

# THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



## General Manager's Monthly Activity Report for April 2017

April 30, 2017

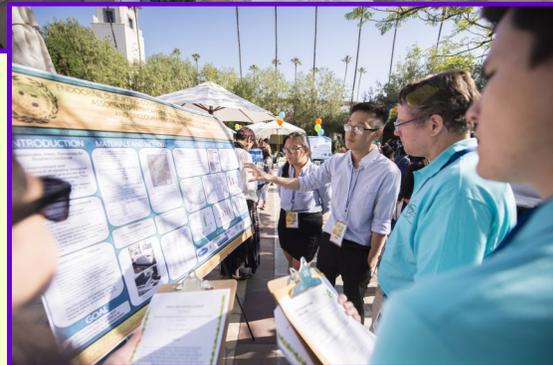
This report identifies the actions and activities taking place during the month that support the objectives of the General Manager's Fiscal Year 2016/17 Strategic Priorities and the Core Business of the GM's work groups.



General Manager Kightlinger joined HGTV and DIY Channel network host Matt Blashaw at the 10th Annual Spring Green Expo. Metropolitan employees joined with participants from more than 20 universities and high schools, and dozens of vendors to learn more about sustainability solutions for home, work and businesses. World Water Forum participants also attended the event and had the opportunity to showcase their innovative projects at a special luncheon event. Spring Green was also featured and promoted on local news outlets and social media, including HGTV platforms and Snapchat.



Guest speaker Matt Blashaw and General Manager Jeff Kightlinger.



### Content by Work Group

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## ADMINISTRATIVE SERVICES

### CORE

#### BUSINESS PROCESSES

Advance continuous business process improvements to improve effectiveness and efficiency while striving for innovation, flexibility, and integration with technology.

Simplify access to business information.

Enterprise Content Management—Staff from the Records Management and Imaging Services Team provided assistance to Engineering Services Group to address vital records stored in their office areas. Records Management and Imaging Services transferred 35 boxes to Metropolitan’s off-site storage facility. These vital records are in protected storage and indexed for retrievability.

Foster a workplace culture of innovation.

Point of Use Dispensing Machines Pilot Project—Fabrication of the new Point of Use Dispensing Machines is in process, the PUD will allow 24/7 access to frequently used items from the warehouse. The expected delivery and service of the new machines is June 2017. *(see photo below)*



Sample of a Point of Use Dispensing Machine

## ANNEXATIONS

### CORE

#### ANNEXATIONS

Seek fair and equitable contract agreements with Member Agencies, federal, and state governments to maintain a long-term sustainable wholesale water resource to Southern California.

Member agencies’ annexation requests

This month, Metropolitan’s Board reviewed and approved two annexation proposals from Eastern Municipal Water District (Eastern).

## BAY-DELTA SOLUTIONS

- Develop near- and long-term solutions that enhance the Delta ecosystem, improve water supply reliability, protect water quality, and mitigate environmental impacts.
- Participate in the State Water Resources Control Board (SWRCB) process considering petition for an additional point of diversion as part of the CA WaterFix project.
- Continue to work on efforts related to meeting the co-equal goals of contributing to a restored Delta ecosystem and ensuring a reliable water supply for California.

**NEAR TERM** – Develop near-term measures, compatible with long-term Delta solutions, to improve water supply reliability and water quality, and facilitate protection and enhancement of Delta ecosystems and associated species.

### State Water Resources Control Board

The California WaterFix Petition proceedings before the State Water Resources Control Board are ongoing. Part 1 of the hearings addresses the effects of the proposed project on legal users of water. Staff is preparing for the rebuttal phase of Part 1 in collaboration with the State Water Contractors and the California Department of Water Resources. DWR submitted rebuttal testimony on March 23, and the hearing for the Part 1 rebuttal will start on April 25. Part 2 of the hearings, which are scheduled to begin once the Environmental Impact Report/Environmental Impact Statement and Endangered Species Act permits are approved, will consider the effects of the proposed project on fish and wildlife.

### Delta Operations

During March 2017, Delta smelt were salvaged at the export facilities on a number of days, causing total Delta smelt expanded salvage to reach 57 as of March 20, 2017. On March 16, 2017, the Bureau of Reclamation reinitiated consultation on the Operating Criteria and Plan Biological Opinion. Through Collaborative Adaptive Management Team communications, staff provided input to the U.S. Fish and Wildlife Service (USFWS) regarding Delta smelt salvage patterns. On April 10, USFWS issued a revised incidental take unit of 151 adult Delta smelt for 2017 based on the fact that other years with high flows also have experienced high levels of salvage. No Delta smelt have been salvaged since March 16. Salvage of larval Delta smelt is also predicted to be small because continued flows will carry most Delta smelt hatched Delta away from the water project facilities.

**SCIENCE/REGULATORY** – Pursue the best scientific research to protect and restore fish, wildlife, and the Delta’s ecosystem while ensuring water supply reliability.

### Science/Regulatory

Staff continues to participate in the Collaborative Science and Adaptive Management Program, providing input to current Delta smelt studies and to the development of work plans addressing priority salmon and Delta smelt science questions. In April, staff participated in an effort to develop presentation materials addressing the scientific basis of the Fall X2 action in the Delta Smelt Biological Opinion.

Staff is conducting field work for the Salmon Predation Study, which was funded by a California Department of Fish and Wildlife grant. This month, staff worked with other project investigators to set up enclosures and equipment in the field for the Study and to begin releases of predators and tagged juvenile salmon into the enclosures. Field work for year one of the Study is scheduled to be completed by May 31, 2017. Year-two field work will be conducted in the spring of 2018.

## BAY DELTA INITIATIVES

### CORE

#### BAY-DELTA SOLUTIONS continued....

**EMERGENCY RESPONSE** – Ensure that Delta emergency response measures are implemented, including actions to develop a freshwater pathway after a major emergency event in the Delta.

#### Emergency Response

##### Delta Flood Emergency Management Plan

DWR has substantially completed testing of the Emergency Response Tool model demonstrating that the emergency freshwater pathway will be functional following major levee and island failures in the range of six months or less for up to 20 hydrologic conditions, including critical water years. The model has tested the progressive closure of channels in the north Delta region under critical water years to direct water through the Delta Cross Channel toward the central Delta where the emergency freshwater pathway would convey the freshwater flows. The model has tested the use of San Joaquin River flows to flush saline waters from the pathway prior to export resumption. DWR is completing sensitivity testing requested by Metropolitan to better represent water quality conditions at export resumption under the most severe seismic emergency and critical water years.

## CHIEF FINANCIAL OFFICER

### CFO

### PRIORITY

#### **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 in the event of a disaster.

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

- Participated in a follow-up audit to the 2015 Information Technology Business System Data Backup and Recovery Audit to ensure that Business Continuity recommendations have been completed.
- Established a SharePoint site for business continuity to serve as a collaborative workspace and repository for documentation, resources, and sharing of information.
- Attended training for the MIR3 emergency notification system. A portal has been established for business continuity in MIR3 that will contain recovery team groups so that specific and targeted messages can be distributed by each team.
- Conducted a tabletop exercise to review and validate business continuity plans for the Chief Financial Officer group. Participating units include Budget and Financial Planning, Controller, Risk Management, and Treasury and Debt Management.
- Partnered with Security and Human Resources to develop protocols and procedures for sending MIR3 emergency notifications to all employees.

### CORE

#### **RISK MANAGEMENT**

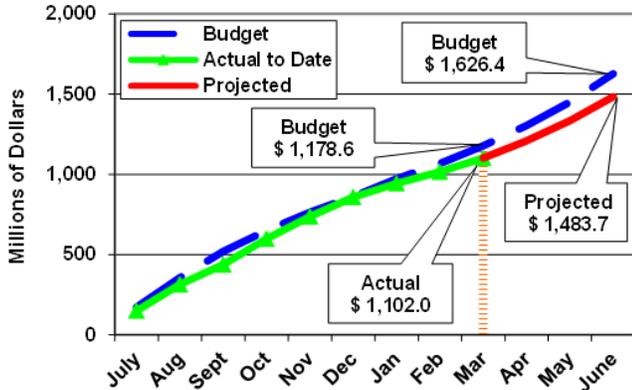
The Risk Management Unit completed 57 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits and spills.

Risk Management completed 72 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events and film permits.

# CHIEF FINANCIAL OFFICER

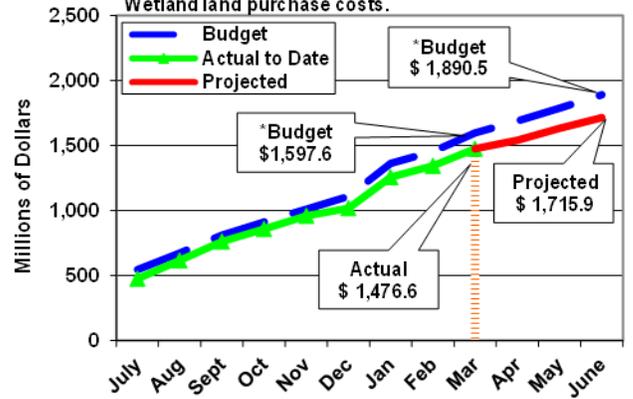
## FINANCIAL SUMMARY AS OF March 31, 2017

Revenues are expected to be \$142.7M under budget at year end, primarily due to lower water sales.



Excludes bond construction and other trust funds activity

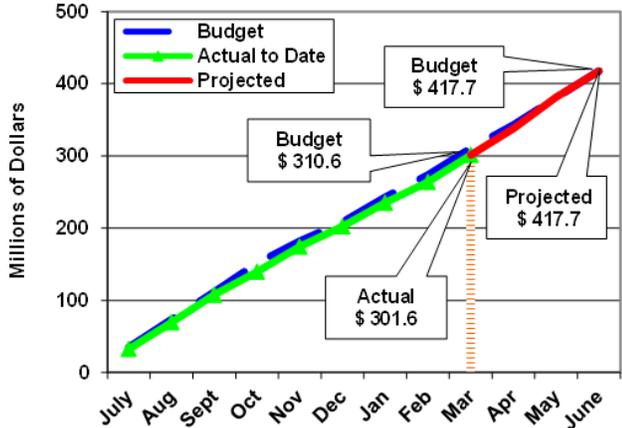
Expenses are expected to be \$174.6M under budget at year end, primarily due to lower SWP, supply program costs, CRA costs, Conservation program costs, and Delta Wetland land purchase costs.



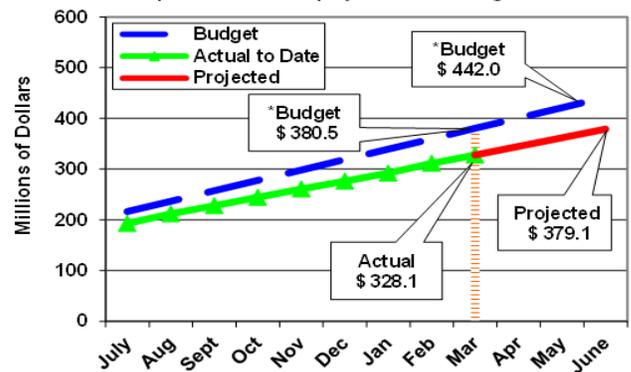
Excludes bond construction and other trust funds activity

\* Includes \$196M Board-approved purchase of Delta Wetlands, of which \$174M has been spent.

O&M expenses are expected to be on budget at year end.

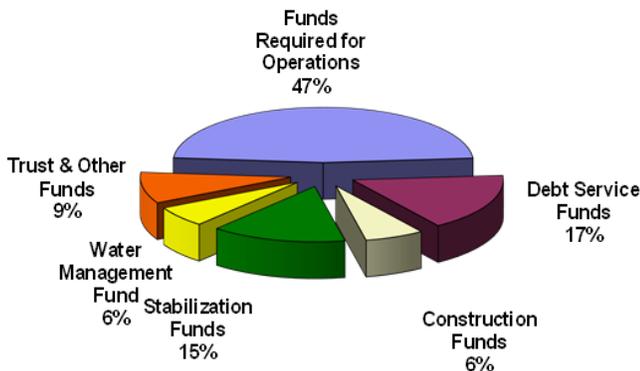


Capital Program expenses are expected to be \$63M under budget at year end, including \$22M lower cost of Delta Wetlands land purchase and \$41M lower CIP costs due to work prioritization and project rescheduling.



\* Includes \$196M Board-approved purchase of Delta Wetlands, of which \$174M has been spent.

### Cash and Investments at Fair Value \$ 1,359.5 million



### Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.26%
Revenue Debt Service Coverage	> 2.00 x	1.48%
Revenue Bond Debt / Equity Ratio	< 100.0%	62.0%

### Credit Ratings

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

## CORE

### INFRASTRUCTURE RELIABILITY

Manage Board-authorized projects in the Capital Investment Plan and collaborate with the Water System Operations Group to identify and address system vulnerabilities to ensure reliability of the region's water treatment and delivery infrastructure. In addition, coordinate closely with WSO to integrate project planning and facility assessment efforts with near-term actions and planned shutdowns.

Manage and complete Board-authorized projects within the CIP to ensure the reliable delivery of water to Metropolitan's member agencies.

#### Distribution System Reliability Program

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

- Etiwanda Pipeline Lining Repairs—This project replaces the Etiwanda Pipeline's damaged interior mortar lining with a polyurethane coating. The pipeline will be relined in three stages. Construction of the Stage 2 repairs was completed in March 2017. Design of the Stage 3 repairs is 98 percent complete and is scheduled to be complete by June 2017.
- DVL East Dam Electrical Upgrades—This project provides permanent electrical service to the seepage monitoring structures at the DVL East Dam and to the East Marina area. This project will connect to a new 12 kV electrical service owned by Southern California Edison. Construction is 75 percent complete and is scheduled to be complete by August 2017. *(see photos below)*
- Sepulveda Canyon Control Facility Bypass—This project enhances the reliability of the Sepulveda Feeder by adding a bypass to the Sepulveda Canyon Control Facility, which will maintain deliveries from the Jensen plant into the Central Pool when the control facility is out of service. Preliminary design is 50 percent complete and is scheduled to be complete by December 2017.
- Allen-McColloch Pipeline (AMP) Cathodic Protection—This project installs cathodic protection at 11 locations along the AMP. Construction is 60 percent complete and is scheduled to be complete by June 2017.
- Orange County Feeder Cathodic Protection—This project installs cathodic protection at three locations along the Orange County Feeder. Final design is 40 percent complete and is scheduled to be complete by September 2017.
- Orange County Feeder Lining Repairs—This project replaces the deteriorated internal lining along an 11-mile portion of the Orange County Feeder within the cities of Santa Ana, Costa Mesa, and Newport Beach. Construction of Reach 1 is 45 percent complete and is scheduled to be complete by July 2017. Final design for Reaches 2, 3 and 4 is 45 percent complete and is scheduled to be complete by April 2018.



DVL East Dam Electrical Upgrades – Encasement of ductbank at East Marina



DVL East Dam Electrical Upgrades – Edison transformer pad

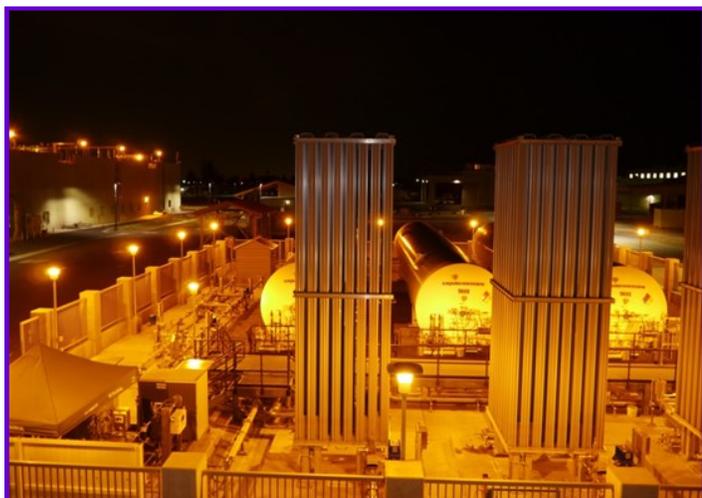
**INFRASTRUCTURE RELIABILITY** continued...

Water Quality/Oxidation Retrofit Program (ORP)

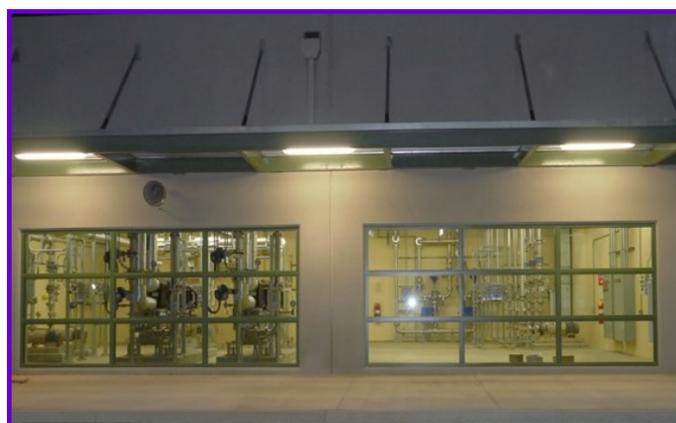
This program adds ozonation facilities which reduce disinfection by-products and improve water quality at Metropolitan’s five water treatment plants. Recent activities include the following:

Weymouth ORP

- Main Ozonation Facilities—Construction of the ozonation system is 99 percent complete and is scheduled to be complete by May 2017. Remaining activities include control system integration, start-up and testing, permitting with the State Division of Drinking Water, and preparation of Operation and Maintenance manuals.
- ORP Bromate Control Upgrades—These chemical system upgrades are needed for integration of the new ozone system into the Weymouth plant’s treatment process. Construction is 54 percent complete and is scheduled to be complete by May 2018.



Weymouth ORP – Liquid oxygen tank farm and separators



Chiller room at ozone generation building

Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program

This program enhances the reliability of Metropolitan’s water distribution system and reduces the risk of costly emergency repairs of PCCP lines. 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. Final design of the first pipeline rehabilitation package is 90 complete and scheduled to be complete by June 2017.
- Pipeline Inspections—A key component of Metropolitan’s strategy for management of its PCCP feeders is to perform regular monitoring of the lines. Electromagnetic inspections of portions of the Calabasas Feeder and West Valley Feeder No. 2 were completed in March 2017.

**INFRASTRUCTURE RELIABILITY** continued...

Treatment Plant Reliability Program

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

**Mills Plant**

- Chemical Unloading Facility Containment System—Construction of the containment system is 98 percent complete and is scheduled to be complete by June 2017.

**Diemer Plant**

- East Basin Rehabilitation—This project rehabilitates aging mechanical equipment and the electrical and structural components within the east flocculation/sedimentation basins. Construction is 78 percent complete and is scheduled to be complete by July 2017. *(see photo below)*
- Administration Building Seismic Upgrades—This project provides seismic and fire safety upgrades to the Administration Building at the Diemer plant. Construction is seven percent complete and is scheduled to be complete by April 2018.

**Jensen Plant**

- Electrical Upgrades, Stage 1—This project replaces electrical equipment, provides backup in the event of individual component failures, and upgrades the Jensen electrical system to be consistent with current codes and industry practices. The work will be completed in three stages. Construction of Stage 1 is 73 percent complete and is scheduled to be complete by February 2019.

**Weymouth Plant**

- Filter Rehabilitation—This project replaces the internal components of the plant’s 48 filters, including the underdrains, media, launder troughs, and surface wash systems. Construction is 88 percent complete and is scheduled to be complete by December 2017. *(see photo below)*

Weymouth Filter Rehabilitation—Removal of existing filter troughs



Diemer East Basin—Demolition of existing equipment in Basin No. 3



## INFRASTRUCTURE RELIABILITY continued...

Cost Efficiency and Productivity Program

This program provides economic savings through enhanced business and operating processes and through reduced energy costs. Recent activities include the following:

- Jensen Solar Power Plant—This project constructs a 1-megawatt solar generating facility on the grounds of the Jensen plant in Granada Hills. Construction is 35 percent complete and is scheduled to be complete by August 2017. *(see photos below)*



Jensen Solar Power Plant – Piers for solar panels

Right-of-Way and Infrastructure Protection Program

This program performs needed site improvements throughout the distribution system, including erosion protection for pipelines and access roads. It also addresses right-of-way issues such as access easements and third-party encroachments, and obtains long-term programmatic environmental permits to enable system-wide improvements.

- Orange County Operating Region—Final design of improvements within the Orange County region is 99 percent complete and is scheduled to be complete by May 2017.
- Western San Bernardino County Operating Region—Final design of improvements within the Western San Bernardino County region is 80 percent complete and is scheduled to be complete by December 2017. The draft programmatic environmental impact report for this region is planned to be released for public review by September 2017.
- Los Angeles County Operating Region—Preliminary design of improvements is 99 percent complete and is scheduled to be complete by July 2017.
- Riverside/San Diego County Operating Region—Preliminary design of improvements is 99 percent complete and is scheduled to be complete by July 2017.

## INFRASTRUCTURE RELIABILITY continued...

Colorado River Aqueduct (CRA) Reliability Program

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

- Sand Trap Rehabilitation—This project replaces deteriorated sand trap equipment located upstream of Iron Mountain, Eagle Mountain, and Hinds Pumping Plants. Construction is 78 percent complete and is scheduled to be complete by August 2017.
- Sump System Rehabilitation—This project rehabilitates the main and auxiliary sump systems at Metropolitan's five CRA pumping plants. The sump systems include parallel pumps and piping that circulate cooling water and collect drainage water from several sources. Rehabilitation will be completed in two stages. The initial stage includes installation of sump isolation valves to isolate the circulating water system from the pumping plant's inlet lines, therefore eliminating the need to shut down the aqueduct for future sump repairs. The installation of the valves is 90 percent complete and is scheduled to be complete by June 2017. The second stage includes full scale rehabilitation of the sump system. Design of the Stage 2 improvements is 75 percent complete and is scheduled to be complete by December 2017.
- Expansion Joint Repairs—This project repairs 16 expansion joints located on the pump delivery lines at the five CRA pumping plants. Repairs will be completed in two stages. The initial stage addressed three joints and was completed in February 2016. Construction of the Stage 2 repairs is ten percent complete and is scheduled to be completed by December 2017.
- Copper Basin & Gene Wash Reservoirs Discharge Valve Rehabilitation—This project rehabilitates the discharge structures at Copper Basin and Gene Wash Reservoirs. The project scope includes replacement of the fixed cone valves at the base of the dams; upgrade of the electrical systems; and access improvements to safely enable construction personnel, materials, and equipment to reach the work site. Fabrication of the valves is five percent complete, and valve delivery is scheduled for February 2018. Preliminary design to improve access is underway and will be complete by summer 2017. Final design of the valve installation is 37 percent complete and is scheduled to be complete by December 2017.
- CRA Discharge Line Isolation Couplings—This project will install a total of 45 couplings in the 6-foot-diameter discharge lines downstream of each main pump unit at all five CRA pumping plants. The discharge line isolation couplings will allow individual pump units to be isolated in order to perform rehabilitation or regular maintenance on the pump units. This project will be completed in two stages. Under Stage 1, staff will procure and install one coupling as a demonstration project. A procurement contract for the coupling was awarded by the Board in April 2017, and delivery is scheduled by December 2017. Stage 2 will address the remaining 44 couplings. Design of Stage 2 is 67 percent complete and is scheduled to be complete by March 2018.
- CRA Mile 12 Monitoring Station Upgrades—This project replaces existing deteriorated flow meters with new ultrasonic models, relocates data and communication equipment from an underground manhole to a new above-ground building, and adds solar panels for the power source. Construction is 50 percent complete and is scheduled to be complete by December 2018. A procurement contract for the aboveground building was awarded by the Board in April 2017, and delivery of the building is scheduled for February 2018.

**STRATEGIC  
PRIORITY**

**EDUCATE THE PUBLIC AND STAKEHOLDERS ON CRITICAL WATER SUPPLY CONDITIONS AND CRITICAL WATER MANAGEMENT DECISIONS**

External Affairs will develop and maintain relationships with the public, legislative leaders, government officials, non-governmental organizations, and other stakeholders, and implement effective and diverse communication and outreach strategies on the value of water, current water supply conditions and the importance of Metropolitan actions to promote stewardship, planning and investments to benefit the region.

Recognizing there is a new normal that is directly impacting California water conditions, inform key stakeholders, media, businesses and the public on the need for sustained conservation actions, support for new water supply projects and continued investment in imported water systems to maintain water supply reliability and protect the environment.

- General Manager Kightlinger participated on KPCC radio's Take Two roundtable discussion about future water management in California. State Water Resources Control Board Chair Felicia Marcus and Stanford Institute for the Environment Director Buzz Thompson were the other panel members on the show. (April 3)
- Directors McKenney and Lefevre attended and General Manager Kightlinger was the keynote speaker at the California Water Policy Conference in San Diego. Executive Strategist Philp interviewed Bakersfield Californian reporter Lois Henry for the lunch program and Assistant General Manager Patterson, Colorado River Program Manager Hasencamp and Special Projects Manager Westford also had major speaking roles at the event, which was attended by over 250 water leaders. (April 6-7)
- Chief Operating Officer Man was interviewed by Sacramento Bee reporter about the shutdown at the State Water Project's Clifton Court Forebay for emergency repairs and potential impact to the State Water Project.
- Chief Operating Officer Man participated in the Building Industry Association's Greater Los Angeles/Ventura Counties Chapter's Energy and Water Summit and discussed current water conditions, California WaterFix and Metropolitan's current and future initiatives. More than 200 local elected officials, home builders, land developers and union trades' representatives attended the summit. (April 27)
- General Manager Kightlinger and Chief External Affairs Officer Zinke attended, and Metropolitan sponsored, the Los Angeles Business Council's Sustainability Summit. Speakers included California Attorney General Xavier Becerra, California State Senate President pro Tem Kevin de Leon, and Los Angeles Mayor Eric Garcetti. (April 28)
- General Manager Kightlinger met with Sacramento Bee reporter for a story about funding issues related to repairs at the damaged Lake Oroville main spillway.

Increase awareness and advance public understanding of the current and anticipated risks to Southern California's water supply reliability and the need to prepare for potentially drier and more volatile supply conditions and impacts due to climate change.

General Manager Kightlinger was interviewed by Sacramento Bee reporters to discuss Metropolitan's interest in supporting the planning activities of the proposed Sites Reservoir in Northern California including the project's potential benefits to address and respond to climate change impacts to water supply reliability and the environment.

**LEGISLATIVE, COMMUNICATIONS, COMMUNITY RELATIONS, PUBLIC AND BUSINESS OUTREACH**

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

**LEGISLATIVE SERVICES** - Develop and implement local, state and federal legislative and regulatory strategies consistent with Board-adopted policies. Promote interaction between Metropolitan leadership and various stakeholders, including elected officials, to facilitate support for, and garner greater understanding of, water policy issues.

**Federal**

Metropolitan hosted 10 federal legislative staff representing members of California's Congressional delegation on an inspection trip of the California State Water Project in Northern California. The trip included tours of the Oroville facilities, the location of the proposed Sites Reservoir, Yolo Bypass, and the Delta. (April 18-21)

Staff provided support and information to the Sites Reservoir Joint Powers Administration's meetings with key members of the California Congressional Delegation. (March 28-30)

Staff participated in the spring conference of the Western Urban Water Coalition in Washington D.C. and met with key administration officials in the Department of Interior and the U.S. Forest Service to discuss the Clean Water Rule, the Water Transfer Rule, the need to exempt water conservation rebates from federal taxes, and legislation to support adequate funding and financing for water infrastructure projects. (April 5-6)

**State**

On April 7, Governor Brown declared the drought state of emergency over in most counties of California and released his plan for establishing a framework for long-term efficient water use. Urban water suppliers would be required to establish new targets by 2021 with a full compliance deadline in 2025.

Other key elements of the Governor's drought plan include: (1) a ban on wasteful practices; (2) technical assistance, financial incentives and standards to detect and repair leaks; (3) requirements for urban water suppliers to prepare water shortage contingency plans, including a drought risk assessment every five years; (4) agricultural water use efficiency; (5) monthly reports by urban water suppliers on water usage, conservation achieved and enforcement efforts; and (6) improved drought planning. (April 25)

**Dam Safety Program Enhancements**

The Trump Administration announced \$500 million in federal emergency response funds for California to help cover damage from winter storms, including \$274 million for repairs to stabilize Oroville's emergency and main spillways and repair Hyatt power plant. Governor Brown released his plan to accelerate state spending for reduction of flood risks and asked for expedited federal environmental review on several projects, including repairs to Oroville's spillway.

The Governor's plan seeks to combine \$50 million from the General Fund with \$387 million from Proposition 1 to fund immediate and longer-term actions to bolster dam safety, improve flood protection

## LEGISLATIVE SERVICES continued...

and fix the state's aging transportation and water infrastructure. Any expenditure in the Governor's plan will require approval by the Legislature. The proposal would also expand inspections, inundation mapping and emergency response plans.

Gubernatorial Appointments

The State Senate approved the Governor's appointees to the Fish and Game Commission, including Pete Silva. (April 6)

The Governor also reappointed Tam Doduc and appointed Joaquin Esquivel to fill two vacancies on the State Water Resources Control Board. (March 15)

**Local**

- Metropolitan staff participated in a BizFed Roundtable discussion with Los Angeles City Council President Herb Wesson. (April 10)
- Staff attended the Southwest California Legislative Council meeting in Murrieta with representatives from chambers, local government and state legislative staff. (April 17)
- Metropolitan sponsored and attended the Greater Riverside Chambers of Commerce Annual Legislative Summit in Riverside. Secretary of State Alex Padilla was the keynote speaker at the event, which included 200 attendees representing local and state government, education, healthcare, industry and businesses. (April 19)
- Director Blois attended and Metropolitan sponsored the 25th Annual Water Symposium held by the Association of Water Agencies of Ventura County in Oxnard. More than 300 business, community, and water leaders met to learn more about current and future challenges for the region, including water supply issues. (April 20)
- Staff participated in the Santa Monica Chamber Sustainable Quality Awards that recognizes local businesses for environmentally sustainable practices. (April 20)
- Director Kurtz and staff met with Assembly Member Acosta in his district office to discuss challenges facing the water industry. (April 21)
- Metropolitan sponsored and staff attended the Pomona Chamber of Commerce Legislative luncheon. Local elected officials and community leaders heard from Rep. Norma Torres (D-Pomona), California Insurance Commissioner Dave Jones, State Senator Connie Leyva (D-Chino) and Assembly Member Freddie Rodriguez (D-Pomona) on legislative priorities to support economic development, infrastructure investments and other key issues in the region. (April 21)
- Metropolitan staff provided a water supply conditions and California WaterFix presentation to the city of Chino Hills City Council. (April 25)
- Staff participated in the League of California Cities Inland Empire Division Legislative Task Force meeting in Ontario to review state legislative priorities with local elected officials. (April 26)
- Metropolitan joined elected and community leaders from Riverside and San Bernardino counties at a speaker series luncheon hosted by the Inland Empire Economic Partnership. (April 28)
- Metropolitan staff joined a delegation of business leaders from the Valley Industry and Commerce Association in meetings with state legislators in Sacramento concerning issues impacting the San Fernando Valley, including water. (April 25)
- Staff met with the California Contracting Cities Association and briefed 50 business leaders on the California WaterFix/EcoRestore, drought, and regional challenges facing the agency. (April 26)
- Metropolitan sponsored and participated at the Pat Brown Institute annual event, which this year honored Assembly Speaker Anthony Rendon. (April 27)

## LEGISLATIVE SERVICES continued...

**Inspection Trips**

More than 200 stakeholders participated in six inspection trips to learn more about the State Water Project and Delta issues, the Colorado River system and Metropolitan's regional infrastructure facilities. An inspection trip for Metropolitan employees was also conducted.

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

**Media Interviews**

- In response to high media interest in this year's record precipitation, water supplies and the impacts on the state and region water infrastructure and operations, Metropolitan arranged separate interviews with Group Manager Upadhyay, Water System Operations Manager Yamasaki and other staff with KABC-TV News, LA Times, KPPC radio and Sacramento Bee reporters.
- Provided information to *Journal of Water* reporter about Metropolitan's farm lease agreements in the Palo Verde Valley.
- Chief Operating Officer Man met with *Environmental and Energy* reporter for a story about the types of possible projects to be funded by Proposition 1 bond funding.
- General Manager Kightlinger and Chief Financial Officer Breaux spoke with a *Voice of San Diego* reporter to discuss Metropolitan's financial condition and costs of developing local water supplies.
- Provided information and participated in interviews to *Los Angeles Times*, KPCC radio, Riverside Press Enterprise and other media outlets about the Diamond Valley Lake Wildflower trail.
- External Affairs Group Manager Sims interviewed with KFI-AM radio Los Angeles to discuss Metropolitan's new spring water conservation public outreach and advertising campaign.

**Online**

- Online search on Google Search and the Google Content Network directs users to bewaterwise.com when keywords such as "water," "California weather," and "conservation" are searched for by Southern California users.
- Metropolitan has secured its own YouTube Channel ([youtube.com/mwdh2o](https://youtube.com/mwdh2o)) as a result of the number of subscribers.
- Metropolitan completed and posted on YouTube360 a virtual reality tour of the Colorado River Aqueduct.

**Press Releases**

- Press statement from General Manager Kightlinger supporting Governor Brown's decision to rescind the state's drought emergency.
- Launch of H2Love spring water conservation public outreach and advertising campaign.
- Action by Metropolitan's Board to invest in planning phase for the proposed Sites Reservoir project.

Created several new fact sheets covering topics such as Metropolitan's financial condition and Metropolitan's infrastructure investments for long-term regional water reliability benefits. Produced Spanish translation of fact sheets on Metropolitan investments and California WaterFix.

MEDIA AND COMMUNICATIONS continued...

**Communication Activities**

- Special Projects Manager Westford provided public comments at the Valley Center Water District regarding Metropolitan’s service to the North County region of San Diego County. (April 17)
- Issued monthly Your Water e-newsletter to more than 12, 000 subscribers and two issues of the California WaterFix e-newsletters.

**Website**

Over 25,500 people visited the English, Spanish and Chinese versions of bewaterwise.com for tips and ideas on how to conserve water.

**Water Conservation Campaign**

Metropolitan’s H2Love spring advertising campaign expanded with the placement of multi-language outdoor billboards and transit signs, and train wraps on the Gold Line, Expo Line and Blue Line routes. LA Galaxy continued with additional placement of signage, Public Service Announcement video with Brian Rowe , faucet media, digital scoreboard PSA and LED field boards. [add photos]

A series of short articles and photographs on conservation topics is being prepared and provided to more than 50 community newspapers on a bi-weekly basis to supplement the paid media outreach campaign.



**LEGISLATIVE, COMMUNICATIONS, COMMUNITY RELATIONS, PUBLIC AND BUSINESS OUTREACH**  
continued...

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

Public Outreach for Metropolitan Projects

- Staff provided information about a pipeline repair project to 80 residents in the Harbor Gateway area of Los Angeles.
- Metropolitan met with staff at the city of Riverside and the Jurupa Unified School District to discuss potential community impacts and outreach for the upcoming Santa Ana River Bridge project.

Member Services

Member Agency public information officers were invited to participate in regional focus groups on water issues and conservation messaging. The sessions were in San Diego, Orange County, Riverside and Los Angeles and were conducted in English, Spanish and Mandarin. (April 17-20)

Metropolitan met with the Member Agency general managers to discuss water supply and operations issues, IRP policies, and other issues. (April 21)

Community Partnering Program

Metropolitan sponsored and provided conservation and water issue materials at the following events:

- Theodore Payne Foundation Native Plant Garden Tour (April 1-2)
- California Water Policy Conference (April 6-7)
- Cucamonga Valley Water District Earth Day (April 8)
- Los Angeles County Sanitation District Earth Day (April 8)
- Del Amo Action Committee Environmental Health Symposium (April 10-11)
- Climate Action Reserve Navigating the American Carbon World (April 19-21)
- San Diego Regional Chamber of Commerce Spring Event (April 20)
- Western Municipal Water District Earth Night in the Garden (April 22)
- Bolsa Chica Conservancy Earth Day Festival (April 22)
- City of Hawthorne Earth Day Festival & Service Provider Fair (April 22)

**LEGISLATIVE, COMMUNICATIONS, COMMUNITY RELATIONS, PUBLIC AND BUSINESS OUTREACH continued...**

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

General Education

Staff supported events, activities and classroom presentations including: LA County Science Fair, Long Beach Garden Tour and Expo, Gidley School, St. Rose of Lima Elementary School, E. Hale Kids in Canyons – Campeones Tours, Foshay Learning Center, Reseda High School, Buchanan Street Elementary School, White Oak Elementary School, Narbonne High School, San Gabriel Mission High School, Los Coyotes Middle School, and St. Rose of Lima Science Explorations. The Education Unit directly interacted with 4,600 students and teachers.

Staff participated in a Career Tech Education Fair in Pomona for high school students on careers opportunities in the water industry. (April 27)

Student Art Program

The Student Art exhibit was showcased and hosted at Anaheim Public Utilities and Rowland Water District. This event was captured in news articles and on social media.

Diamond Valley Lake Education Program

The Visitor Center hosted nearly 600 visitors and provided guided trips to the Viewpoint, including the local Red Hat Society and the granddaughter of Hiram W. Wadsworth for whom the Wadsworth pumping plant is named. Education staff provided field trips to 390 students, some of whom also participated in the Western Science Center program. Staff presented Diamond Valley Lake education programs to Harmony Elementary School.

Solar Cup

Staff conducted several site visits to inspect boats and provide technical assistance to high schools who will be participating in the 2017 Solar Cup event.



**LEGISLATIVE, COMMUNICATIONS, COMMUNITY RELATIONS, PUBLIC AND BUSINESS OUTREACH**  
continued...

Facilitate opportunities for small businesses to work with Metropolitan. Help position Metropolitan as a leader in water resource/systems innovation.

Supported small- and disabled-veteran businesses throughout the region by participating in the following award programs, conferences and events:

- Metropolitan provided information on its small business certification program at an event hosted by LA Metro and attended by more than 300 small business owners. (April 5)
- Metropolitan sponsored and exhibited at IGNITE22 – *Celebrating Innovations That Will Shape the 22nd Century*. More than 250 entrepreneurs, investors, government agencies, community leaders, universities, STEM programs, and students participated. (April 6) *(see photo below)*
- Representatives from Metropolitan’s Business Outreach and IT programs participated in the Council for Supplier Category Sourcing Exchange in San Diego to discuss bid opportunities with small businesses. (April 6)
- Metropolitan participated in the SBA/SBDC Small Business Conference in Orange County and met with over 60 small businesses to discuss contracting opportunities. (April 12)
- At the WBEC-West event in Orange County, staff met with 60 small businesses and discussed certification and bid opportunities. (April 19)
- Business Outreach staff attended the *Who’s Who in Building and Construction Showcase* powered by Blue Book Construction and Network. The event provided the largest and most active construction networking in the U.S. that includes large state agencies and well known construction primes. (April 20)
- Metropolitan attended the National Association of Business Owners Networking Breakfast in which legislative issues along and procurement contract opportunities were discussed. (April 28)



Program Manager Wigsbert Mendoza participating on IGNITE22 Panel

**STRATEGIC  
PRIORITY**

**EMPLOYEE DEVELOPMENT**

Recruitment activity will be expanded to fully replace all retirements and add some positions to bring the work force to approximately 1,800 positions over the next two years. Increased cross-training and employee development efforts will be needed to meet the challenge of increased retirements brought about by an aging workforce.

Partner with district and group leadership to support learning, development and workforce planning initiatives.

The first cohort of 28 employees, not in Water System Operations, began their learning journey in the MWD Management Academy to prepare for future open managerial opportunities. This is a nine-month program that covers the role of the manager, with classes conducted once a month at various Metropolitan facilities to provide exposure to different parts of the organization. *(see photo below)*

2-hour modules of software training were conducted on the following topics:

- MS Project – Level 1 Part 2
- PowerPoint – Compelling Presentations
- Microsoft Word – Tables and Labels, Professional Reports, Advanced Features
- Excel – Lookups, Pivot Tables, Charts and Graphs (2 sessions), Performing Calculations, Intermediate
- SharePoint – Introductory class

Other activities

- Coordinated two sessions of a customized Adobe Acrobat Pro class for Engineering Services Group with 22 participants.
- Delivered ‘pilot’ classes on Effective Communication Skills and Business Writing at the Weymouth plant through Starlight Education Consultants. Classes on Customer Service Skills and Managing Emotions in the Workplace were delivered at Headquarters.
- Project Management Essentials for the Unofficial Project Manager and Accelerating Teamwork classes were delivered at Weymouth plant.
- The second of three Colorado River Aqueduct Employee Inspection Trips for the year had 30 participants.



Management Academy Kick-off Meeting

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

- During the past month Staffing has filled 7 positions and received 10 new requisitions. Staffing is currently recruiting for 141 positions.
- Physical Ability tests were held on April 17 – 20 for the Apprentice recruitment. The next step in this recruitment are the interviews, which will be conducted in May.
- Staff continued to evaluate the processes and the use of technology and social media to enhance abilities to recruit a diverse workforce.

## HR PRIORITY

### ENSURE EFFECTIVE PEOPLE MANAGEMENT

Provide consultation, guidance, standards, policies, procedures and learning opportunities to ensure that employee experience is enhanced as they are appropriately managed, evaluated, engaged, motivated, developed, recognized and valued.

Ensure Metropolitan managers have the foundational knowledge and on-going support to effectively manage employees.

Metropolitan Management University – Graduate program for unit managers kicked-off with a cohort of 15 managers. The six-module program meets every other month and will culminate in February 2018. The first module was on the *Role of the Senior Leader as a Teacher*. The curriculum includes a subscription to [www.degreed.com](http://www.degreed.com) for online Career Pathways for continuous self-directed and assigned learning options.

The fourth cohort of managers of Metropolitan Management University attended Module 3, which is focused on managing and leading others.

Five managers attended an Institute for Management Studies full-day seminar on *How to become a more Strategic Thinker*.

## HR PRIORITY

### PREPARE FOR A FUTURE WORKFORCE AND CHANGING ROLES

Partner with groups to develop programs for skill development, knowledge capture, change management, and employee engagement to ensure Metropolitan's capability as an agile organization preparing for future changes and challenges.

Implement strategies to prepare management and employees for change, unknown challenges, and future retirements.

- Staff continues to support deployment of the fifth cohort of the Mentoring Program in the Engineering Services Group and facilitated a Career Guidance workshop for the mentees.
- Staff is also providing continued facilitation for a Talk Circle that is looking into ways to improve effectiveness in the Real Property Group.
- Organizational Development and Training Manager attended the Chief Learning Officer Symposium to keep up with latest in training methodologies, new technologies and learning practices.

## HR PRIORITY

### PARTNER WITH CUSTOMERS ON HR SOLUTIONS

Collaborate and partner with customers at all levels to support strategic decisions on workforce planning, hiring strategies, advancement and learning opportunities, disciplinary issues and other challenges as they arise.

Establish partnerships focused on strategic solutions to various human resource management challenges.

- Participated in Desert Housing Workgroup that focused on developing strategies and solutions for the housing provided to the desert employees.
- Staff continues to work with workforce planning and succession management actions in the Water Resource Management Group.
- Staff is also providing coaching and coordinating with external coaches to address personal development and other management issues for six managers.

## HUMAN RESOURCES

### CORE

#### Provide Excellent HR Services

Human Resources provides a wide range of services and support from pre-hire to post-retirement care. To ensure our services add value and meet the needs of all employees, we will review and revise HR policies, procedures and practices as appropriate to continually improve service and better utilize technologies.

Hosted the Spring Service Awards Luncheon on April 13 honoring long-term employees at Metropolitan; this year 43 honorees with 20 to 40 years of service were recognized and 11 Water System Operations Apprentice honorees were recognized. *(see photos below)*



General Manager Kightlinger with Stuart Krasner and his wife. 40 years of service.



### CORE

#### COMPLY WITH EMPLOYMENT LAWS AND REGULATIONS

Ensure all policies, programs and practices comply with ever-change laws and regulations.

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

HR Benefits successfully filed the mandatory IRS Affordable Care Act 1095-C report for calendar year 2016, following the issuance of all 1094-C employee notices.

#### Workers' Compensation/Medical Screening:

- Conducted initial investigations on 9 injury incidents
- Submitted 5 new claims to Metropolitan's workers' compensation claim administrator
- Settlements were negotiated in 2 claims, and 17 claim files were closed
- Conducted MedVan evaluations at Weymouth, Hinds, Eagle Mountain, Iron Mountain and Gene Camp facilities
- Arranged 16 medical evaluations (DMV, medical surveillance, hearing conservation, etc.)
- Coordinated random drug/alcohol tests at 2 facilities
- Addressed 6 accommodation issues.

## ◆ ..... INFORMATION TECHNOLOGY ..... ◆

### CORE

#### **INFORMATION TECHNOLOGY**

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

Upgrade and refurbish Information Technology applications and infrastructure to ensure system reliability and performance levels that meet customer needs.

Hiram Wadsworth Pumping Plant Control and Electrical Protection—The design phase for the replacement and upgrades of the control and electrical protection systems at the Hiram Wadsworth Pumping Plant project is now 95 percent complete.

Simplify access to business information.

Web Services—Staff worked collaboratively with External Affairs to update the advertisement campaign message on Bewaterwise.com. Staff continued to develop web services to allow the public to access publicly available meter data on a self-service basis.

## ◆ ..... REAL PROPERTY ..... ◆

### CORE

#### **REAL PROPERTY ACQUISITION, MANAGEMENT AND REVENUE ENHANCEMENT**

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

Implement strategies for right-of-way planning and acquisition support of infrastructure reliability, protection programs, and Bay-Delta Initiatives.

- An entry permit was acquired from Worthington Investments, Co. LLC, et al. to access Metropolitan's adjacent fee property for a period of one year in support of the Santa Ana River Bridge Bellows Expansion Joint Replacement project.
- Staff completed a review of an independently prepared appraisal of a permanent easement for access and a Temporary Construction Easement for staging and access for the Allen-McColloch Pipeline in Orange County for the Right of Way Infrastructure and Protection Program.
- Two Release and Settlement Agreements for loss of access to residents due to street closures necessitated by repair work on the Orange County Feeder Line in Santa Ana were processed.

## REAL PROPERTY ACQUISITION, MANAGEMENT AND REVENUE ENHANCEMENT

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

Seek incremental revenue-generating opportunities for real estate assets in traditional and alternative market segments such as telecommunications, solar/wind generation, agriculture, and sustainable technology and research.

- Three leases were executed on the Metropolitan-owned parcels at Palo Verde Irrigation District for farming and agriculture entities.
- A lease was executed with Semitropic Water Storage District on Metropolitan-owned islands Bouldin Island and Webb Tract located at Bay Delta Islands. Semitropic Water Storage District originally leased the property from Delta Wetlands Properties, the previous owner of the islands.
- An entry permit was issued to allow horseback riding in conjunction with the 2017 Domenigoni Ranch Charity Ride for Diabetes. The ride took place at the property located west of Diamond Valley Lake.
- Staff has determined that a 2.75-acre portion of the larger 8.22 acre larger parcel that was acquired in 2001 for the operational Inland Feeder Pipeline is surplus to Metropolitan’s operational and business needs. Metropolitan completed the sale of 2.75 acres to San Bernardino Valley Municipal Water District and retained permanent easement access to the Pipeline. San Bernardino Valley Municipal Water District has its Foothill Pump Station, a pipeline, and associated equipment within this parcel, by way of grant of easement and a coordinated operating agreement from Metropolitan.

Pursue development and improvement of the Diamond Valley Lake area, including the DVL Visitor Center and marina facilities, to support recreation, develop additional leasing and revenue opportunities for Metropolitan, and benefit the surrounding community.

Metropolitan entered into a non-binding Memorandum of Intent that will be used as a tool for planning and coordination purposes in developing recreation at Diamond Valley Lake. The signatory parties on the MOI include Metropolitan, Valley Wide Park and Recreation District, Eastern Municipal Water District, City of Hemet, and Riverside County Regional Park and Open Space District.

The seasonal wildflower trail in the Southwestern Riverside County Multi-Species Reserve drew a steady stream of visitors throughout March, with an attendance figure totaling over 14,000 visitors.

An existing lease with Western Science Center was amended to include additional square footage for the Western Center Academy located at the Visitor Center campus.

Foster staff training and development.

- One manager attended the IRWA Course 701 – *Property/Asset Management: Leasing*.
- One staff member attended the International Right of Way Association course, *Communications in Real Estate Acquisition*, and three staff members attended the IRWA 25th Annual Valuation Seminar.

Efficiently maintain and operate Metropolitan’s Headquarters building and the Diamond Valley Lake Visitor Center.

Performed the following tasks as required by building and safety code: completed annual maintenance of the Headquarters building accelerographs, fire pumps, and emergency generators.

## WATER SUPPLY

Develop and execute water resource strategies that achieve the long-term reliability envisioned in the Integrated Resources Plan (IRP). Efforts include the negotiation and management of supply, storage, and water use efficiency programs, administration of imported supply contracts, development of new water resource policy recommendations in support of the IRP, collaborative planning with member agencies, and forecasting resource and facility needs.

Ensure cost-effective and reliable imported water supplies.

Article 21 Water Program—Metropolitan staff, in coordination with the State Water Contractors, negotiated the resumption of Department of Water Resources’ 2017 Article 21 Water Program in the month of April. This coordinated effort led by Metropolitan staff maximizes water supplies in a record wet year in the face of facility limitations.

Implement the Local Resources Program.

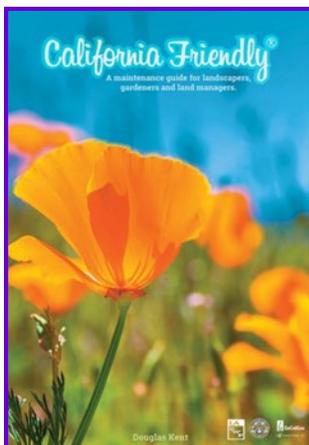
Camarillo Desalter Project—Staff met with Calleguas MWD to discuss the proposed Camarillo Desalter project, which will treat about 4,000 AFY of degraded groundwater. Calleguas will submit an LRP application for this project soon.

Implement the Conservation Program effectively.

Energy Smart Landscapes Series—Metropolitan staff attended the Energy Smart Landscapes Series at the Energy Resource Center of the Southern California Gas Company to present water supply updates and to discuss conservation programs offered at Metropolitan. This event was open to the public and had over 100 registered attendees. *(see photo right of the group)*



Danish Water Technology Alliance (WTA)—Metropolitan staff met with a representative from the Danish Water Technology Alliance. One of the WTA’s primary areas of interest is water conservation; finding solutions to enhance conservation is a core goal of the Danish Water Technology Alliance, along with knowledge sharing and innovation.



California Friendly Landscape Maintenance Guidebook—Metropolitan staff attended and participated in a reception and book signing acknowledging the new California Friendly Landscape Maintenance Guidebook written by Doug Kent of Douglas Kent + Associates. The book is a collaboration among three Southern California organizations; Los Angeles Department of Water and Power, Metropolitan, and Southern California Gas. Books are available for free on Metropolitan’s BeWaterWise.com website, and will also be presented at the 16th Annual Municipal Green Building Conference and Expo, sponsored by the U.S. Green Building Council Los Angeles Chapter on April 20. *(see photo left of the book)*

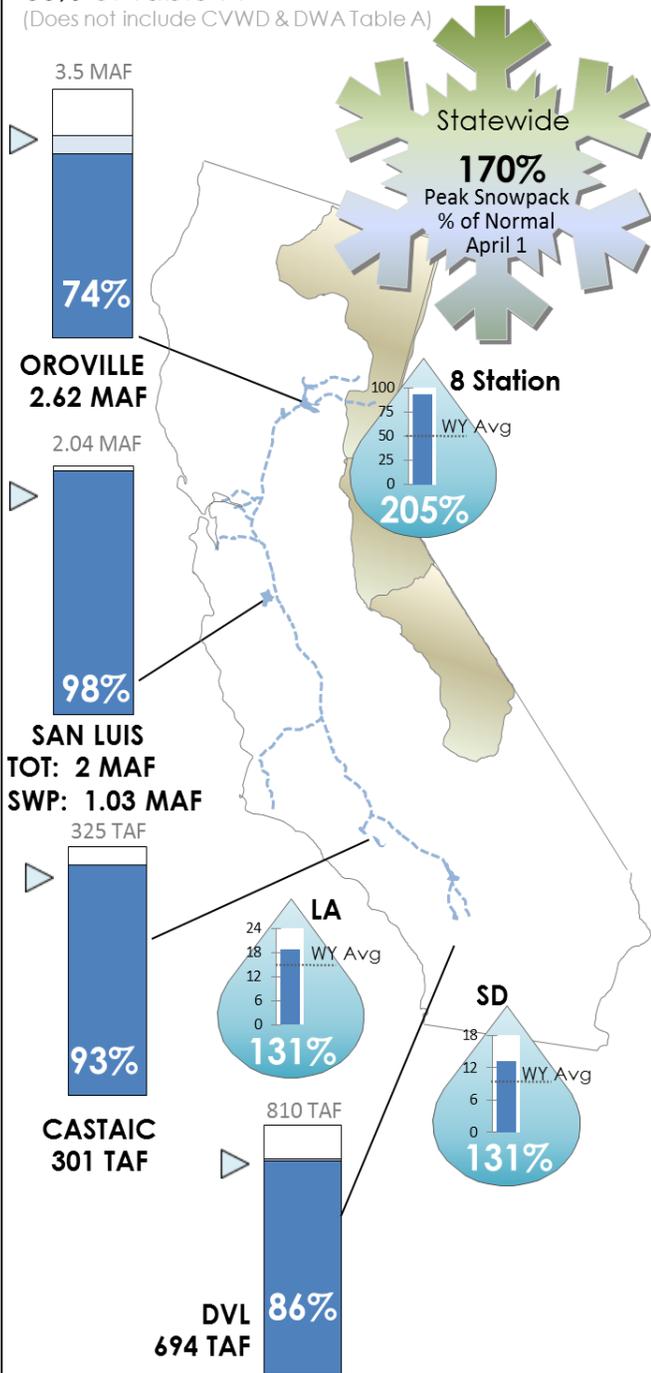
# WATER SUPPLY CONDITIONS as of April 30, 2017

## 2017 SWP Allocation

1,624,775 AF

85% of Table A

(Does not include CVWD & DWA Table A)

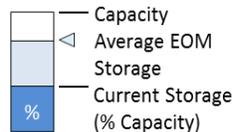
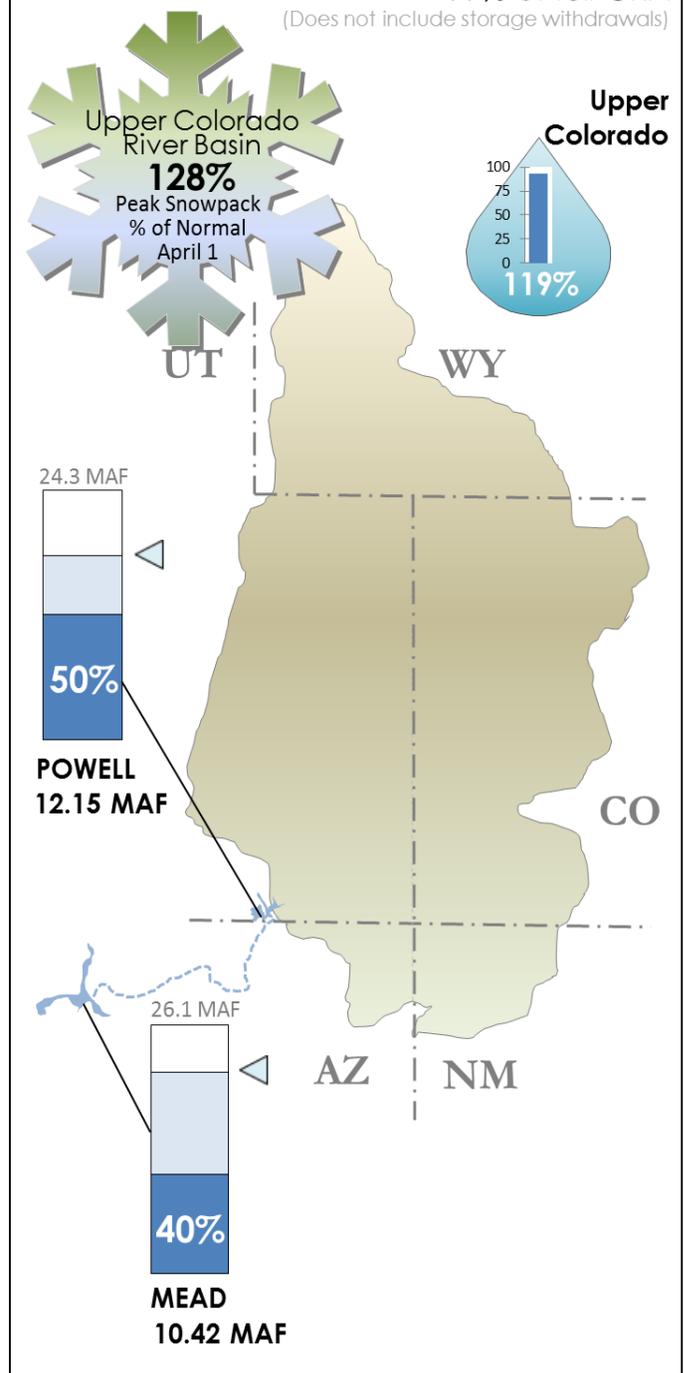


## 2017 Colorado River

964,000 AF

77% of full CRA

(Does not include storage withdrawals)



**STRATEGIC PRIORITY**

**DEVELOP WATER SUPPLIES AND MANAGE WATER RESERVES**

Staff will work closely with the Board to manage Metropolitan’s water supply reserves in the face of the unprecedented drought conditions in California and throughout the Southwest. If El Niño conditions create more supply, staff is prepared to maximize storage opportunities. The actions will include implementation of storage withdrawals, coordination of deliveries with the member agencies, close monitoring of drought conditions and possible allocation actions as part of the Water Surplus and Drought Management plan, and targeted outreach on conversation efforts. The past year’s successful implementation of the Water Supply Allocation Plan will be reviewed and a determination will be made on what actions to take for FY2016/17.

Manage water reserves.

State Water Project imports into the service area increased by about 20 percent from last month. This was done to increase SWP deliveries with the availability of Article 21 surplus water in April. This surplus water delivery is in addition to the SWP allocation, which increased to 85 percent. For the month of April, the use of SWP water accounted for 98 percent of Metropolitan’s deliveries. Storage at Diamond Valley Lake increased to 698,900 AF or 86 percent full. Deliveries to Semitropic and Kern Delta Storage are underway. With the installation of a new weir gate on the CRA, deliveries to the Desert Water Agency and Coachella Valley Water District are being maximized at a new high flow rate of 650 cfs. In addition, by reducing CRA deliveries to a 3-pump flow, Lake Mead Intentionally Created Surplus storage is continuing to fill.

**CORE**

**PROVIDE RELIABLE WATER SUPPLIES**

Metropolitan delivered approximately 94,000 acre-feet of water to meet member agency demands in April, which averaged approximately 3,130 AF per day. This was an increase of 42 percent from March deliveries, due to warmer conditions and an increase in demand within Metropolitan’s service area. Treated water deliveries for April totaled about 59,000 AF, or 63 percent of total deliveries for the month, which is an increase of 9,000 AF from March treated water deliveries. The CRA operated at a three-pump flow for the month of April. Year-to-date CRA diversions are 145,000 AF. SWP imports averaged 4,040 AF per day for 121,200 AF for the month, which was an increase of about 18,100 AF from March SWP imports. Staff continued to maximize power generation throughout the month. Metropolitan’s hydroelectric plants generated an average of 26.7 megawatts per hour for 19,224 megawatt-hours for the month.

The Colorado River Aqueduct was successfully shut down for 24 days to complete a significant amount of work. The main drivers for this shutdown were the replacement of sand trap mechanical equipment, switch house seismic upgrades, NERC electrical tests, maintenance and repair of areas normally underwater, and a variety of other projects. Each of these projects is critical to the safe and reliable operation of the CRA, and as such the timely completion of the work was vital to ensuring the continued safe and reliable operation of the CRA. *(see photos below)*



Welding of the platform for sand trap equipment at Eagle Mountain



Concrete repair prep work at Eagle Mountain

# WATER SYSTEM OPERATIONS

## STRATEGIC PRIORITY

### EMPLOYEE DEVELOPMENT

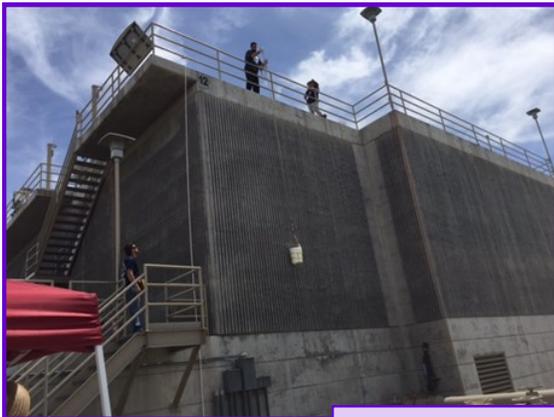
The proposed budget calls for Metropolitan to cease its managed attrition that has shrunk Metropolitan from 2,400 full-time employee positions to a current workforce of approximately 1,750. Recruitment activity will be expanded to fully replace all retirements and actually add some positions to bring the work force to approximately 1,800 positions over the next two years. Increase employee cross-training and employee development efforts will be needed to meet the challenge of increased retirements brought about by an aging workforce.

Manage vacancies.

WSO filled four vacant positions in March 2016.

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. Metropolitan conducted physical abilities testing for the pre-apprentice recruitment on April 17 – 20, 2017. Test events were staged at the Mills plant. Approximately 170 candidates participated in confined space simulation, working overhead, shoveling, climbing while lifting, and wire color matching activities. Experienced journey-level workers from mechanical and electrical operations and maintenance teams proctored the tests. Interviews for the top 85 candidates will be held in May 2017. *(see photos below)*



Physical abilities testing for pre-apprentice recruitment



## CORE

## OPTIMIZE MAINTENANCE

Staff coordinated aerial herbicide application to the downstream face of dams at Diamond Valley Lake, Lake Skinner, and Lake Mathews. The use of herbicide is a safe, effective, and efficient means to minimize the growth of woody vegetation on the dam, which would require a more costly and inefficient manual application. *(see photo right of aerial herbicide application on downstream face of Lake Skinner Dam)*



Staff completed the fabrication and installation of weir guides and a weir gate at the Colorado River Aqueduct Whitewater Siphon outlet transition. The weir gate installation, just downstream of the Whitewater Siphon, increased the Colorado River water delivery capability at the Desert Water Agency/Coachella Valley Water District connections to maximize deliveries and storage into the Advance Delivery Account that is part of Metropolitan's dry-year storage portfolio. *(see photos below)*



CRA Whitewater Siphon outlet transition weir gate installation



CRA Whitewater Siphon outlet transition weir gate in operation

The Wadsworth Pumping Plant was shut down for 11 days to allow staff to perform preventative maintenance on high-voltage electrical components and equipment. Staff also took this opportunity to install an upgraded protection panel for the 115kV transmission line that provides electrical power from Southern California Edison. The upgraded protection panel was part of a partnership with Southern California Edison that will allow a compatible communication loop between SCE and the Wadsworth plant during a high-voltage transmission line fault or interruption. *(see photo right of staff upgrade of Wadsworth plant high voltage protection panel)*



## CORE

## OPTIMIZE MAINTENANCE continued...

Staff completed a shutdown of the West Valley Feeder No. 2, Calabasas, and Foothill Feeders, which was scheduled in conjunction with the Jensen plant shutdown. The primary purpose of the shutdown was to perform electromagnetic and visual inspections of the pre-stressed concrete cylinder pipe along three miles of the West Valley Feeder No. 2 and nine miles of the Calabasas Feeder. Visual inspections identified the need for internal motor grout repairs that were also completed at various pipe joints for each feeder during this shutdown.

Other work performed during this shutdown included the repair of coatings and removal of corrosion accumulation on a 30-inch turnout plug valve for the Calabasas Feeder. In addition, seven pipeline shutoff valves were replaced at various air release/vacuum valve and pump well stations. Staff also completed corrective work at the Foothill Pressure Control Structure that consisted of replacing the sealing components on three 78-inch butterfly valves and one 42-inch butterfly valve. The new seals will provide a positive shutoff to allow for future inspection and maintenance of other conical and needle control valves in the facility, without shutting down the entire facility. *(see photos below)*



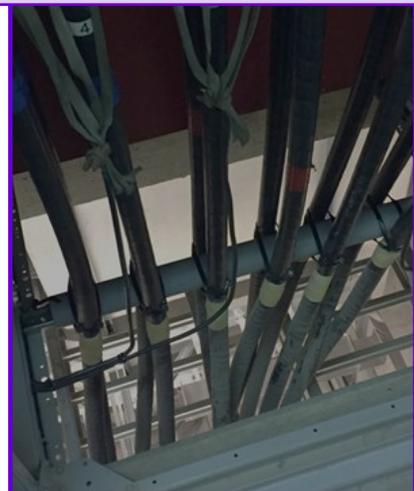
Welding of the new tee pipe section for the pump well on the Orange County Feeder



Replacing the seal on a 78-inch butterfly valve at the Foothill Pressure Control Structure

The Jensen plant was shut down from March 27 through April 4 to support contractor construction activities for the high-voltage electrical power improvement project and to provide infrastructure for the new Jensen solar power plant construction. Work included electrical equipment upgrades under the \$23.9 million capital project, which will improve safety and plant reliability by replacing aging equipment and providing emergency power supply systems. Staff undertook a series of shutdown repair and improvement projects with the replacement of valves and equipment to ensure chlorine disinfection reliability. Staff also manufactured and installed steel guides in the plant outlet tower to facilitate installation and removal of a weir plate without requiring worker access and additional system shutdowns. This weir plate increases plant operational flexibility under low flow conditions. *(see photo right)*

Installed switch gear cables and new cable racking supports at the Jensen plant



# WATER SYSTEM OPERATIONS

## CORE

### OPTIMIZE MAINTENANCE continued...

Diemer staff will be relocated to temporary trailers during the Administration Building Seismic Upgrade Project. This \$8.1 million capital project commenced Winter 2016 with target completion by mid-2018, and is required to minimize the risk of disruption to plant operation, reduce potential building damage, and enhance safety in a seismic event. Diemer operations, administration and laboratory staff will relocate during the week, while ensuring plant reliability with no disruption in treated water deliveries. *(see photo below)*



Temporary trailers for Diemer staff during seismic upgrade project

Staff removed one of the four wash water pump motors at the Weymouth plant to have it rebuilt at an offsite facility. This motor was rebuilt because it had excessive vibration, a leaking seal, and worn bearings. The newly rebuilt motor was then reinstalled by a crane. After installation, the newly rebuilt motor was recoupled to the pump and initial vibration testing was performed to establish a new vibration baseline as part of the condition-based maintenance program. *(see photo right)*



Weymouth plant wash water pump motor installation

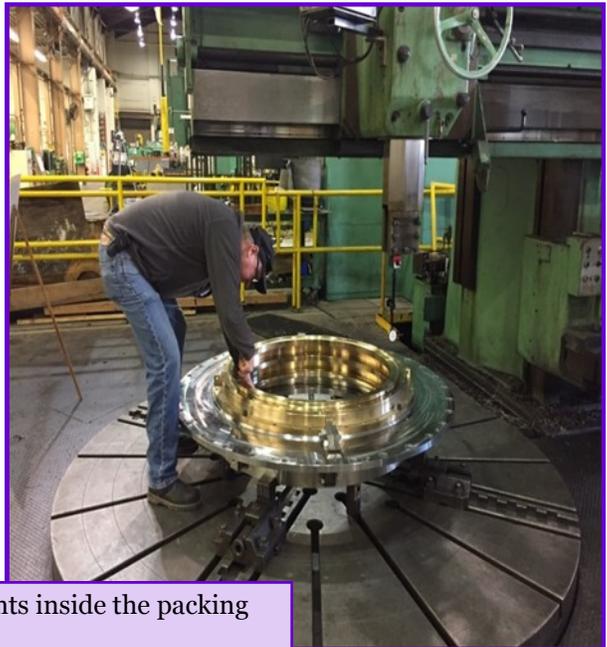
Staff performed major maintenance on ammonia tanks at the Weymouth plant. To ensure the safety of staff, a vendor provided a portable scrubber system to prevent any fumes from escaping to the air while the ammonia tanks were drained. After the tanks were drained, several valves were replaced and the tanks were cleaned. This type of service ensures the long-term reliability of the chemical feed system.

Staff drained and cleaned sedimentation basins at the Weymouth plant. Cleaning of the sedimentation basins is performed periodically to remove solids that build up on the basin floor. The cleaning requires staff to go into the basins and manually remove the sludge and any other debris not removed by the regular motorized cleaning sweeps.

## CORE

### OPTIMIZE MAINTENANCE *continued...*

The La Verne Shops manufactured a 66-inch diameter packing box and three sets of 45-inch diameter lantern rings for the Department of Water Resources' Gianelli Pump Generating Plant Unit No. 3 at San Luis Reservoir. The packing box holds the sealing components consisting of resilient packing rings, which fill the space between the stationary packing box and the rotating shaft. The shops manufactured the new packing box from stainless steel and a carbon steel mounting flange. The flange was coated with corrosion resistant high solids epoxy. The lantern rings were machined from centrifugally cast high strength bronze rings. The corrosion resistant material used on the new components is an improvement from the original all-carbon steel components. The La Verne Shops, working in conjunction with Engineering staff and DWR, developed an improved design that has much better corrosion resistance. *(see photo right)*



Corrosion resistant lantern ring segments inside the packing box for DWR's Gianelli plant

Staff performed major maintenance and testing at Corona Hydroelectric Plant. During the planned shutdown, staff upgraded and replaced several worn and failing components, including new air and oil coolers, new bearing oil seals, and a new lube oil pump. Proactive replacement of these worn components during a planned outage increases plant reliability and reduces the risk of unscheduled outages. Additionally, the new coolers have design improvements that include corrosion resistance and resistance to erosion caused by quagga mussels. *(see photo right)*



Removal and inspection of the thrust bearing at the Corona Hydroelectric Plant

Staff performed major testing, maintenance and protection upgrades on the Diamond Valley Lake 115 kiloVolt electrical power system. The 115kV system is a critical component of the facility that allows power from Southern California Edison to be transmitted to plant equipment. The maintenance included work on high-voltage breakers, transformers, and disconnect switches. The work also includes replacement of protection relays and upgrades needed due to improvements that SCE is making in their system.

## WATER SYSTEM OPERATIONS

### CORE

#### MANAGE THE POWER SYSTEM

On March 28, the California Independent System Operator (CAISO) held a stakeholder meeting to describe a proposal to create a unique classification for a geographic area that would encompass the Metropolitan CRA electrical system. The specified area would be used to determine the amount of power resources Metropolitan would need to reliably operate its CRA electrical system under the CAISO jurisdiction. CAISO staff plans to take the formal request for the Metropolitan area to their Board on May 1. This is part of the process to replace the existing Service and Interchange Agreement with SCE that will expire September 30, 2017.

Metropolitan invited staff from the Arizona Electric Power Cooperative (AEPCO) to attend the annual high-voltage switching refresher training at Gene Camp on April 11 and 12. Metropolitan is negotiating with AEPCO for certain transmission services that could start when the existing Service and Interchange Agreement with SCE expires on September 30, 2017.

### CORE

#### IMPROVE SECURITY AND EMERGENCY RESPONSE

On April 18, staff conducted an emergency response exercise as part of the Emergency Management Program. The exercise focused on real-time use and testing of the new two-way radio system, network-based information sharing (WebEOC) system, and Metropolitan's emergency notification system. Participants were asked to provide feedback on the performance of the communication systems they utilized during the exercise. The data collected will be used to determine overall performance of the systems and to develop potential refinements for continuous improvement of the Emergency Management Program.

### CORE

#### PROTECT SOURCE WATER QUALITY

Staff continued intensive monitoring and inspections to evaluate the occurrence of quagga mussels in the East Branch State Water Project. The only site that has been intermittently positive for suspect larval stages of the mussels (veligers) has been DWR's Northpark valve on the Santa Ana Valley Pipeline. All other upstream and downstream locations remain negative.

On April 18 and 19, staff participated in workgroup meetings held in Henderson, Nevada for the Topock Chromium-6 Groundwater Remediation Project. Stakeholders discussed current field investigations, groundwater remedy development, and comments on the Subsequent Environmental Impact Report. In addition, Metropolitan provided a presentation on Colorado River water quality and emphasized the importance of implementing the groundwater treatment system to continue protecting Colorado River drinking water supplies. Construction of the project is expected to begin at the end of 2017.

### CORE

#### OPTIMIZE WATER TREATMENT AND DISTRIBUTION

State Water Project target blends at the Weymouth and Diemer plants were 100 percent for April 2017. SWP blends at the Skinner plant were about 80 percent in April, as Lake Skinner continues to transition from 100 percent Colorado River water to 100 percent SWP water. Flow-weighted running annual averages for total dissolved solids from February 2016 through January 2017 were 624, 625, and 617 mg/L for Weymouth, Diemer and Skinner plants, respectively.

## WATER SYSTEM OPERATIONS

### CORE

### PROVIDE TECHNICAL SUPPORT TO MEMBER AGENCIES

Staff installed a new flowmeter and pipe spool piece, manufactured by the La Verne Shops, at the LA-29 service connection. This meter will measure water deliveries to the Los Angeles Department of Water and Power during the scheduled improvements to their Upper Stone Canyon Reservoir. Staff excavated above the existing vault structure near Sunset Boulevard and the 405 freeway to access the pipeline during a scheduled shutdown. Staff removed a portion of the existing 30-inch delivery line, secured the new flow meter, and returned the pipeline to operation. Staff coordinated closely with the City of Los Angeles and Caltrans to minimize impacts to the busy corridor during this project. *(see photos below)*



Lowering the flowmeter into the vault at LA-29 in preparation for final installation



Welding of pipe fit-up pieces to accommodate the new meter at LA-29

Staff conducted a workshop on March 29 with representatives from several member agencies to discuss service connection meters and possible refinements to Metropolitan's design guidelines and administrative code. The workshops will continue on a monthly basis in an effort to develop new policies and procedures for service connections under low flow conditions.

### CORE

### ENSURE WATER QUALITY COMPLIANCE, WORKER SAFETY, AND ENVIRONMENTAL PROTECTION

Metropolitan complied with all water quality regulations and primary drinking water standards during the month of March 2017.

April marked the end of a second two-year period of federally mandated *Cryptosporidium* monitoring at the five water treatment plants, under the Long-Term 2 Enhanced Surface Water Treatment Rule. *Cryptosporidium* is rarely detected in Metropolitan's source waters and never detected in finished water. Consequently, no additional treatment is necessary at Metropolitan's plants under this regulation.

# WATER SYSTEM OPERATIONS

## CORE

### PREPARE FOR FUTURE LEGISLATION AND REGULATION

Metropolitan submitted comments to the State Water Resources Control Board (SWRCB) on its pending regulation of the chemical constituent 1, 2, 3-Trichloropropane (1, 2, 3-TCP). 1, 2, 3-TCP was a popular soil fumigant used extensively in agricultural areas and was also used as a cleaning and degreasing solvent. It has been detected in groundwater wells throughout California and has been listed as a suspected human carcinogen. Metropolitan's comment letter supports regulation of this chemical and will encourage SWRCB to allow for adequate compliance time for utilities to implement strategies to remove 1, 2, 3-TCP from contaminated supplies. The proposed MCL of 5 parts per trillion is also the current analytical level of detection for this chemical; accordingly, Metropolitan requested the SWRCB evaluate potential data integrity issues associated with detection and reporting of this chemical in contaminated source waters. Metropolitan has monitored for 1, 2, 3-TCP in its source and finished water supplies and found no detections.

On April 10, 2017, Metropolitan sent a comment letter to the California Air Resources Board on the draft 2017 Climate Change Scoping Plan Update. The 2017 Scoping Plan Update proposes to reduce greenhouse gases (GHGs) 40 percent below 1990 levels by 2030. Metropolitan's letter emphasized that (1) water utilities must first meet their obligations to provide safe and reliable water before meeting GHG emissions reduction goals; (2) the greatest potential for energy savings resides with water end users, where water conservation and efficiency play an important role; and (3) the continued de-carbonization of the state's electrical supply will benefit the overall water sector. The public hearing on the proposed final 2017 Scoping Plan Update is scheduled for June 22-23, 2017. Staff will continue to monitor and engage in the 2017 Scoping Plan Update process, as needed.

## CORE

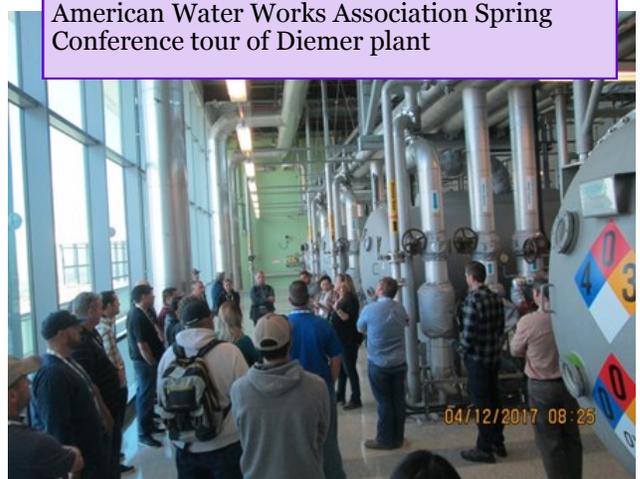
### SUPPORT EDUCATION AND OUTREACH INITIATIVES

Staff conducted four plant inspection trips during the month of April for approximately 120 participants at the Diemer, Skinner and Weymouth plants. The Environmental Leadership Institute toured Skinner treatment and solar plants, and students from Los Angeles Trade Tech toured Weymouth plant and the La Verne Shops. Diemer staff offered a tour to the attendees of California Nevada Section of the American Water Works Association in conjunction with the Spring Conference held in Anaheim. Staff members at the plants provided oral presentations on water treatment facilities, pertinent water quality and treatment issues, as well as plant operations and maintenance activities.

Inspection trip attendees learn about solar energy at the Skinner plant



American Water Works Association Spring Conference tour of Diemer plant



# More Spring Green Expo



### Useful information:

**AF** = acre-foot, the volume of water to cover an acre of land, one-foot deep.

Approximately 326,000 gallons of water, serves annual needs of two typical California families.

**TAF**=thousand acre-feet. **MAF**=million acre-feet.

Storage	As of 4/30/17	% of Capacity
DVL	693,535 AF	86
Lake Mathews	163,342 AF	90
Lake Skinner	39,508 AF	90

**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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