

# THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

## General Manager's Monthly Activity Report for April 2016

April 30, 2016

This report identifies the actions and activities taking place during the month that support the objectives of the General Manager's Fiscal Year 2015/16 Business Plan.



### 9th Annual Spring Green Expo

An educational event featuring more than 60 exhibits of sustainable products and services by students, businesses, conservation groups and public agencies was held at Metropolitan's Headquarters Building on April 28. This year's event showcased over 30 sustainability concept projects designed by nearly 100 students, representing 15 Southern California universities and colleges in Riverside, San Bernardino, San Luis Obispo, San Diego, Orange and Los Angeles counties. And for the first time, three high schools participated. *(See photos from the event below)*

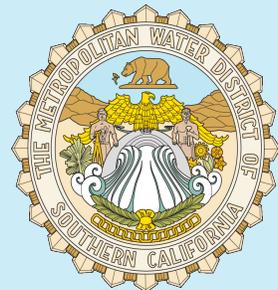


Special guest speaker—Joel Greene, hosts educational show Curiosity Quest on PBS TV station.



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## STRATEGIC PRIORITY

### **COMPLETE PLANNING PROCESS FOR THE CALIFORNIA WATERFIX AND CALIFORNIA ECORESTORE**

Continue to take on a lead role in securing water supplies for the State Water Project (SWP) and working towards the completion of the State of California's Proposed Delta Improvements, Recirculated Draft Environmental Impact Report (RDEIR)/Supplemental Draft Environmental Impact Statement (SDEIS) for the California WaterFix and California EcoRestore.

Pursue decision on the State's Proposed Delta Improvements including the California WaterFix and California EcoRestore.

California WaterFix and California EcoRestore—As part of the state and federal Endangered Species Act compliance that the U.S. Bureau of Reclamation and California Department of Water Resources are undertaking with the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the California Department of Fish and Wildlife (CDFW) for the California WaterFix, the Delta Science Program convened a scientific panel to review the draft Biological Assessment. The purpose of the California WaterFix Aquatic Science Peer Review (Peer Review) is to provide an independent scientific evaluation of the methods and approaches for developing the joint Biological Opinion requirements and analyses prepared for the CDFW 2081 (b) Incidental Take Permit application. The results of the panel review are scheduled to be released in May 2016. Staff worked with the State Water Contractors to submit a letter that included several areas of comment regarding the scope and focus of the Peer Review and relevant scientific studies that the panel should consider in its evaluation of the draft Biological Assessment. Staff attended the two-day workshop and will monitor the forthcoming recommendations and further development of the BA and Biological Opinion/2081 permit.

## CORE

### **BAY-DELTA SOLUTIONS**

- Develop near- and long-term solutions that enhance the Delta ecosystem, improve water supply reliability, and protect water quality.
- Participate in the State Water Resources Control Board (SWRCB) process considering petition for an additional point of diversion for new conveyance facility.
- Continue to work on efforts related to improving water supply reliability and protecting water quality.

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—On March 28, 2016, the State Water Resources Control Board hearing officers for the California WaterFix water right change petition hearing regarding additional points of diversion received a letter from DWR and USBR (collectively Petitioners) requesting a 60-day continuance of all dates and deadlines associated with the hearing. The hearing officers also received additional requests from other interested parties to delay and stay the hearing pending resolution of several matters. In response to the various requests on April 25, the SWRCB granted a 60-day continuance of the proceedings. The proceedings are now scheduled to begin with the first hearing date on July 26, 2016.

## BAY DELTA INITIATIVES

### CORE

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

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

Science Activities—Staff continues to work with researchers on priority science investigations. As part of the longfin smelt larval distribution study, Dr. Grimaldo (ICF) prepared a draft journal article on the distribution of larval longfin smelt in the Bay Delta system. The paper suggests that longfin smelt spawn primarily in the shallows and wetlands ringing Suisun Bay and San Pablo Bay, and that they are much more tolerant of salinity than previously believed. The implication is that downstream production could be very important in wetter years and that habitat restoration around Suisun and San Pablo Bays could boost longfin spawning habitat.

Staff continued to participate in the Collaborative Science and Adaptive Management Program to provide input to on-going Delta smelt and salmon science studies related to the existing biological opinions. The Salmon Gap Analysis report is expected in June. Staff is also developing potential projects addressing model development for wind and turbidity relationships, Hyacinth control impacts on lower trophic levels and fish, ocean sampling for longfin smelt, and salmon predation.

## BUSINESS TECHNOLOGY

### CORE

#### **BUSINESS PROCESSES AND INFORMATION TECHNOLOGY**

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

Continue innovative sustainability efforts in business practices including Spring Green, Our Legacy Newsletter, the rideshare program, energy conservation and recycling efforts.

Our Legacy E-Newsletter—The newsletter was distributed to all employees during April with the focus on the 9th Annual Spring Green Expo.

Annual Spring Green Expo and Innovators Showcase—Staff completed selection of vendor participants and student participants for the Spring Green Expo. All materials for the event were procured and volunteers were selected and trained for the event. Final statistics of the event will be presented in May.

Metropolitan Rideshare Program—Staff has collected the Average Vehicle Ridership data, which reached a 99 percent response rate. Staff is on track to meet South Coast Air Quality Management District’s May 2016 deadline.

**BUSINESS PROCESSES AND INFORMATION TECHNOLOGY continued...**

Implement innovative solutions for customers that will positively impact their business operations through improved quality, speed, simplicity, and cost improvements.

Information Technology Strategic Plan—Over 90 percent of IT staff had a formal introduction to the service delivery process based on the guidance delivered in the Information Technology Infrastructure Library framework. The next step is to begin the process of implementing the best practice for the Framework within the Information Technology Section.

MWD's E-Form Management Program—Staff continues to improve productivity and processes through the use of E-forms software for Imaging Services, approving leave usage via mobile technology, and connecting to PeopleSoft databases to improve auto-population of employee data fields.

Records Management Program Assessment—Staff made a presentation of the Records Management Program Assessment Findings and Project Plan for IT stakeholders during April. Staff is also developing the scope of work for a request for proposals for services to assist with Phase I design initiatives of the Enterprise Content Management Project

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

Voice Over Internet Protocol Technology—Staff plans on deploying 12 pre-pilot phones by late April. The pre-pilot phones will be connected to the new AT&T carrier connections to facilitate the testing of the new telephone system. The next step is to schedule the deployment of an additional 200 phones for the IT pilot at Metropolitan's Headquarters, 6th and 7th floors.

Network Communications Infrastructure—As part of the network communications infrastructure project, staff is connecting the building power to the upgraded electrical equipment and cooling system. By the end of May, the 6th and 7th floor equipment rooms at Headquarters will be ready to support the telephone replacement project.

Wadsworth Pump Plant, Controls and Electrical Protection Systems—As part of the final design phase of the control and electrical protection systems at the Hiram Wadsworth Pumping plant, staff resolved technical findings related to the control, electrical, and protection components. Testing is scheduled to go into May.

Emergency Two-Way Radio Upgrade—Staff plans to distribute the remaining radios next month once the assessment of firmware is completed.

IT Disaster Recovery Exercises—Staff completed an IT Disaster Recovery exercise involving critical applications from Water System Operations, Finance, Legal and Human Resources. The exercise provided live simulation of staff accessing critical applications via servers/databases located at Metropolitan's remote disaster recovery facility. The test objectives for this exercise included providing hands-on training, validating of recovery procedures, and identifying opportunity for enhancements to the IT Disaster Recovery Plan and Procedures Guide.

Metropolitan Data Center Architecture—Staff completed analysis of storage solutions and developed an Assessment Report outlining the potential options.

## BUSINESS TECHNOLOGY

### CORE

#### **BUSINESS PROCESSES AND INFORMATION TECHNOLOGY** continued...

Continue innovative sustainability efforts in business practices, including Spring Green, Our Legacy Newsletter, the Rideshare program, energy conservation and recycling efforts.

Spring Green Expo and ECO Innovators Showcase—Solicitation of the ECO Innovators and vendor participation has been completed and all other event coordination tasks are on schedule.

Simplify access to business information.

Metropolitan's Warehouse Inventory Online Ordering—Staff completed implementation and continues to incorporate work order functionality for use with Water System Operations' Maximo Maintenance Management System.

Foster a culture of innovation.

Digital Board Letter Screens—Staff is in the process of acquiring pricing of digital screens to replace hardcopy board agenda postings in the Headquarters Building.

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

Digital Board Letter Screens—Staff is in the process of acquiring pricing of digital screens to replace hardcopy board agenda postings in the Headquarters Building.

## CHIEF FINANCIAL OFFICER

### CFO PRIORITY

#### **MAINTAIN STRONG FINANCIAL POSITION**

Provide innovative and proactive financial analyses, planning, and management services to ensure that forecasted revenues are sufficient to cover planned expenditures and provide a prudent level of reserves consistent with Board policy.

Monitor external impacts on rates and charges to help maintain low rates, minimize their variability, and recover costs consistent with Board policy.

On April 12, the Board adopted the Biennial Budget for FY 2016/17 and 2017/18 and adopted Water Rates and Charges effective January 1, 2017 and January 1, 2018.

On April 6, 2016, Metropolitan executed two, \$200 million, revolving credit facilities, with RBC Capital Markets, LLC, and US Bank, N.A., and drew \$125 million from each facility, for a total of \$250 million. These drawn amounts will replenish amounts that had been set aside in financial reserves pursuant to the Exchange Agreement with the San Diego County Water Authority and were transferred to a designated fund established to hold these amounts (the Exchange Agreement Set-Aside Fund).

## CORE PRIORITY

### **BUSINESS CONTINUITY**

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

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

Continued weekly roundtable discussions with plan owners to address topics of concern and provide guidance in the Business Continuity Plan development process and initiated workshops to guide BC Plan coordinators in developing their plans. As a result of unexpected system issues and the impact of shutdowns on staff, the deadline for completion was extended to May 27.

## CORE

### **MANAGE RISK**

- The Risk Management Unit completed 59 incident reports communicating instances of Metropolitan property damage, liability, workplace injuries, regulatory visits and spills.
- Risk Management completed 68 risk assessments on contracts, including professional service agreements, construction contracts, entry permits, special events and film permits.

## CORE

### **FINANCIAL MANAGEMENT**

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

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.

Financial activities are recorded in a timely and transparent manner. The SDCWA under paid its water invoices for December 2015 and January 2016 in the amounts of \$663,267.80 and \$863,908.20, respectively. Metropolitan has assessed interest on the late payments totaling \$43,808.88. The total amount outstanding is \$1,570,984.88.

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

Staff continues to provide the necessary liquidity for Metropolitan's operational and capital expenditures, with no loss of principal and no policy violations, while generating a portfolio return that exceeded the benchmark.

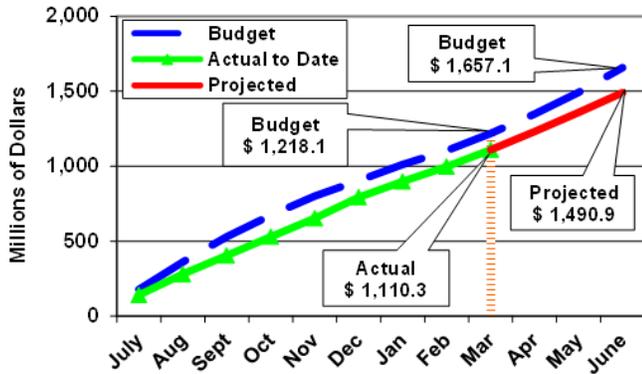
Record and report the financial activities of Metropolitan in a timely, accurate, and transparent manner to the Board, executive management, member agencies, and the financial community.

Financial activities were recorded in a timely and transparent manner.

# CHIEF FINANCIAL OFFICER

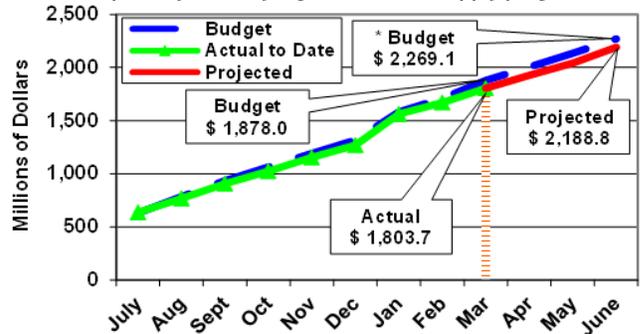
## FINANCIAL SUMMARY AS OF MARCH 31, 2016

Total revenues are expected to be \$166 million lower than budget at year end, mainly due to lower water sales.



Excludes bond construction and other trust funds activity

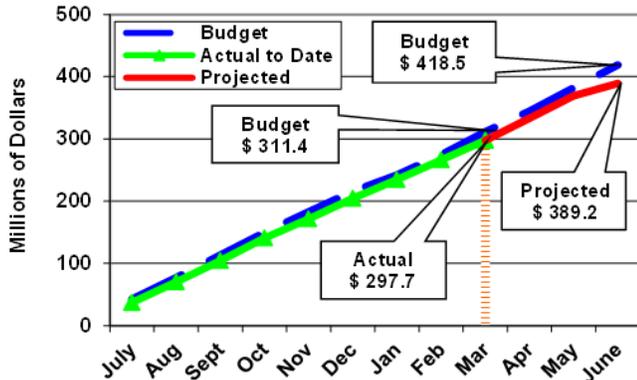
Total expenses are expected to be \$80 million lower than budget by year end, mainly due to lower Dem and Management, Capital Program and O&M expenses, and partially offset by higher SWP, and supply program costs.



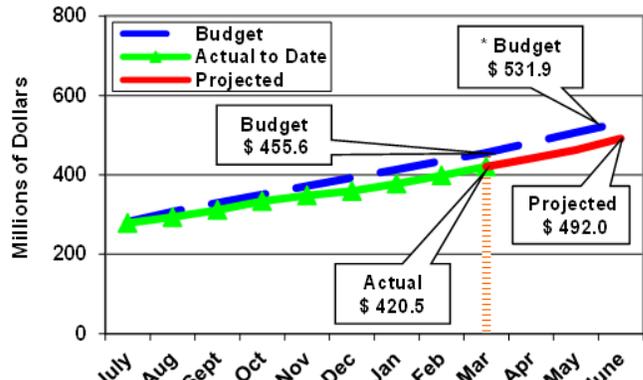
Excludes bond construction and other trust funds activity

\*\* Includes \$305.6M, \$264M and \$9.8M Board-approved increases for Conservation, Riverside and Imperial County land purchase, and Water Supply Programs, respectively

Metropolitan O&M expenses are expected to be \$29 million lower than budget at year end, mainly due to an effort to reduce controllable expenses by five percent.

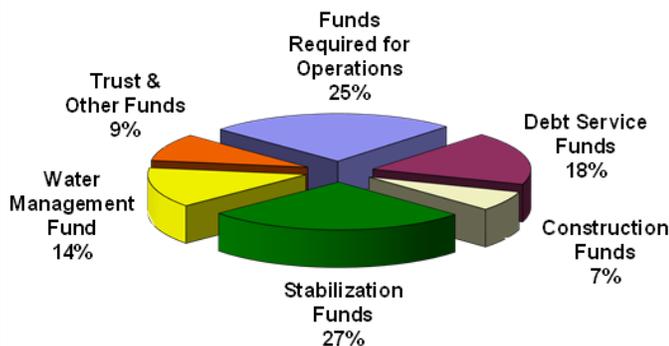


Capital Program expenses are expected to be \$40 million lower than budget by year end, mainly due to work prioritization and project rescheduling.



\* Includes \$264M Board-approved increase for Riverside and Imperial County land purchase.

### Cash and Investments at Fair Value \$ 1,195.1 million



### Summary Financial Statistics

	Target	Year-End Projected
Fixed Charge Coverage	≥ 1.20 x	1.23 x
Revenue Debt Service Coverage	> 2.00 x	1.36 x
Revenue Bond Debt / Equity Ratio	< 100.0%	60.7%

### 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 Water System Operations 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:

- Greg Avenue Pump Station Rehabilitation—This drought-response project improves the operational reliability of the Greg Avenue Pump Station by replacing the existing pump and pump/turbine and by upgrading the electrical and control systems. Design is 87 percent complete and is scheduled to be complete by October 2016.
- Middle Feeder Blow-Off Valve Replacement—This project replaces two deteriorated lubricated plug valves along the Middle Feeder within the city of Compton. Design is complete and a request to the Board for award of a construction contract is planned for June 2016.
- Middle Feeder Relocation—Metropolitan's 72-inch-diameter Middle Feeder is located within a 40-foot easement that crosses the Southern California Edison Mesa Substation in the city of Monterey Park. SCE intends to expand the existing substation to meet future regional power demands. In December 2015, the Board authorized a cost-sharing agreement with SCE to relocate 3,300 feet of the Middle Feeder to a new alignment within SCE's property. Design is 99 percent complete and is scheduled to be complete by May 2016.
- Palos Verdes Reservoir Cover Replacement—This project replaces the reservoir's existing floating cover and liner, and modifies the existing spillway, control tower, and outlet structures. Construction is eight percent complete and is scheduled to be complete by September 2017.
- Etiwanda Pipeline Lining Repairs—This project replaces the Etiwanda Pipeline's damaged interior mortar lining with a polyurethane coating. The first stage of repairs lined approximately 2,800 feet of the pipeline. The remaining five miles of the pipeline will be relined in two stages. Construction of the Stage 2 repairs is five percent complete and is scheduled to be complete by December 2016. Design of the Stage 3 repairs is 90 percent complete and is scheduled to be complete by July 2016.
- Lakeview Pipeline Rehabilitation—This project installs a steel liner within the Lakeview Pipeline to strengthen the pipe and prevent water leakage. Design is 10 percent complete and is scheduled to be complete by October 2017.
- Foothill Hydroelectric Plant Seismic Assessment—This project performs seismic upgrades of the facility to better withstand a significant earthquake. Design is 15 percent complete and is scheduled to be complete by January 2017.

**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:

- La Verne Solar Power Plant—This project constructs a 3-megawatt solar generating facility on the grounds of the Weymouth plant in La Verne. The solar power plant will hedge against projected increases and volatility in the price of electricity, and will enhance Metropolitan's long-term power use efficiency. Construction is 98 percent complete and is scheduled to be complete by May 2016.

Right-of-Way and Infrastructure Protection Program

This program performs needed site improvements within 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. Recent activities include the following:

- Orange County Operating Region—Final design of improvements for the Orange County region is scheduled to be complete by September 2016. A value engineering review of the planned improvements has been completed. The programmatic environmental impact report for the Orange County region was certified in April 2016.
- Western San Bernardino County Operating Region—Final design of improvements for the Western San Bernardino County region is scheduled to be complete by October 2016. The draft programmatic EIR for this region is expected to be released for public review and comment by August 2016.
- Los Angeles County Operating Region—Preliminary design of improvements is 45 percent complete and is scheduled to be complete by September 2016.
- Riverside/San Diego County Operating Region—Preliminary design of improvements is 40 percent complete and is scheduled to be complete by September 2016.
- Colorado River Aqueduct Operating Region—Due to the unique needs and right-of-way considerations for the Colorado River Aqueduct, improvements within this region will be executed under a future stand-alone capital program.

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:

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 36 percent complete and is scheduled to be complete by December 2017.

Mills Plant

- Chemical Unloading Facility Chlorine Containment—Construction of containment facilities is 77 percent complete and is scheduled to be complete by February 2017.
- Industrial Wastewater Handling Improvement—This project adds three wastewater storage tanks and a force main connection to the sanitary sewer system to enable safer and more efficient handling of the wastewater, and to reduce the risk of an accidental release. Construction is 45 percent complete and is anticipated to be complete by July 2016. *(see photo on next page)*

## INFRASTRUCTURE RELIABILITY continued...

### Treatment Plant Reliability Program continued...

#### Skinner Plant

- Administration Building HVAC System Replacement—This project replaces the Skinner Administration Building’s heating, ventilating, and air conditioning system. Construction was completed in April 2016.

#### Diemer Plant

- East Filter Upgrades—This project upgrades the plant’s east filters, including replacement of 127 deteriorated valves with AWWA-standard valves, and seismic strengthening of the filter buildings. Construction is 68 percent complete and is scheduled to be complete by November 2016.
- East Basin Rehabilitation—This project rehabilitates the aging mechanical equipment and its electrical and structural components inside the four east flocculation/sedimentation basins. Construction is 28 percent complete and scheduled to be complete by July 2017. *(see photo below)*

#### Jensen Plant

- Module No. 1 Filter Valve Replacement—This project replaces 78 deteriorated filter valves within Module No. 1 with new AWWA-standard valves. Construction is 75 percent complete and is scheduled to be complete by November 2016.
- LADWP Lagoon Refurbishment—This project rehabilitates four LADWP lagoons, which will be used for a period of 50 years by Metropolitan. Construction is 55 percent complete and is scheduled to be complete by September 2016.
- Electrical Upgrades, Stage 1—This project replaces electrical equipment, provides backup in the event of individual component failures, and upgrades the electrical system to be consistent with current codes and industry practices. The work will be completed in three stages. Construction of the first phase is 15 percent complete and is scheduled to be complete by February 2019.



Diemer plant east basin rehabilitation – Removal of clarifier walkway bridge

Mills plant industrial wastewater handling system – Placement of tank pad foundations



## 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:

- Employee Housing Rehabilitation—This project will construct eight new houses at four pumping plants (Hinds, Eagle Mountain, Iron Mountain, and Gene). Design is 50 percent complete and is scheduled to be complete by July 2016.
- Sand Trap Rehabilitation—This project replaces deteriorated sand trap equipment located upstream of the Iron Mountain, Eagle Mountain, and Hinds Pumping Plants. Construction is 25 percent complete and is scheduled to be complete by August 2017. *(see photos below)*
- Expansion Joint Repair—This project repairs 16 expansion joints located on the pump delivery lines at each CRA pumping plant. Repairs will be completed in two stages. The first stage repaired three expansion joints, and the second stage will repair the remaining 13 joints. Stage 1 was completed in February 2016. Design of the Stage 2 repairs is 70 percent complete and is scheduled to be complete by June 2016.
- 6.9 kV Switch House Building Seismic Upgrades—This project performs structural upgrades to the 6.9 kV switch houses at each CRA pumping plant. Design is 90 percent complete and is scheduled to be complete by July 2016.
- Copper Basin and Gene Wash Dam Discharge Valves—This project replaces the emergency discharge valves and rehabilitates the discharge structures at Copper Basin and Gene Wash Reservoirs. These facilities are used to draw down the reservoirs in the event of an emergency. Design is 40 percent complete and is scheduled to be complete by December 2016. Valve manufacturers have been prequalified and procurement documents are complete. A request to the Board for award of a valve procurement contract is planned for August 2016.



CRA Sand Trap Rehabilitation—Placement of concrete slab at Iron Mountain Pumping Plant



CRA Sand Trap Rehabilitation—New concrete slab at Iron Mountain Pumping Plant

**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 ORP Facilities—In March 2016, during a planned shutdown of the Weymouth plant, the inlet conduit was diverted to the new ozone contactors and a new bypass conduit was completed. Incoming water now flows through the ozone contactors. Construction of the ozonation system is 96 percent complete and is scheduled to be complete by late 2016. The ozonation system will commence operation in early 2017. *(see photos below)*
- ORP Chemical Upgrades—These chemical systems are needed for integration of the upcoming ozonation system into the plant’s treatment process. Construction of the project is 16 percent complete. The ORP-related upgrades are scheduled to be complete by April 2017, and the bromate control upgrades are scheduled to be complete by May 2018.



Weymouth ORP – Concrete placement at the inlet bypass structure



Weymouth ORP – New inlet bypass structure

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:

- Sepulveda Feeder Urgent PCCP Repairs—This project repairs approximately 8,300 feet of existing PCCP segments with steel liner in two separate reaches. Consistent with the long-term rehabilitation effort planned for the Sepulveda Feeder, the steel liner has been designed as a stand-alone pipe that can accommodate full internal and external pressures on the line. Construction commenced on April 18, 2016 and is scheduled to be complete by June 2016.
- Second Lower Feeder PCCP Rehabilitation—This project rehabilitates the remaining 28 miles of existing PCCP segments within the Second Lower Feeder. Design of the valve and pipe procurement is approximately 43 percent complete and are scheduled to be complete by September 2016.
- Second Lower Feeder Emergency Repairs—This project repairs a leak on the Second Lower Feeder in the city of Long Beach. On March 10, 2016, an emergency construction contract was awarded to repair four PCCP segments using carbon fiber lining. The construction was completed on March 25, 2016 and the pipeline was returned to service on March 30, 2016.

## EXTERNAL AFFAIRS

### STRATEGIC PRIORITY

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

External Affairs efforts will focus on educating the public, legislative leaders, government officials, non-governmental organizations, and other stakeholders on critical water supply conditions and critical water management decisions.

Expand and enhance Metropolitan's outreach to key stakeholder groups in Southern California, statewide, nationally and internationally in support of strategic priorities.

- General Manager Kightlinger was the keynote speaker at the San Diego Downtown Rotary and addressed 200 community and business leaders on water supply reliability, Delta issues and drought conditions. (April 7)
- Metropolitan partnered with the San Diego Chapter of the Industrial Environmental Association to host the inaugural Water Innovation & Technology Showcase for Industry event for 50 businesses. This was a pilot project of Metropolitan's Water for Business-Business for Water program and built off the successful Metropolitan Technology Approval Group program that has been developed for water utilities. (April 27)
- General Manager Kightlinger joined a panel of water experts, moderated by Felicia Marcus, to discuss partnership solutions to address California's water crisis as part of the Los Angeles Business Council's Annual Sustainability Summit at the Getty Center. The event, California's Energy and Water Future in a Global Market, was sponsored by Metropolitan and featured Senate President pro Tem Kevin de Leon and leaders in energy, finance and academia. (April 29)

Inform Southern Californians about the drought/water supply conditions and how they can help improve water supply reliability through conservation actions and support for water supply projects.

- Set up editorial board meeting with Chairman Record, General Manager Kightlinger and Assistant General Manager Zinke at the Los Angeles Times to discuss current water supply conditions and Delta issues. (April 19)
- Metropolitan was honored by the American Academy of Environmental Engineers and Scientists with the Environmental Communications Grand Prize, given for excellence in communicating about water conditions, drought and conservation through the Take a Turn campaign and other outreach initiatives. Assistant General Manager Zinke accepted the award, which was presented at the National Press Club in Washington DC. (April 14)
- The Los Angeles County Board of Supervisors awarded Metropolitan its 2016 Green Leadership award in recognition of the outstanding leadership and commitment to sustainability through its innovative and successful conservation programs, including the nation's largest turf and device rebate programs and outreach to residents and businesses. (April 26)
- Arranged interview with General Manager Kightlinger and reporters from the Sacramento Bee to discuss drought conditions in Southern California and related water supply issues including the Delta and California WaterFix.
- Strong media interest in current water supply conditions, Sierra snowpack and possible ongoing drought impacts continues to generate requests for print, radio and TV interviews. Metropolitan senior management and water resource staff were interviewed by KNBC-TV Los Angeles, Associated Press and Los Angeles Times, and San Jose Mercury News.

## EXTERNAL AFFAIRS

### STRATEGIC PRIORITY

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

Communicate and cultivate support for Metropolitan's key initiatives related to Colorado River supplies.

- Assisted Colorado River Board in developing new outreach materials to highlight achievements by California agencies to diversify water portfolios and strengthen partnerships in the Colorado River basin.
- Set up interview with Colorado River Resources Manager Hasencamp and Arizona Daily Star for a story about an Arizona proposal regarding allocation of Colorado River water that is conserved and stored in Lake Mead.

Secure support for Delta conveyance improvements and habitat restoration projects to maintain State Water Project supplies, including any regulatory and/or legislative policies and funding needed to facilitate its implementation.

Set up interviews with Assistant General Manager /Chief Financial Officer Breaux and Bay-Delta Initiatives Manager Arakawa and reporters from Sacramento Bee, Stockton Record, Associated Press, and KQED-San Francisco radio on Metropolitan's purchase of Delta Wetlands properties.

### CORE

#### **LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS**

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.

Support Board member and executive management communications and working relationships with elected officials, other government leaders, business, agriculture, non-governmental organizations, community leaders and other stakeholders to improve awareness and understanding of water policy issues.

- Staff presented information about state legislation, including Metropolitan sponsored bills, to the Water Advisory Committee of Orange County. (April 1)
- General Manager Kightlinger spoke at the Metropolitan-sponsored Water Education Foundation lecture in which Pat Mulroy discussed opportunities for collaboration to address water challenges. (April 6)
- Staff made a presentation to the West San Gabriel Valley Association of Realtors on current water supply reliability issues and conservation initiatives. (April 7)
- As part of Director Vasquez's Central Basin Municipal Water District Water Education Tour, Metropolitan staff provided participating local business and community leaders with an update on the drought, El Niño, state and regional water supplies, and California WaterFix/EcoRestore. (April 8)
- Metropolitan participated in the Water Education Foundation's Central Valley tour, providing the opportunity to learn about and discuss local and statewide water issues with water industry, environmental and community leaders. (April 13-15)

**LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS continued...**

Support Board member and executive management communications. Continued...

- Director Touhey spoke on water supply reliability within and outside the region to more than 150 attendees at the Metropolitan-sponsored El Monte/South El Monte Chamber of Commerce's State of the City. The event also featured South El Monte Mayor Louie Aguinaga, local officials and community leaders. (April 14)
- Staff spoke at the Design-Build Institute of America's Water and Wastewater workshop in Irvine, which was attended by more than 125 Los Angeles and Orange County members of the Design-Build Institute. The presentation included a historical overview of Southern California water infrastructure and an update on Metropolitan's capital improvement program. (April 14)
- Staff discussed the drought and conservation with employees of Reformation (People and Culture)/Los Angeles, a clothing manufacturer, as part of their Earth Day activities. (April 21)
- Sponsored the Pomona Chamber of Commerce's Legislative Luncheon featuring Congresswoman Norma Torres, California Secretary of State Alex Padilla, California State Controller Betty T. Yee, State Senator Connie Leyva and Assembly Member Freddie Rodriguez. (April 22),
- Staff presented Metropolitan's Sustainable Water Supply Strategy to the California Council for Environmental and Economic Balance. (April 25)
- Staff participated in a discussion on Water Market Solutions for California with the American Groundwater Trust. (April 29)

Inspection Trips

Metropolitan hosted approximately 200 guests on eight inspection trips, including six trips to the Colorado River Aqueduct and the second inspection trip this year for Metropolitan employees.

Community Partnering Program

- Provided sponsorship and staffed exhibit booths on water saving landscape and California Friendly plants at the Theodore Payne Foundation Garden Tour. (April 2-3)
- Sponsored and participated in the Muzeo Museum's Trash Art Contest in Anaheim, which promotes zero-waste recycling and conservation by encouraging students to turn trash to art. (April 9)
- Provided sponsorship and conservation educational materials to the City of Hawthorne's Earth Day Festival. (April 16)
- Sponsored the Samburu Project's Walk for Water in Manhattan Beach. Samburu seeks to educate the public on global water issues, including the need for sustainable water use. (April 17)
- Provided sponsorship and staff support for the U.S. Green Building Council's annual conference at the Energy Resource Center in Downey. The council helps advance water conservation and water use efficiency through building and community design. (April 21)

Support Metropolitan's planning and operational objectives through communication and outreach to various stakeholders, including local government agencies and utilities and the Metropolitan workforce.

Staff participated in meetings with City of Los Angeles and Van Nuys Airport staff to support the Sepulveda Feeder Urgent Repair project.

## LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS continued...

Provide public outreach to increase awareness of water issues and communicate Metropolitan’s interests and Board-adopted policies.

### GM Blogs

- Delta Wetlands Purchase
- Innovative land fallowing pilot program with the Bard Water District
- H2oTalk video blog about the importance of investing in infrastructure and system repairs and upgrades

### Press Releases

- Special logo and activities commemorating the 75th anniversary of Colorado River Aqueduct deliveries
- Joint press release with the U.S. EPA, Bureau of Reclamation, Central Arizona Project and Southern Nevada Water Authority about grant program for water-saving devices and technologies
- New Board Member Mark Gold representing the City of Los Angeles
- Board of Directors approved FY 2016/17 and 2017/18 budget and rates for 2017 and 2018.

### Online

Paid online search on Google Search and the Google Content Network continued. Links to bewaterwise.com appear when keywords such as “drought” “conservation” and “water rebates” are searched for by Southern California users.

### Website

Over 45,000 people visited the English and Spanish versions of bewaterwise.com for tips and ideas on how to conserve water.

### Social Media

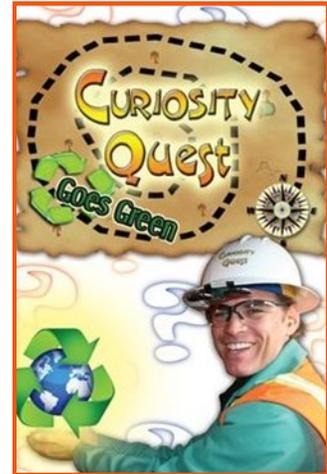
Viewership of mwdh20\_75 years Twitter handle, which features daily posts of the stories of men and women who worked on the Colorado River Aqueduct 75 years ago, continues to grow. *(see photos below)* Facebook followers now top 18,000, with one video on mulch attracting 131,000 views. Instagram followers number more than 1,300.



## LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS continued...

Provide public outreach to increase awareness of water issues and communicate Metropolitan's interests and Board-adopted policies. continued...

- Arranged for Joel Greene, host of the PBS television series *Curiosity Quest*, to provide opening remarks at Spring Green 2016. Greene also filmed activities and interviewed General Manager Kightlinger and other participants for his television show and website on water conservation and Metropolitan's programs. *(see photo to the right)*
- Set up interviews with Assistant General Manager/CFO Breaux and reporters for the Voice of San Diego, Ventura County Star and KPBS radio in San Diego for stories about Metropolitan's proposed budget rate increase and charges.
- Arranged interview with Metropolitan's Ethics Officer Ghaly and Los Angeles Times reporter to discuss the ethics office's proposed budget to support its work.
- Wrote and placed opinion-editorials in the San Diego Union-Tribune and Voice of San Diego on Metropolitan budget and rates.



- Arranged placement of opinion-editorial by Chairman Record in the Ventura County Star.
- Set up interview with Metropolitan Water Quality Lab representative and reporter for Live Science publication on tap water.
- Created and distributed several new fact sheets, including Delta Wetlands Properties purchase agreement, Metropolitan-Bard Water District partnership, 2015 Integrated Water Resource Plan overview, AB 2488 backgrounder, 75th Anniversary Turning on the Tap story and proposed budget and rates. *(see photo on page 20)*

Provide a suite of educational products and programs that promote conservation behaviors and critical thinking of the water issues facing Southern California.

Metropolitan coordinated with the City of Los Angeles Sanitation District, Los Angeles Department of Water and Power, Los Angeles Unified School District and the City of Los Angeles to host the third One Water LA Educational Initiative at Union Station. The topic, From Droughts to Floods: Radar-based Monitoring of California's Aqueducts and Levees was presented by Dr. Cathleen Jones, Radar Scientist of NASA's Jet Propulsion Laboratory. The event was broadcast by the school district's KCLS education station. (April 14)

Diamond Valley Lake Education Program—The education program hosted more than 600 students on field trips and presentations.

Tweets—The Education Unit's tweets on MWD's education programs received over 9,000 impressions using #solarcup, #waterart, #thinkh2o, #mwdeducates through @bewaterwiseh2o and @mwdh2o.

Student Art Program—Metropolitan's student Water is Life art exhibit toured Jurupa Community Services District, Corona DWP, Cucamonga Valley Water District, Irvine Ranch Water District, and Rancho California Water District. These events were captured in various news articles and on social media.

**LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS continued...**

Provide a suite of educational products and programs that promote conservation behaviors and critical thinking of the water issues facing Southern California. Continued...

General Education

The following activities directly reached more than 1,400 students and teachers:

- Presentations to Cole Canyon Elementary, Mesa View Elementary, Whittier Elementary, Dwelling Place Learning Academy, Megan Cope Elementary, Luiseno Elementary, Harvest Elementary, Monte Vista Elementary and E. Hale Curran Elementary
- Outreach and workshops for Cal Poly Pomona Intern Program, Orange County Children's Drinking Water Festival, and a Science Fair at Pasadena Convention Center
- Meetings with Linked Learning, California Department of Water Resources, RJ Frank School, and Archer School for Girls in Brentwood
- Visited schools for Solar Cup program
- Hosted an advisory council meeting and webinar for the World Water Forum College Grant Program
- Worked with history teachers to promote the 75th Anniversary of Metropolitan's delivery of water through the Colorado River Aqueduct and a student from the Moreno Valley School District who submitted a project on the San Jacinto Water Tunnel for National History Day ([www.nhd.org](http://www.nhd.org))

Develop and implement local, state, and federal water policy and legislative strategies consistent with Board-adopted policies.

**FEDERAL**

- Board Vice Chair Ackerman met with members of Congress and other officials during the National Water Resources Association's annual conference. As part of the conference, Metropolitan staff worked with the Association of California Water Agencies and NWRA to generate support for federal legislation to provide tax parity for water and energy conservation rebate programs. (April 11–13)
- General Manager Kightlinger, Assistant General Manager Zinke, and Colorado River Resources Manager Hasencamp, together with other large urban water utility managers, met with key Congressional leaders, including Senate Energy and Natural Resources Committee Chair Senator Lisa Murkowski (R-Alaska), to promote federal policies of interest to Metropolitan at the annual Washington, D.C. conference of the Western Urban Water Coalition. (April 14–15)
- Staff participated in the Los Angeles Area Chamber of Commerce Access DC advocacy trip. Over 100 business leaders joined together to meet with members of Congress and administrators to discuss issues impacting the region including water supply reliability. Topics discussed included proposed drought legislation, tax parity for water and energy conservation and Title XVI reform. (April 23-25)
- General Manager Kightlinger, Assistant General Manager Zinke, and staff briefed Representative Denham on Metropolitan's resource issues.

**STATE**

Metropolitan-sponsored AB 2488 by Assembly Member Dababneh (D-Encino) was heard in the Assembly Water, Parks and Wildlife Committee and passed unanimously on April 12. The bill would allow Metropolitan to perform important maintenance and repairs on the Foothill Feeder by authorizing the Department of Fish and Wildlife to issue an incidental take permit for potential take of the unarmored threespine stickleback, a California fully protected species.

**LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS** continued...

Develop and implement local, state, and federal water policy and legislative strategies consistent with Board-adopted policies. Continued...

## LOCAL

Metropolitan sponsored and participated in a Community Leaders Briefing for Assemblyman Matt Harper (R-Huntington Beach) that featured presentations by Director McKenney and Bay-Delta Initiatives Manager Arakawa about statewide and local water conditions. Attendees included the mayors of Newport Beach and Fountain Valley, County Supervisor Michelle Steele, as well as business, water and community leaders. (April 8)

Metropolitan and Calleguas MWD sponsored and participated in the Association of Water Agencies of Ventura County's Annual Water Symposium in Oxnard. Local elected officials and more than 300 community and water leaders attended the symposium, which explored ways flood control agencies, water agencies and purveyors can collaborate in extreme weather circumstances to manage a diversified water supply portfolio that encompasses stormwater, recycled water, groundwater and surface water. (April 21)

Director Dake, Assistant General Manager Zinke, member agency and Metropolitan staff participated in a legislative briefing with Assembly Member Jimmy Gomez (D-Los Angeles). The briefing focused on drought, water supply conditions and state legislation. (April 22)

## Foster a culture of innovation.

- Metropolitan's TechHub team held a Lunch and Learn workshop, Igniting Innovation to encourage employees to submit ideas for new technologies and innovations that streamline processes, benefit Metropolitan's mission, and support a culture of innovation and technology. (April 11)
- Business Outreach's Innovation and Technology programs partnered with Environmental Entrepreneurs (E2) and the Los Angeles Cleantech Incubator for presentations by Los Angeles Department of Water and Power's Marty Adams and other water policy experts on water entrepreneurship. (April 13)
- Staff hosted a H2O TechTalk corner at Spring Green that featured a self-driving car, 3D printing and virtual reality displays. (April 28)
- Metropolitan's TechHub team partnered with Green LAVA to host a workshop on the Innovative Conservation Program. More than 80 water and energy innovators attended the event at the Los Angeles Cleantech Incubator (LACI). (April 29)

Maintain an effective Business Outreach Program for regional, small businesses and veterans to ensure broad participation and competitive costs.

In April, Metropolitan supported small and disabled veteran businesses throughout the region by participating in the following award programs, conferences and events:

- Together with the Orange County Small Business Administration, facilitated a webinar on Five Secrets to Successful Matchmaking. (April 11)
- Supported the Los Angeles Latino Chamber of Commerce Awards Luncheon honoring Latino-owned businesses in the greater Los Angeles area. (April 13)

## LEGISLATIVE, COMMUNICATIONS AND COMMUNITY RELATIONS continued...

Maintain an effective Business Outreach Program for regional, small businesses and veterans to ensure broad participation and competitive costs. Continued...

- In partnership with member agency staff from Western Municipal Water District, staff spoke at the Water Update Program to inform members on the status of water supply architecture, engineering and construction opportunities in the water sector. (April 14)
- Staff participated in the first California Procurement event hosted by the California Department of General Services at the North San Diego Small Business Development Center. Over 150 small businesses attended the event. Staff provided information on how to do business with Metropolitan. (April 15)
- Partnered with the Los Angeles Department of Water and Power, the Los Angeles Department of Sanitation and the Industrial Waste Management Division to present information to suppliers about upcoming construction projects and opportunities at the Summer Introduction to Engineering and Sciences Program. (April 14)
- Hosted and made a presentation at the Asian Business Association - Los Angeles workshop, Doing Business with Public Agencies: a Supplier Diversity Event. (April 19)
- Participated in the National Association of Women Business Owners at the Inland Empire Chapter - Entrepreneur Scholarship event, which attracted over 300 businesses and government agencies. (April 21)
- Co-sponsored and Executive State Legislative Representative Cole made a presentation on water issues at the National Association of Women Business Owners (NAWBO) Annual Conference and Legislative Day in Sacramento. (April 25)
- Business Outreach participated in the U.S. Small Business Administration's Southern California Small Business Conference 2016, the largest business development event of the year. More than 450 attendees were introduced to opportunities at Metropolitan through exhibits and one-on-one matchmaking. (April 26)



These new brochures and fact sheets have been widely distributed online, at events and community leaders to provide the public with accurate, timely and easy to understand information about Metropolitan initiatives and programs.

## STRATEGIC PRIORITY

### EMPLOYEE DEVELOPMENT

This strategic priority focuses on ensuring employees have the tools necessary to meet current job and future responsibilities to support Metropolitan's goals.

Foster learning and development to expand internal talent pool.

- Completed Session 6 (Team Building) of the second cohort of the Water System Operations Management Academy, which was held at Gene.
- Classes delivered this month includes: two-hour modules of *EXCEL: Pivot Tables, WORD: Professional Reports, Advanced Features, and Images, Shapes and Hyperlinks; VISIO; EXCEL 2010 Part 2; Project Management Essentials, Success Signals*, and a two-day *Everyday Business Writing class*.
- Coordinated and facilitated an inspection tour of the Colorado River Aqueduct facilities for 37 employees.

Acquire talent.

- During the past month, staffing has filled 19 positions and received 11 new requisitions. Staffing is currently recruiting for 69 positions.
- Staff continued to evaluate processes and the use of technology and social media to enhance ability to recruit a diverse workforce.
- In the process of making offers to the next Apprentice class which will consist of 17 new apprentices. The anticipated start date is May.

Foster management excellence.

- On April 27, delivered Module 3 of the Metropolitan Management University focused on *Managing and Leading Others*, designed for Team managers.
- Continued to provide coaching, change-management and team building support through internal staff and external consultants to seven managers and their teams.

Foster workforce diversity.

Employee Relations staff, including Equal Employment Opportunity personnel, underwent a half-day training on *Disabilities and the Interactive Process*. The goal is to better equip staff to effectively respond to employees requesting workplace accommodations.

## CORE

### HUMAN RESOURCES EXCELLENCE

Foster Human Resources Excellence with innovative and efficient processes that attract, hire and develop staff. Also, ensure Metropolitan is a high-performance workplace with excellent leadership and management practices.

Provide excellent Human Resources customer service.

Continuing bi-weekly Caregivers lunchtime discussions to address various caregiver issues being faced by employees.

**HUMAN RESOURCES EXCELLENCE continued...**

Provide proactive, swift, and consistent employee and labor relations.

In April, Employee Relations staff worked with American Federation of State, County and Municipal Employees Local 1902 in resolving two outstanding salary negotiations on single-job classifications. One of the two resolutions resolved a formal bargaining impasse that had been set for hearing before a Fact-Finding panel, pursuant to Metropolitan's Administrative Code.

Manage total compensation benefits.

HR Benefits provided the annual 2015 Total Compensation Statements to all employees to communicate the value of the range of benefits Metropolitan provides.

Manage job classifications.

Updated, and implemented, 6 classifications within Administrative Code guidelines.

Manage Human Resources Information Systems.

Evaluated various recruitment systems to determine the best system for applicants, managers and HR staff.

Foster a high-performance culture.

Facilitated a team building and communication skills workshop at Eagle Rock for teams involved in the SCADA function in Information Technology and Water System Operations.

Update the StrategicHR Plan.

Drafting new StrategicHR plan that will have priorities and objectives that will be used in developing the next year's group-level business plan.

Control leave and disability costs.

- Conducted initial investigations on 11 injury incidents.
- Submitted 9 new claims to Metropolitan's workers' compensation claim administrator.
- Settlements were finalized in 1 claim and 6 claim files were closed.
- Conducted MedVan evaluations at Weymouth, Hinds, Eagle Mountain, Iron Mountain and Gene facilities.
- Arranged 9 medical evaluations (DMV, medical surveillance, hearing conservation, etc.).
- Coordinated random drug/alcohol tests at 2 facilities.
- Addressed 2 accommodation issues.

## REAL PROPERTY ACQUISITION, MANAGEMENT AND REVENUE ENHANCEMENT

Manage Metropolitan's real property assets with a focus on revenue enhancement 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.

- Two permanent easements were acquired to protect access to Metropolitan's Lower Feeder. One permanent easement was acquired from Tri Pointe Homes, Inc. and the other from Brea Industrial III, LLC.
- An entry permit was acquired from the Los Angeles World Airports for pit excavation, pipeline removal and repair, and the contractor's storage and laydown area as part of the Sepulveda Feeder Urgent Repair Project.
- Preliminary land value estimates were completed as part of the spreading basins cost analysis for the Regional Recycled Water Supply Program.
- Staff is conducting due diligence work and coordinating the escrow for the potential acquisition of Bacon, Bouldin and Chipps Islands, and Holland and Webb Tracts.
- Cost studies were completed for the properties impacted by the Orange County region of the Right of Way and Infrastructure Protection Program.

Seek revenue-generating opportunities.

Verizon Wireless was granted a lease to allow a telecommunications facility on a portion of the Colorado River Aqueduct/Foothill Feeder right of way in the city of San Dimas.

An existing lease was amended with New Cingular Wireless to allow for replacement of existing equipment

Foster staff training and development.

- Staff attended Metropolitan-sponsored training courses: Ten Principles of Effective E-mail and Sharepoint.
- Staff completed the mandatory training course Securing the Human Awareness.
- Four staff attended the International Right of Way Association Annual Valuation Seminar.
- One person attended The Appraisal Institute sponsored course, Federal and California Statutory and Regulatory Law Course.

Efficiently maintain and operate Metropolitan's Headquarters building, the Diamond Valley Lake Visitor Center, and the Diamond Valley Lake Education Center.

- Approval was granted to proceed with installing lighting motion sensors in all restrooms and conference rooms at the Headquarters building, as recommended by the energy audit. Work is scheduled to be complete during the next quarter.
- The painting of the accent walls on all floors at Metropolitan's Headquarters Building has been completed.

## REAL PROPERTY ACQUISITION, MANAGEMENT AND REVENUE ENHANCEMENT continued...

Pursue development 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 benefits the surrounding community.

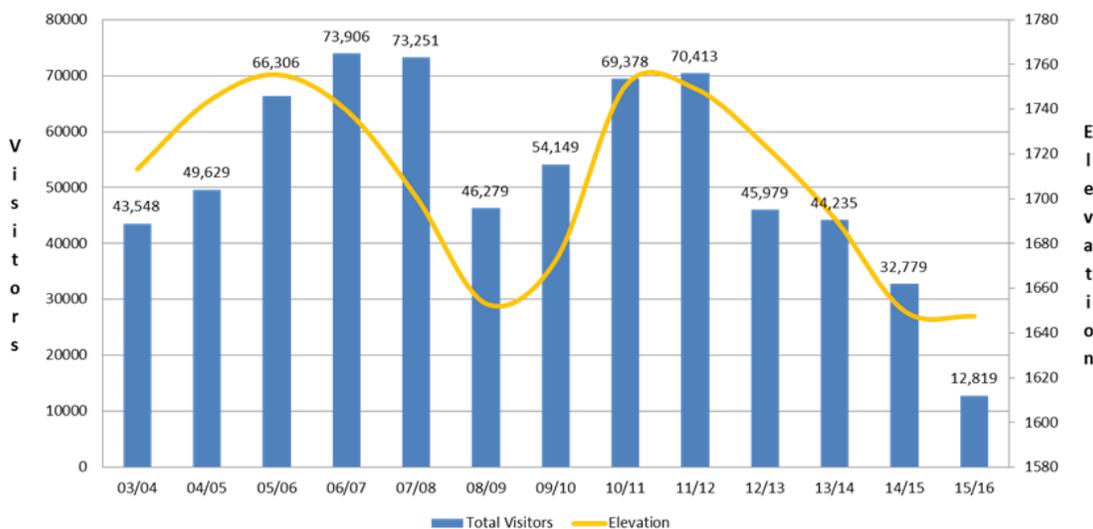
Total visitors to the DVL Marina continued to decline as a result of low elevations and the private boat launch suspension effective May 2015. The recent increase in SWP allocation has put DVL in fill mode and the lake elevation has increased to 40 percent of capacity. In the first ten months of the FY2015/16, Diamond Valley Lake had 12,819 visitors, a drop of 57 percent from the same period in the previous year, and 78 percent from years when the lake capacity ranged from 70-100 percent. Rental boats are available and the DVL trail system remains open to the public.

The contractor has begun work on the DVL Visitor Center Building Improvements project, which includes improvement of more than 2,000 square feet of usable space. Construction includes installing drywall, doors, windows, electrical, lighting, heat, ventilating and air conditioning ducting, and automatic fire sprinklers with alarm panel.

Bids for the DVL East Dam Electrical Upgrades and DVL East Marina Sanitation Facility projects have been submitted and a Board request for action to award the contract is expected in May.

The capital investment plan proposal to install monument and permanent directional signage on the east and west sides of DVL has been approved. The signage is necessary for the protection of Metropolitan's property and assets, and to enhance security and public safety.

### Diamond Valley Lake Visitor / Elevation Data



## WATER RESOURCE MANAGEMENT

### STRATEGIC PRIORITY

#### **LOCAL PROJECTS AND INTEGRATED RESOURCES PLAN UPDATES**

In late 2014, Metropolitan adopted a new Local Resources Program (LRP) to encourage the development of additional supplies within the region. Staff intends to monitor progress under this new LRP through fiscal year 2015/16 to see if additional recommendations are necessary to meet the region's long-term supply needs. Metropolitan's Integrated Resources Plan was adopted in 2010 and will be updated in 2015 with new resource targets. Following adoption of the updated IRP, staff intends to discuss with the Board approaches that Metropolitan can take to help the region meet the updated long-term targets. Staff will also update the Regional Urban Water Management Plan by the end of fiscal year 2015/16.

Local Resources Program Applications—Staff continues to meet with member agencies and sub-agencies to discuss the Local Resources Program and help them with the application process for their proposed projects. This month staff helped the Central Basin MWD with an LRP application for their proposed water recycling project.

On-site Retrofit Pilot Program—Under the On-site Retrofit Pilot Program, Metropolitan reserved \$7.2 million for converting 8,142 acre-feet per year of potable water to recycled water at 268 sites, including schools, parks, golf courses, cooling towers, and one ice rink.

### CORE

#### **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.

Quantification Settlement Agreement Quarterly Meeting—Metropolitan staff attended the Quantification Settlement Agreement quarterly meeting. Staff from all participating agencies met to discuss ongoing implementation of the QSA, as well as any specific obstacles that agencies may be facing to ensure smooth continued implementation of the various transfers that are part of the QSA.

System Conservation Pilot Program—Two funding agreements for Pilot System Conservation Projects selected in the Upper Basin have been executed this month. The Upper Colorado River Commission announced two separate requests for proposals, with the second occurring for projects to be implemented in 2016. The two newly executed agreements are for the first program project with a farmer in New Mexico, and a municipal project with the City of Pueblo in Colorado.

Arvin-Edison Water Management Program—Metropolitan is operating the Water Quality Sub-Account of the Arvin-Edison Water Management Program that will help regulate up to 30,000 AF of supplies. Metropolitan will receive a benefit of up to \$1.5 million in reduction of future program regulation fees.

Streamline approvals for future Sacramento Valley water transfers.

Staff attended two workshops addressing water marketing constraints in California. The first workshop was held on April 5, 2016 at Rand Corporation's Headquarters in Santa Monica. The second workshop was held on April 19-21, 2016 at the California Institute of Technology in Pasadena. Both workshops were attended by representatives from water agencies, academic institutions, and environmental groups.

## WATER SUPPLY continued...

Implement the Conservation Program effectively.

### Long Term Conservation Plan Agreements

- Conservation highlights:
- Metropolitan’s “Rebates for Turf Removal and Water Conservation” won the 2016 Los Angeles County Green Leadership Award.
- Green Media Creations was selected through a competitive Request for Proposal to teach a brand new workshop for our member agencies residential customers on the benefits of turf removal.
- New commercial landscape audits are now being provided by WaterWise Consulting who was selected through a competitive Request for Proposal process.

Santa Ana Unified School District—Metropolitan staff met with representatives from the Santa Ana Unified School District, who are very interested in reducing their water footprint. and is keen on upgrading irrigation throughout their school district. Staff provided an overview of Metropolitan’s incentive programs and guidance on initial steps to take. There are over 50 schools in the District that are hoping to access Metropolitan incentives to become more water efficient.

Altman Specialty Plants—In March 2013, Metropolitan’s Board approved entering into an agreement with Altman Specialty Plants to provide incentives for a project to capture and re-use irrigation water that was estimated to save approximately 3,400 acre feet over a 10-year period. The 375 acre facility in Western MWD’s service area in Riverside County grows annuals and perennials, along with grasses, ferns, lilies, herbs, vegetables, and bedding plants, and serves as a major distribution center for much of California and parts of Nevada and Arizona. An analysis of the water use at Altman shows that over a 12-month monitoring period (after project completion), Altman saved over 300 AF compared to the previous year and baseline water use estimates. Metropolitan offered Altman incentives totaling \$357,659, and in partnership on the project, Western MWD also provided \$100,000 in incentives; the United States Department of Agriculture offered technical and other financial assistance. The Altman project highlights significant water savings potential in the commercial/agricultural sector, and demonstrates how creative ideas can increase efficiency and reduce costs for a single customer, while also providing benefits to Metropolitan’s entire service area. *(see photo below)*



Altman Specialty Plants

Participate and lead, where appropriate, in statewide and regional planning efforts.

CalDesal's announces new Executive Director—Metropolitan staff participated in the selection of CalDesal's new Executive Director Paul Kelley. Paul is currently the principal of Paul Kelley Consulting representing clients in the water, energy and government fields. He is a past president of the Association of California Water Agencies, and has served on the California Water Commission. Paul was the Director of the Sonoma County Water Agency and also served as a county supervisor during this period. CalDesal is a consortium of water agencies and desalination industry stakeholders dedicated to advancing desalination and salinity management in California. Metropolitan is a founding member, participates in CalDesal's committees, and currently holds the treasurer position.

Rolling Blackouts in Southern California—Staff attended a workshop on increased risks for rolling blackouts in Southern California due to the shutdown of the Aliso Canyon natural gas storage facility in Porter Ranch. The Aliso Canyon facility is a critical link in Southern California's natural gas supply system. It supports 9,800 megawatts of grid electricity in Southern California, especially in Los Angeles and Orange Counties. Restricted use of the facility could cause 14 summer days with rolling blackouts, depending on demand, with additional shortages in the winter. Metropolitan and other water agencies participating in Demand Response Programs could be impacted by greater than expected calls to implement actions including increased use of back-up generation. State agencies, along with Los Angeles Department of Water and Power, are implementing a plan for managing and mitigating the risks. The plan includes targeted operation of the Aliso Canyon facility, coordinating energy utility operations and expanding the state's FlexAlert program and other energy efficiency measures. Additional workshops will be held throughout the year.

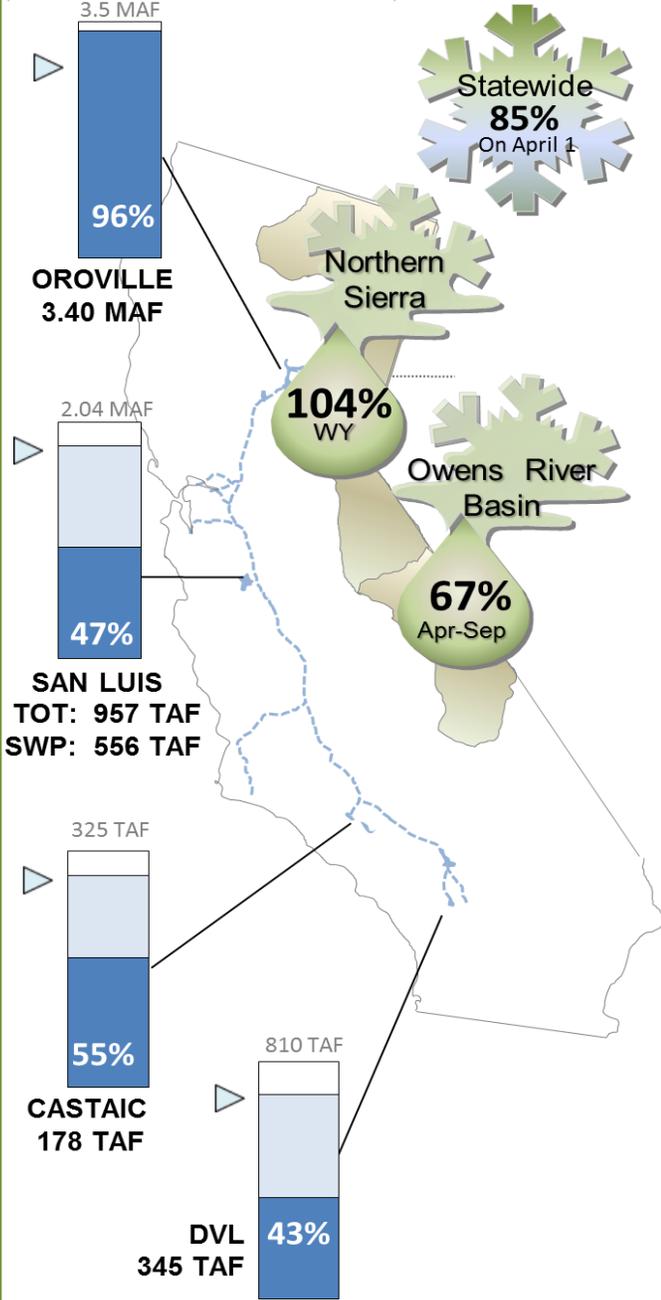
Colorado River Basin Study—The U.S. Bureau of Reclamation has begun Phase 2 of the Colorado River Basin Study Moving Forward effort. In Phase 2, the Coordination Team, with input from the workgroups formed in Phase 1 on which Metropolitan is represented, will integrate and synthesize the Phase 1 opportunities and potential future actions identified by the workgroups and identify proposed pilot projects. The goal of Phase 2 is the implementation of the proposed pilot projects. The ultimate goal is to identify actionable steps to address projected water supply and demand imbalances that had broad-based support and provide a wide range of benefits.

# WATER SUPPLY CONDITIONS as of April 30, 2016

## 2016 SWP Allocation

1,146,900 AF  
60% of Table A

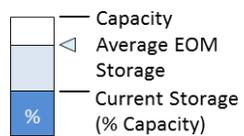
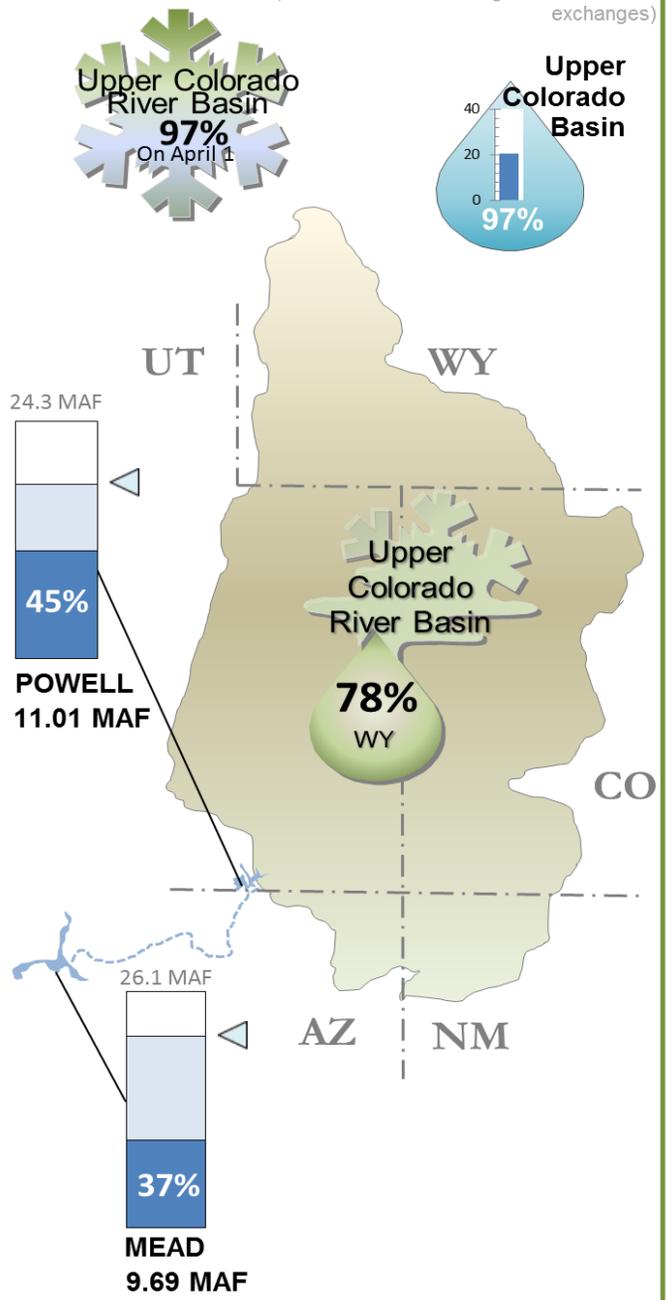
(Does not include CVWD & DWA Table A)



## 2016 Colorado River

865,000 AF  
69% of full CRA

(Does not include storage withdrawals or exchanges)



# WATER SYSTEM OPERATIONS

## CORE

### PROVIDE RELIABLE WATER SUPPLIES

System Operations delivered approximately 110,000 acre-feet of water to meet member agency demands in April, which averaged 3,650 AF per day. Treated water deliveries for April totaled 47,000 AF, or 43 percent of total deliveries for the month. In April, 88,000 AF of Colorado River water was pumped. This was an average 2,940 AF per day. Year to date CRA diversions are 285,000 AF. State Water Project imports averaged 2,485 AF per day for 74,500 AF for the month. This was an increase of 15,500 AF from March 2016. This increase was due to increased groundwater deliveries and resumption of flows on the Inland Feeder. System Operations continued the strategy of minimizing the use of SWP water wherever possible. For the month of April, the use of SWP water accounted for 37 percent of Metropolitan's deliveries.

Storage at Diamond Valley Lake increased slightly to 343,000 AF, or 42 percent full as Inland Feeder deliveries were increased to 850 cubic feet per second on April 1. State Water Project blends to the Weymouth, Diemer, and Skinner plants remained at zero percent to conserve water in an effort to rebuild storage reserves depleted after years of extended drought. Water levels at Diamond Valley Lake have begun to rebound from low levels not seen since the lake's initial fill. Metropolitan's flexible storage account in DWR's Castaic Lake has also started to refill from exceptionally low levels. The Greg Avenue pump station remained off line in the month of April except for a three-day operation to support the Jensen plant shutdown.

System Operations continued to maximize power generation throughout the month. In April, Metropolitan's hydroelectric plants generated an average of 17.7 megawatts per hour for 12,800 megawatt-hours for the month.

## CORE

### OPTIMIZE MAINTENANCE

In conjunction with the scheduled Jensen plant outage, staff successfully completed repairs to four large valves ranging from 78 to 132 inches in diameter at the Foothill Pressure Control Structure. The repairs included replacing the sealing components on the valves and recoating to restore performance and corrosion resistance. Additionally, 6.6 miles of pre-stressed concrete cylinder pipe (PCCP) on the upper portion of the Sepulveda Feeder was inspected using eddy-current technology to determine the current condition to plan for future steel lining reinforcement projects. After the upper portion of the Sepulveda Feeder was returned to service, staff dewatered the lower portion of the pipeline from Van Nuys to Culver City to facilitate repairs on two areas of PCCP totaling 8,300 feet. These areas of the pipe had become weakened due to a high number of wire breaks. The repairs were determined to be necessary after a recent inspection using an unmanned probe called a pipe diver. The pipe diver technology allowed the most recent inspection to be performed without dewatering the pipe. Insertion of the steel liner reinforcement will be performed by a contractor and will take approximately 45 days to complete. During the outage, agency deliveries will continue using system flexibility to provide service from the Culver City Feeder to the south, and the upper portion of the Sepulveda Feeder to the north. *(see photos on page 30)*

The La Verne Shops manufactured two operating shafts for a 12-inch pressure regulating valve that controls pressure on the Orange County Feeder. Staff analyzed a broken shaft and recommended a significantly stronger grade of stainless steel material for the new shaft. The older shaft had broken after years of repeated operating cycles. The La Verne Shops reverse-engineered, manufactured, and fit-tested the shaft to ensure proper operation. The reverse-engineering was necessary because the replacement parts and drawings are not available from the original manufacturer.

The incoming electrical service to the Skinner plant was replaced and commissioned in 2007. This month, staff performed the first major maintenance and testing on the new switchgear.

## CORE

## OPTIMIZE MAINTENANCE *continued...*



Foothill Pressure Control Structure 132-inch isolation valve before (left) and after (below) cleaning and coating. Story on page 29.



Staff completed repairs to a main pump discharge valve at the Eagle Mountain pumping plant. During a regular maintenance inspection late last month, it was noted that the valve stem, used to open and close the valve, had excessive movement. Repairs to the valve required fabrication at the La Verne Shops because the equipment is no longer available from the manufacturer.

Staff performed major maintenance and testing at the Greg Avenue pump station. The work included disassembly, inspection, and testing of mechanical and electrical equipment. Coating repairs to the internal components of the pumps and replacement of the mechanical seal due to erosion and wear were also completed. *(see photo to the right)*



Staff reinstalling pump casing at Greg Avenue pump station.

# WATER SYSTEM OPERATIONS

## CORE

### MANAGE THE POWER SYSTEM

Staff provided final comments to the proposed Hoover power contracts that will become effective on October 1, 2017. The Bureau of Reclamation and Western Area Power Administration will consider Metropolitan's comments as well as the other Hoover power contractors' comments in finalizing the contracts. It is anticipated that the contracts will be ready for Board consideration and approval this summer.

On April 27, Metropolitan continued its discussions with other electric agencies on possible cooperative arrangements for the operation of Metropolitan's Colorado River Aqueduct transmission system. These arrangements would replace an existing CRA energy and transmission agreement that will expire September 30, 2017.

## CORE

### IMPROVE SECURITY AND EMERGENCY RESPONSE

On March 30, staff conducted a workshop with representatives from California Department of Water Resources and City of Los Angeles' Department of Water and Power to coordinate response to a major earthquake in Southern California. These three agencies own and operate the major aqueducts supplying water to Southern California. The participants will use information gathered from this workshop to continue development of a coordinated response strategy for the three aqueducts to ensure Southern California has water after a major earthquake.

## CORE

### DEVELOP WORKFORCE

The Water System Operations Apprentice and Technical Training Programs help develop and train personnel to become qualified electricians and mechanics responsible for maintaining Metropolitan's water treatment and distribution systems. The seventh period of instruction for the Class of 2016 mechanical apprentices includes all aspects of valving: large valves, flow control and pilot valves, cross connection prevention, dewatering, and surge protection. The class visited the La Verne machine shop for cross connection and large valve training followed by pilot valve training at the Rio Hondo Power Plant. These training sessions were conducted in conjunction with subject matter experts from Metropolitan's journey-level workforce. *(see photos below)*



Mechanical apprentice adjusting a pilot valve.



Mechanical apprentice assembling a pressure control valve used for downstream control.

# WATER SYSTEM OPERATIONS

## CORE

### PROTECT SOURCE WATER QUALITY

On April 19, staff met with the Nevada Environmental Response Trust and other Colorado River stakeholders for an inspection of the Tronox perchlorate remediation site in Henderson, Nevada. Participants reviewed the groundwater treatment system, site operations and management, and current remedial investigations for soil and groundwater cleanup. Staff continues to closely coordinate with the Trust and other stakeholders on the development of the site's long-term remedial plan to ensure protection of Colorado River drinking water supplies.

Also in Henderson, on April 20, staff participated in a workgroup meeting held for the Topock Chromium-6 Groundwater Remediation Project to discuss the project progress and the subsequent Environmental Impact Report, expected to be available for public review in September 2016. Construction of the final groundwater remedy system is scheduled to begin in 2017.

Staff continues to monitor the Department of Energy's progress in the removal of uranium mill tailings along the Colorado River near Moab, Utah. In early 2016, the DOE achieved a significant milestone with removal of half of the original 16 million tons of tailings, but the tailings removal rate could slow down due to proposed federal budget cuts. Metropolitan sent a letter to the Secretary of Energy and Congressional delegation to advocate for increased funding for the project in Fiscal Year 2017 to expedite cleanup and meet DOE's targeted completion date of 2025.

## 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 April 2016.

Staff worked with Association of California Water Agencies to prepare comments on the State Water Resources Control Board's proposed changes to the Aquatic Pesticide Weed and Algae Permit, which is up for its five-year renewal. Metropolitan is enrolled under this permit to allow the application of copper sulfate to control taste and odor causing algae in reservoirs. The Control Board added the use of peroxide-based compounds to the permit, but placed restriction on their use. ACWA's comment letter supported the inclusion of peroxide-based compounds, but advocated for removing the flow restrictions, such that their applicability could be broadened to lakes and reservoirs.

## CORE

### PROVIDE TECHNICAL SUPPORT TO MEMBER AGENCIES

Metropolitan completed and submitted its Annual Water Quality Report to the member agencies. This report contains a summary of water quality monitoring data from Metropolitan's system for calendar year 2015. This report is used, in part, by the agencies in the preparation of their Consumer Confidence Reports. The Consumer Confidence Report is provided to drinking water customers to inform them of the quality of their drinking water.

## CORE

## OPTIMIZE WATER TREATMENT AND DISTRIBUTION

State Water Project target blends at the Weymouth, Diemer, and Skinner water treatment plants were zero percent for April. Flow-weighted running annual averages for total dissolved solids from February 2015 through January 2016 were 649, 653, and 618 mg/L for Weymouth, Diemer, and Skinner plants, respectively.

A successful Jensen plant shutdown was completed from April 5 – 11. All work tasks were completed on time or ahead of schedule, facilitating the plant return to service on time with no issues and no injuries. The purpose of the full-plant shutdown was to facilitate high-voltage work for electrical improvements that will increase plant reliability. A contractor performed measurements and electrical equipment identification needed to accurately fabricate new equipment. Jensen plant staff replaced flow meters and added piping to increase chlorine disinfection reliability. Work also included installation of steel guides, fabricated and machined by staff in the plant outlet tower to allow operators to raise and lower the weir plate into position without the need for a scheduled shutdown to reach the gate. The plate provides for low flow treatment operations when combined with Greg Avenue pumping operations for system flexibility. (*see photo right*)



Installation of weir gate into 60-foot-deep structure. The weir gate sits on the bottom of a pipe to hold back water under low flow conditions



Brown Bear tractor in operation within plant lagoons.

At the Mills plant, reclamation basins treat both spent filter backwash and residual solids from the sedimentation basins. Reclamation basins are taken out of service periodically, dried for several months, and then the solids are removed for recycling or reuse. Weekly turning over of the solids reduces drying time by up to four weeks, thereby increasing reclamation basins availability and reliability in operations. Additionally, the drier solids weigh less and reduce the disposal cost by up to 50 percent. A tractor aerates the solids by breaking them into small parts, which allow more exposed area for drying. During this tractor operation windrows are also formed, which allow excess water to be channeled away from material. (*see photo left*)

# WATER SYSTEM OPERATIONS

## CORE

### PREPARE FOR FUTURE LEGISLATION AND REGULATION

On April 15, the State Water Resources Control Board released a new proposal for how water agencies will be charged fees for regulatory oversight. Staff is reviewing this proposal and will present information at the Engineering and Operations Committee's May meeting.

## CORE

### SUPPORT EDUCATION AND OUTREACH INITIATIVES

Staff assisted with seven, three-day tours of the Colorado River Aqueduct this month. A total of 280 participants (40 per tour) visited key sites along the CRA and received information relating to agricultural water use, water conveyance and storage, power production, and coordination of resources related to Colorado River users. Additionally, staff supported a legislative group tour of 15 participants and a media tour for two Sacramento Bee reporters at Diamond Valley Lake.

Staff conducted six plant tours for approximately 200 participants during the month at the Jensen, Skinner and Weymouth plants. Of note, staff conducted lab and plant tours and provided presentations on pertinent topics for a group of Metropolitan staff. Tour participants included Board members, member agencies, local government officials, university science and engineering students and non-profit organization members who learned about water treatment processes, source water protection, and drought response initiatives.

#### 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 4/30/16	% of Capacity
DVL	343,292 AF	42
Lake Mathews	158,241 AF	87
Lake Skinner	39,047 AF	89

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

**General Manager:** Jeffrey Kightlinger  
**Office of the GM No.** 213-217-6139  
**Email:** OfficeoftheGeneralManager@mwdh20.com

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

[www.MWDH2O.com](http://www.MWDH2O.com)

[www.BEWATERWISE.com](http://www.BEWATERWISE.com)