Emergencies

A life-threatening, bleeding injury can happen anywhere and can be caused by many factors, including disasters, vehicle accidents, and power tool and kitchen implement mishaps. Instead of being passive bystanders, 59 Metropolitan Western Region C&D employees elected to become immediate responders by taking Stop the Bleed training this month.

Stop the Bleed, a nationally recognized course, is taught at no-cost by EMT-qualified Metropolitan Security proprietary staff. Throughout the two-hour dynamic training, participants successfully demonstrate skill mastery and calm competence in (1) applying direct pressure, (2) correctly applying tourniquets, and (3) packing wounds to empower their confidence in potentially saving a life.

Stop the Bleed kits are being installed in all Western Region Utility fleet vehicles to enhance worker safety in the field. The kits (already installed at Headquarters and all major facilities) are also being added to shutdown staging deployment supplies and will be installed at additional remote facilities, where immediate medical response could potentially be delayed. Course graduates received official certificates and training feedback has been overwhelmingly positive.



EMT-qualified security staff teach Stop the Bleed national campaign

# Finance and Administration



## Finance

### 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.**

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

The Risk Management Unit completed 35 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits, and spills.

Risk Management completed 62 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events, and film permits.

### Business Continuity

**Facilitate district-wide planning and training to prepare employees and managers to effectively carry out critical roles and recover mission essential functions thus ensuring continuity of operations and resiliency in the event of a disaster.**

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

- Continued facilitating tabletop exercises and Business Continuity plan updates, with a special focus on cyberattack planning.
- Participated in meetings with the Fusion business continuity management software consultant to implement system and plan enhancements.
- Participated in planning efforts for two exercises in November focused on testing response and business continuity for the Diemer and Jensen water treatment plants.

### 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 that 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.**

**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.**

Beginning July 2022 water transactions and revenues are reported on a cash basis

- Water transactions for July 2022 totaled 141.3 thousand acre-feet (TAF), which was 10.8 TAF higher than the budget of 130.5 TAF and translates to \$133.6 million in revenues for July 2022, which were \$12.3 million higher than the budget of \$121.3 million.

- In July 2022, Accounts Payable processed approximately 3,400 vendor invoices for payment and took advantage of about \$9,200 in discounts.

**Manage investor relations to ensure clear communications, accuracy of information, and integrity.**

Treasury and Debt Management staff rolled out the new Investor Relations portal with a dual purpose of providing access to our offering documents during the marketing of our bonds, as well as serving as an ongoing platform for engagement of investors to better evaluate and update Metropolitan's credit profile.

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

On July 7, 2022, Metropolitan issued \$279,570,000, Water Revenue Refunding Bonds, 2022 Series A. The bonds were issued at a True Interest Cost of 2.93 percent and achieved net present value debt service savings of \$40.1 million, or 12.66 percent of the refunded par bonds. The bond sale, which took place on June 22, 2022, was very successful, with \$2.1 billion in orders, from 72 different investors. Average annual debt service savings of approximately \$3.2 million per year will be realized over the 15-year term of the bonds. Bond proceeds were used to refund portions of outstanding revenue bonds, other debt obligations, and fund costs of issuance.

On July 27, 2022, Metropolitan issued \$253,365,000, Water Revenue Refunding Bonds, 2022 Series B, and \$282,275,000, Water Revenue Refunding Bonds, 2022 Series C (Taxable). The 2022 Series B bonds were issued at a True Interest Cost of 2.90 percent, the 2022 Series C bonds were variable rate bonds, and had an initial weekly rate of 1.60 percent (Series C-2), and 1.62 percent (Series C-1). The 2022 Series B and 2022 Series C bonds were priced on July 20, 2022, as part of an integrated plan of finance. The 2022 Series B bond sale received strong investor demand, with orders of \$1.14 billion, from 58 different investors. Similarly, the weekly variable rate, 2022 Series C bond sale received strong investor support. The 2022 Series C-1 bonds were fully subscribed, and the 2022 Series C-2 bonds were three times oversubscribed. On a combined basis, the refunding provided substantial expected net present value debt service savings of \$22.1 million, or 8.28 percent of the refunded par bonds. This will provide average annual debt service savings of approximately \$1.8 million per year over the 18-year term of the bonds. Bond proceeds were used to refund portions of outstanding revenue bonds and fund costs of issuance.

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

As of July 31, 2022, Metropolitan's investment portfolio balance was \$1.3 billion; in July 2022, Metropolitan's portfolio managers executed nine trades, and Treasury and Debt Management staff executed two trades to liquidate Metropolitan's last bond reserve fund as part of the recent bond refunding.

In July 2022, Treasury staff processed 1,061 disbursements by check, 24 disbursements by Automated Clearing House (ACH), and 113 disbursements by wire transfer. Treasury staff also processed 88 receipts by check, 26 receipts by ACH, and 47 receipts by incoming wires and bank transfers.



## Administrative Services

### Accomplishments

#### Contracting Services Unit

During the month of August, the Professional Services Contracting Team staff completed Request for Qualification (RFQ) No. 1316 to establish a list of pre-qualified firms for Geotechnical and Tunnel Design Engineering Consulting Services on an on-call basis to provide geotechnical and dam safety consulting services in support of various critical projects throughout Metropolitan's distribution system and service area.

#### Document Services Unit

A blast from the past from the Archives:

Metropolitan partnered with McDonald's in 1991 for a water conservation campaign. This is the digital image of a placemat.



#### Procurement Team

The Procurement Team awarded a contract for a two-stage swing check valve for the Greg Avenue Pumping Station and East Valley Feeder. These new valves will provide adequate surge protection without requiring backflow through the pumps. The competitive bid process resulted in a contract award that came in approximately \$24,000 under budget.

## Human Resources

### HR Priorities

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

In August, 351 Metropolitan employees attended virtually facilitated classes, including Grant Administration, MS Project, Advanced Excel, and Personal Security Awareness.

LinkedIn Learning, Metropolitan's online, e-learning content platform, was accessed for such topics as Conflict Resolution, Executive Presence, Learning Brainstorming, and How to Keep High Performers Engaged.

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

Recruitment successfully filled 19 positions for the month of August. Recruitment received 29 new staffing requisitions resulting in 184 positions currently in recruitment.

The HR Group Manager continued to work with the Board search committee in the recruitment process for the General Auditor position.

### HR Core Business: Provide Excellent Human Resources Services

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

Negotiations continue with the Supervisors' Association on a successor MOU. Staff will continue to brief the Organization, Personnel, and Technology (OP&T) Committee on the status of those talks.

The Benefits Unit is working with Metropolitan's broker, CalPERS, and various health providers on contract renewals, rates, and plan changes for Open Enrollment. Benefits will be launching seven webinars for the months of August and September.

The Business Support Team planned, organized, and coordinated a "Cultivating Mindfulness" wellness webinar. The live webcast was held on August 24, 2022, and hosted by Kaiser Permanente. The webinar introduced employees to mindfulness activities while exploring the definition of mindfulness, benefits of being in the present moment, and how to build the skill of awareness.

### HR Core Business: Comply with Employment Laws and Regulations

**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.**

Human Resources continued efforts to review hiring, promotion, and Employee Relations procedures to address concerns raised in the State Audit report and to ensure that any revisions meet the deadlines outlined in the State Audit Report.

The Benefits Unit is currently administering 2022 COVID-19 Leaves through September 30, 2022. As of July, 345 leaves have been approved.

# Finance and Administration

(continued)

In August, five new Workers' Compensation claims were received. Nine 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.

In addition, staff is collaborating with IT to implement a new Workers Comp claim management system designed by Ventiv Technology. Staff continue to work closely with our new Workers' Compensation Third Party Administrator, TRISTAR Risk Management, during the transition.

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

- Coordinated six medical medvan visits (DMV, respirator exams and hearing tests) to Mills, Skinner, Mathews, and LaVerne.
- Arranged 11 medical evaluations (Pre-employment, DMV, medical surveillance, and vanpool program restart)
- Addressed approximately 40 COVID-related matters.
- Addressed 35 Accommodation issues, referrals, and follow-ups with Shaw Consulting Group.

HR Metrics	June 2021	August 2022	Prior Month July 2022
<b>Headcount</b>			
Regular Employees	1,881	1,770	1,766
Temporary Employees	32	34	39
Interns	5	1	2
Recurrents	20	18	18
Annuitants	16	18	19

	August 2022	July 2022
<b>Number of Recruitments in Progress (Includes Temps and Intern positions)</b>	184	174
<b>Number of New Staffing Requisitions</b>	29	2
	August 2022	July 2022
<b>Number of Job Audit Requests in Progress</b>	5	6
<b>Number of Completed/Closed Job Audits</b>	2	2
<b>Number of New Job Audit Requests</b>	1	0

Transactions Current Month and Fiscal YTD (includes current month)			
External Hires	FY 21/22 Totals	August 2022	FISCAL YTD
Regular Employees	82	4	8
Temporary Employees	36	2	2
Interns	4	0	0
<b>Internal Promotions</b>	70	4	8
<b>Management Requested Promotions</b>	152	8	13
<b>Retirements/Separations (regular employees)</b>	127	3	5
<b>Employee-Requested Transfers</b>	15	2	3

# Finance and Administration

(continued)

## Departures

Last	First Name	Classification	Eff Date	Reason	Group
Boyd	Glen	Section Mgr- Conveyance&Distrbn	7/5/2022	Retirement - Service	WATER SYSTEM OPERATIONS GROUP
Lara	Adolfo	Fleet Coordinator	7/5/2022	Retirement - Service	WATER SYSTEM OPERATIONS GROUP
Huoh	Cliff	Engineer	7/2/2022	Resign-Accepted Other Employ	ENGINEERING SERVICES GROUP



## Diversity, Equity and Inclusion

### Highlights

#### DEI Board Forum: “Playing to Win: Advancing Inclusive Excellence”

The DEI Office hosted Metropolitan’s first-ever DEI Forum, titled “Playing to Win: Advancing Inclusive Excellence” to actively engage members of the Board, employees, and various community and business partners in a holistic conversation about what a true commitment to equity and inclusion demands. We highlighted various case studies and best practices from both public and private institutions and also highlighted Metropolitan’s own changemakers and DEI journey. We publicly announced our aspirational goal to be “the most inclusive, equitable, and socially and environmentally conscious public institution in the world.”

#### Expanding Career Pathways—HBCU Outreach & Partnerships

Metropolitan joined a consortium of local agencies, along with LADWP, Bureau of Engineering, LAWA, and the Port of LA, who are providing a unique opportunity to engineering students from historically black colleges and universities (HBCUs) to research and present solutions to engineering challenges confronting both urban and suburban municipalities. A small group of interns from HBCUs will work on a unique engineering challenge pertinent to Metropolitan and will present their research; the top students will be flown to LA to meet with member agencies. Besides providing the engineering research opportunity, Metropolitan is also providing an engineer who will serve as a mentor to these students during the month-long research opportunity. This program is slated to kick off in September/October timeframe and is being funded by a grant (because no budgetary provision is available from Metropolitan to execute this). This is one of many different partnerships and pathways that we are driving to expand greater access and opportunity at Metropolitan and to build a diverse talent pipeline.



DEI Board Forum

# External Affairs



## External Affairs

### Highlights

GM Hagekhalil was a panelist at the opening session of the Future of Water Summit where he shared his One Water vision in the face of climate change. (August 8)



*GM Delivering Keynote to the Building Industry Association Conference*

GM Hagekhalil was a keynote speaker at the Metropolitan-sponsored Building Industry Association Southern California Water Conference, which was attended by 300 community and industry leaders. (August 12)

Chairwoman Gray and GM Hagekhalil participated in a roundtable meeting with U.S. Department of Interior Secretary Haaland, Bureau of Reclamation Commissioner Touton, and state and local water agency representatives to discuss climate change, water conservation, water reuse/recycling, and overall drought mitigation strategies. (August 18)

Congresswoman Napolitano (D-El Monte) hosted Bureau of Reclamation Commissioner Touton, Carson Mayor Davis-Holmes, and local dignitaries for a presentation and tour of the Pure Water Southern California Demonstration Facility. Chairwoman Gray welcomed the dignitaries and GM Hagekhalil provided a brief update on Metropolitan, water supply conditions, and the One Water vision. (August 18)



*Meetings with DOI Secretary Haaland, USBR Commissioner Touton, and Congresswoman Napolitano and local officials.*

Metropolitan hosted the third GM Listening Session to an audience of 100 representatives from environmental and community organizations, member agencies, and staff. The session focused on the Pure Water Southern California partnerships and opportunities for collaboration. (August 22)

Chairwoman Gray, Director Ramos, GM Hagekhalil, WSO Group Manager Yamasaki, and representatives from Burbank Water and Power held a press conference to raise public awareness about the Upper Feeder shutdown and call for no outdoor watering in much of Los Angeles County for 15 days in Sept. (August 30)



## Legislative Services

### Federal

Metropolitan staff worked closely with Senate staff to include \$4 billion in funding in the Inflation Reduction Act of 2022 to help address severe drought conditions on the Colorado River by compensating farmers and others who reduce their water use and supporting projects that provide environmental benefits. The funding could also advance important activities that promote water efficiency and environmental restoration projects. The measure was signed by President Biden on August 16.

Work continues to secure federal funding for turf replacement programs including using WaterSmart WEEG program funds for turf replacement in residential landscapes and emphasize the removal of non-functional turf in commercial areas.

### State

In the final month of the legislative session, Governor Newsom presented a major climate change package which included legislation to accelerate greenhouse gas cuts, set new interim targets for reaching 100 percent clean electricity and codify safety zones around new oil and gas wells.

Metropolitan continues to advocate for amendments to SB 1020, that would set interim targets to accelerate transitioning the State Water Project to renewables and zero carbon emissions and address the significant costs and rate impacts that the bill in its current form would have for consumers.

The legislature passed a Metropolitan priority bill, AB 1845 (Calderon D-Whittier) and SB 991 (Newman, D-Fullerton). These complementary bills authorize alternative project delivery methods and will help Southern California water agencies accelerate important drought mitigation and new supply projects.

The CMUA and Metropolitan co-sponsored CEC bill, SB 230 (Portantino D-La Canada-Flintridge) is awaiting final action by the Assembly. An agreement was reached with the State Water Board and the environmental NGOs on a set of amendments to ensure that any CEC program focused on drinking water would not interfere with existing State Water Board work to investigate PFAS.

AB 2142 (Gabriel D-Woodland Hills), which reinstates the exemption for turf replacement rebates from personal income, also passed the Legislature and was sent to Governor's Office for signature.

The Newsom administration released a new report that presents a strategy to adapt and protect the state's water supplies from rising temperatures and identifies several initiatives to replace the projected water loss that are consistent with Metropolitan's One Water Vision, including recycled water, expanding above and below ground storage, advancing demand management, funding for turf replacement, and advancing the Delta Conveyance EIR. The Governor also named former Los Angeles Mayor Antonio Villaraigosa as the state's infrastructure czar.

### Local

Director Quinn participated in a virtual water panel hosted by Assemblymember Friedman (D-Glendale). The panel included speakers from Burbank Water and Power, Glendale Water and Power, and Los Angeles Department of Water and Power. (August 11)

Chairwoman Gray and GM Hagekhalil attended Central City Association's Elected Officials reception, which recognized Los Angeles-area elected officials. (August 17)



Colorado River Resources Manager Hasencamp and other Metropolitan staff participated in the Riverside County Water Task Force speaker series “California’s Drought” and spoke on conditions on the Colorado River. (August 26)

In addition to priority outreach initiatives, Metropolitan staff monitored and/or participated in 50 in-person meetings and events and presented information about current water supply conditions, drought actions, local water supply projects, and conservation programs.

## Media and Communications

Set up interviews on the Upper Feeder shutdown with WSO Group Managers Yamasaki and KPCC, KABC-TV, KNBC-TV, KCAL/CBS-TV, KFI-AM 640, and KNX-AM 1070.

Coordinated interviews on the Upper Feeder shutdown between EA’s Luis Cetina and Telemundo and Univision Spanish television.

Arranged on-camera interviews with GM Hagekhalil, SRI Chief Crosson, and staff at various facilities for Al Hurra’s “Road to Zero” documentary on efforts to curb climate change.

Set up an interview between GM Hagekhalil and Colorado Politics’ Marianne Goodland about the work by Colorado River users to cut water use by 2–4 million acre-feet.

Arranged interviews on Colorado River Basin states plans to reduce water usage and ongoing resource issues for Colorado River Resources Manager Hasencamp and Palm Springs Desert Sun, Spectrum News, CalMatters, San Diego Union-Tribune, KABC-TV, CNN, KSNV Las Vegas, KTLA-TV, Associated Press, Reuters, and Nevada Independent, and an EO/AGM Upadhyay interview with Washington Post.

Coordinated an interview between CalMatters reporter Rachel Becker and WRM Water Efficiency Manager McDonnell about turf replacement programs.



Arranged an interview between KPCC’s Caitlin Hernandez and WRM’s Guerrero for a guide on how the public can replace their lawns with California Friendly and native plants.

Set up an interview between SJV Water’s Lois Henry and Bay-Delta Initiatives Manager Arakawa regarding the release of the Delta Conveyance Project Draft Environmental Impact Report.

Coordinated a Spanish-language interview between Univision and External Affairs’ Cetina about Colorado River issues and conservation in Metropolitan’s service area.

Set up an interview for WSO’s Assistant Group Manager Chaudhuri and Riverside Press-Enterprise reporter Monserrat Solis about Diamond Valley Lake.

Coordinated an interview between KPCC reporter Erin Stone and EO/AGM Upadhyay regarding Pure Water Southern California and the role of recycled water in the region’s future.

Coordinated an interview between WRM Group Manager Coffey and Salvador Hernandez of the Los Angeles Times regarding the conservation numbers released by the State Water Resources Control Board.

Arranged an interview between WRM Group Manager Coffey and KNX-AM In-Depth news show to discuss water conservation in Southern California.



Secured press coverage of the Casa Loma Siphon project site visit by Director Smith, garnering coverage of Metropolitan's seismic resilience efforts by LA, with quotes from Chief Engineer Bednarski and GM Hagekhalil.

## Press Releases

- Board resolution committing to providing the district's entire six-county service area with reliable and equitable access to available water and storage across the region.



*Speakers at the Board's DEI Forum with Chairwoman Gray and GM Hagekhalil*

- Statements from Chairwoman Gray and GM Hagekhalil on Colorado River discussions to reduce demands on the river by 2 to 4 million acre-feet.
- Upper Feeder shutdown and no outdoor watering in portions of Los Angeles County.
- Statements from Chairwoman Gray and GM Hagekhalil on U.S. Senate passage of Inflation Reduction Act.
- Statements from Chairwoman Gray and GM Hagekhalil on the release of Draft EIR for the Delta Conveyance Project.
- The Board's first-ever Diversity, Equity and Inclusion Forum.



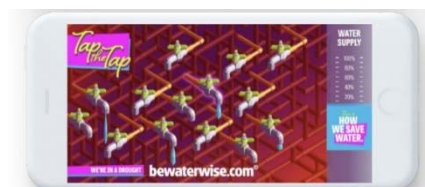
*Casa Loma Siphon project to increase seismic resilience*

## Website and Social Media

- Revamped the Pure Water Southern California web page to support the announcement of the scoping phase of environmental review in September.
- Bewaterwise.com received more than 105,000-page views with the 'This is How We Save Water' pages in English and Spanish as the most visited. Campaign also received more than 7 million social media impressions.
- Initiated partnership with Tree People, posting graphics promoting tree care during drought.

## Creative Design

- Launched an in-house designed video game as part of a conservation advertising campaign; game plays during the top 500 video game apps and directs players to bewaterwise.com
- Shot and edited the first posting for social media influencer campaign with The Linda Lindas, a Los Angeles-based rock band composed of four SoCal-native teenage girls with strong social media following. The video received 44,000 views on Instagram.
- Created webpage materials, map, fact sheet, and social media assets for Upper Feeder shutdown.



## Public Outreach and Member Services

Outreach activities for Pure Water Southern California included English and Spanish language tours for the public and the following events:

- Member agency workgroup meeting on Pure Water survey and focus group results (August 3)
- Tour with Panda Restaurant Green Committee (August 12)
- Briefing for Asian Pacific Islander Forward (August 23)
- Tour with Water Replenishment District (August 30)

Other Activities:

- Met with member agency managers to discuss Upper Feeder shutdown, Colorado River issues, Bay-Delta policy update, actions for SWP Dependent Areas, and conservation (August 5)
- Distributed more than 2,000 notices to the communities of Newport Beach and Costa Mesa for upcoming repairs to the Orange County Feeder (August 15-31)
- Distributed notices to local businesses and residents for the Upper Feeder shutdown (Aug 26-30)
- Hosted meeting of WaterReuse California Communications Collaborative Group (Aug 25)

## Education and Community Relations

### General Education

Education staff virtually interacted with more than 150 teachers, students, and parents through online virtual tours, scouting, and class presentations.

Working with Three Valleys Municipal Water District, Southern California Edison, and local water retailers, Metropolitan co-hosted a facility tour of Three Valleys MWD for students from the University of La Verne interested in career opportunities in the water and energy industries.

Staff provided a Water Journeys tour of Pure Water Southern California to high school students attending Los Angeles Service Academy who have expressed an interest in public, civic, and civil service.

Staff worked with California Landscape Contractors Association and Armstrong Nurseries to create consumer materials with water-saving tips that residents can use to protect their yards and trees.

In coordination with WRM, provided outreach for a Future Supply Actions program webinar with San Diego County Water Authority on a pilot program at the Carlsbad Desalination Plant. (August 31).

Metropolitan sponsored events through the Community Partnering Program for the Nature Collective Water Conservation School Garden and Think Earth Environmental Education Foundation, Think Watershed Floating Lab.



*Metropolitan co-hosted tour and briefing on water issues and careers for University of La Verne students*

# Sustainability, Resiliency and Innovation



## Sustainability, Resiliency, Innovation, and Environmental Planning

### SRI Core Activities

CSRIO presented on the Climate Action Plan at Southern California Edison's Clean Energy Summit and provided the keynote address at Water Solutions 7, hosted by Sustain SoCal, for water managers and innovators. SRI also led negotiations with Colorado Basin urban water providers in development of a basin-wide Memorandum of Understanding on additional water conservation and efficiency commitments.

### Innovation

The Innovation Team met with four entrepreneur applicants of the Feedback Forum Technology program. The entrepreneurs presented their ideas and technologies as they would apply to potential Metropolitan uses. Some of the technologies presented were mobile desalination equipment, a drought urinal for water conservation purposes, a smart water digital platform, and a method of using brine as a growth medium for genetically modified halophilic bio-refineries.

The Innovation Team participated in the Southern California PGA and the USGA Golf Summit. The events served as opportunities to learn how the Southern California golf community is meeting current and future water challenges as they arise. Metropolitan Deputy General Manager Deven Upadhyay provided the keynote for this event. The events were held at the La Serena Golf Course in Chino Hills and were attended by about 250 participants.



Deven Upadhyay, Keynote Speaker and WRM Panel, Gary Tilkian, Bruce Chalmers, Krista Guerrero, and Parker Cohn at Southern California PGA

# Sustainability, Resiliency and Innovation

(continued)

The Innovation Team also participated in Sustain SoCal's WATER SOLUTIONS 7 (WS7) annual conference. This year's event focused on exploring real-life strategies and innovations in reuse, desal, storm water, energy nexus, contamination, investor and policy trends, and big data in Southern California and the surrounding region. Liz Crosson, Metropolitan's Chief Sustainability, Resilience and Innovation Officer, provided the keynote for the hybrid and in-person event, which was attended by over 200 participants.



Liz Crosson, Keynote Speaker at Sustain SoCal's Water Solutions 7

## Environmental Planning Section

**Core Business: Environmental Planning and Regulatory Compliance Support**

### Bay Delta Initiatives

#### **Delta Conveyance Project**

- Continued coordination with Department of Water Resources to support development of information for regulatory permit applications.

### Engineering Services Group

#### **Etiwanda Pipeline Relining Project**

- Completed pre-construction biological surveys and participated in a pre-construction kickoff meeting with the contractor and Resident Engineer.

#### **Perris Valley Pipeline**

- Obtained Caltrans and Federal Highway Authority (FHWA) approvals to support the encroachment permit.

#### **Pure Water Southern California**

- Continued preparation of the Notice of Preparation (NOP) of a Draft Environmental Impact Report, which will be released for public review in September 2022.



# Sustainability, Resiliency and Innovation

(continued)

- Prepared materials and drafted presentation in support of scoping meetings to be held during the NOP public review period.

## **Construction Monitoring**

- Provided construction monitoring for the Orange County Feeder Relining Reach 3, Weymouth Basins 5–8 Rehabilitation, La Verne Shops Upgrades, Battery Energy Storage System, and PCCP Valve Storage Facility.

## **External Affairs Group**

- Provided input on the Watershed Initiatives section of the FY 2021-2022 SB 60 Annual Achievement Report.

## **Sustainability, Resiliency, and Innovation Office**

### **Climate Action Plan (CAP) Monitoring and Reporting**

- Continued development of the CAPDash website for tracking and reporting of emissions and emissions reductions.
- Conducted subsequent CEQA review for the Weymouth Battery Energy Storage System project.

## **Water Resource Management Group**

- In coordination with Colorado River Resources, WRM, and Legal staff, prepared and submitted comment letter responding to the U.S. Bureau of Reclamation's Request for Input on Development of Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead Under Historically Low Reservoir Conditions.

## **Water System Operations Group**

### **Upper Feeder Santa Ana River Bridge Emergency Repairs Project**

- Obtained emergency authorization from the U.S. Army Corps of Engineers and Santa Ana Regional Water Quality Control Board to work in Clean Water Act Sections 404 and 401 jurisdictional area.
- Submitted emergency notification to California Department of Fish and Wildlife.
- Provided environmental awareness training to contractor and Metropolitan staff. Training was recorded for project staff who were not able to attend.
- Initiated vegetation removal and grubbing activities in preparation for the shutdown and repair.



**CalFire crews conducting vegetation maintenance in support of the Upper Feeder Santa Ana River Bridge Emergency Repairs Project**

# Sustainability, Resiliency and Innovation

(continued)

## Reserve Management

### **Lake Mathews Multiple Species Reserve**

- Installed “No Trespassing” signs along El Sobrante Road where unauthorized access was occurring and repaired cuts on the reserve’s fencing along Archer and Loundsberry roads.
- Conducted invasive species control, targeting invasive pigweed, in areas north of Lake Mathews and directly south of Cajalco Road.
- Coordinated with Southern California Edison in advance of maintenance work to be conducted along Edison’s easement that crosses the Reserve to ensure that effects are minimized.

### **Southwestern Riverside County Multi-Species Reserve**

- Monitored brown-headed cowbird traps.
- Installed an additional 50 native plants in the Tualota Creek restoration site and collected riparian species to propagate for future installation.
- Opened the Alamos Schoolhouse environmental education facility to the public three days a week. Recent activities included showing an owl documentary and presenting a snake program.
- Mowed 20 acres of grassland habit management units and conducted weed abatement.
- Coordinated with and assisted California Conservation Corps with approximately two miles of reserve roadside fuel reduction.



**Cowbird Trap on the Southwestern Riverside County Multi-Species Reserve**

# Equal Employment Opportunity



## Equal Employment Opportunity

### The EEO Office's Vision

The EEO Office structure was established in April 2022 as a neutral, fact-finding office reporting directly to the General Manager. EEO's vision is to foster an environment where employees can represent any protected characteristic (race, age, gender identity, disability, ethic/national origin, religion, etc.) without discrimination, harassment or retaliation in any aspect of employment. The vision is to create a culture where differences are not just accepted but also celebrated; where equity and fairness is not just a right and theory but also a fact and a result. Three core principles were established to foster this vision.

### Awareness

The EEO Office seeks to create a heightened sense of awareness regarding EEO rights and to edify the Metropolitan family for professional and personal growth; creating a harassment-free work environment and enhancing cultural competency. The EEO Office implemented the following to enhance its awareness:

- 1) Created EEO posters highlighting the recently updated H-07 EEO and H-13 Sexual Harassment Prohibition policies.
- 2) Developed an EEO brochure explaining the purpose of the office, listing the protected characteristics, defining retaliation, guidance on how to submit a complaint, and EEO staff contact information.
- 3) EEO staff participated in two days of desert plant field visits at the end of August to introduce themselves to staff, hang EEO posters, and pass out EEO brochures.

### Integrity

The EEO Office communicates openly and honestly, listens, and respectfully values multiple perspectives. We do what we say and are accountable for everything we do. We do the right thing, always, even when it isn't easy. To support integrity, the EEO Office:

- 1) Created a new high-level investigator position (Chief EEO Investigator) to attract and hire well-trained and experienced investigators sensitive to the nuances that come with conducting EEO complaints.
- 2) Conducted Chief EEO Investigator interviews and selected two candidates to fill these positions.
- 3) Requested feedback from Metropolitan unions when it developed the EEO Complaint & Investigative Procedures.

### Accountability

The EEO Office holds itself to the highest standards. We live our values and truths and work to maintain reliable and trustworthy governance. We have a zero-tolerance policy, which strictly prohibits discrimination, harassment, and retaliation in any form. We will work with appropriate departments to implement corrective action in response to any violation of EEO policy. To uphold accountability, the EEO Office:

# Equal Employment Opportunity

(continued)

- 1) Created a roundtable process where the EEO Office, EEO's legal advisor, Employee Relations, and applicable management meet to determine appropriate discipline based on best practice factors.
- 2) Developed EEO Complaint & Investigative Procedures to share with Metropolitan employees as they participate in EEO investigations.
- 3) Created an Intake Assessment process to review complaints for EEO jurisdiction and determine whether the complaint warrants an EEO investigation.





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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