MEETING OF THE BOARD OF DIRECTORS OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY Jointly with the

PLANNING & OPERATIONS COMMITTEE

September 8, 2020, 8:30 a.m.

Due to the spread of COVID-19 and as authorized by the Governor's Executive Order, MWDOC will be holding all upcoming Board and Committee meetings by Zoom Webinar and will be available by either computer or telephone audio as follows:

Computer Audio: You can join the Zoom meeting by clicking on the following link: https://zoom.us/j/8828665300

Telephone Audio: (669) 900 9128 fees may apply

(877) 853 5247 Toll-free

Webinar ID: 882 866 5300#

P&O Committee:Staff: R. Hunter, K. Seckel, J. Berg,Director McVicker, ChairH. De La Torre, K. Davanaugh,Director DickV. Osborn

Director Yoo Schneider

Ex Officio Member: Director Tamaribuchi

MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

PUBLIC COMMENTS - Public comments on agenda items and items under the jurisdiction of the Committee should be made at this time.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - Determine there is a need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda. (Requires a unanimous vote of the Committee)

ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING -- Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the District's business office located at 18700 Ward Street, Fountain Valley, California 92708, during regular business hours. When practical, these public records will also be made available on the District's Internet Web site, accessible at http://www.mwdoc.com.

ACTION ITEMS

BUREAU OF RECLAMATION WATERSMART GRANT RESOLUTION

DISCUSSION ITEMS

- 2. UPDATE ON COVID-19/HEAT EVENT RELATED ITEMS (ORAL REPORT)
- WEROC ASSESSMENT PRESENTATION PART 1

INFORMATION ITEMS (The following items are for informational purposes only – background information is included in the packet. Discussion is not necessary unless a Director requests.)

- 4. OC-70 FLOW METER ACCURACY TESTING UPDATE
- 5. METROPOLITAN'S ASSESSED VALUATION FOR MWDOC AND ORANGE COUNTY FOR FISCAL YEAR 2020-21
- 6. STATUS REPORTS
 - a. Ongoing MWDOC Reliability and Engineering/Planning Projects
 - b. WEROC
 - c. Water Use Efficiency Projects
- 7. REVIEW OF ISSUES RELATED TO CONSTRUCTION PROGRAMS, WATER USE EFFICIENCY, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, DISTRICT FACILITIES, and MEMBER-AGENCY RELATIONS

ADJOURNMENT

NOTE: At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated, and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.



ACTION ITEM

September 16, 2020

TO: Board of Directors

FROM: Planning & Operations Committee

(Directors McVicker, Yoo Schneider, Dick)

Robert Hunter, General Manager

Staff Contact: Joe Berg, Director of WUE

Rachel Waite, WUE Analyst II

SUBJECT: Bureau of Reclamation WaterSMART Grant Resolution

STAFF RECOMMENDATION

Staff recommends the Board of Directors adopt the attached resolution in support of MWDOC's 2020 WaterSMART Water and Energy Efficiency grant application to be submitted to the Bureau of Reclamation on September 17, 2020.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

In response to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2021 Funding Opportunity Announcement (FOA), staff will be submitting a grant application proposing the Orange County Sustainable Landscapes Program to provide incentives for residential and commercial properties to participate in water conservation by increasing the water use efficiencies of their landscapes. The proposed project will request up to \$2 million and will provide benefits that include decreased outdoor water use, energy savings, and runoff reductions. Additionally, this Program will assist Orange County retailers in complying with SB 606 and AB 1668 and promotes conservation as a California way of life.

Budgeted (Y/N): N/A	Budgeted amount: N/A		Core	Choice X
Action item amount: N/A		Line item: N/A		
Fiscal Impact (explain if unbudgeted):		i): N/A		

DETAILED REPORT

In June 2020, the Bureau of Reclamation released its "WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2020" Funding Opportunity Announcement. The objective of this Opportunity is to provide funding for projects that result in quantifiable water savings, energy savings, and support broader water reliability benefits. Eligible projects conserve and use water more efficiently; increase the production of hydropower; mitigate conflict risk in areas at a high risk of future water conflict; and accomplish other benefits that contribute to water supply reliability in the western United States. The President's FY 2021 budget request includes \$7.8 million for WaterSMART Grants. The final amount of funding available for award under this FOA is contingent on finalized FY 2021 appropriations and the demand for funding under this and other categories of WaterSMART Grants. Eligible applicants must reside in the designated 23 Western United States or Territories.

The Bureau has established two funding groups: Group 1 includes projects that will be awarded up to \$500,000; and Group 2 includes projects that will be awarded up to \$2 million each. Staff will be submitting a Group 2 application proposing an Orange County Sustainable Landscapes (OCSL) Program to provide incentive funding for residential and commercial properties to promote water conservation through the transformation of high water using landscapes to landscapes utilizing a combination of California Friendly/Native installations and high efficiency irrigation. The OCSL Program is a multibeneficial project, as suggested in the Governor's Water Resilience Portfolio. The primary benefit of the Program is reductions of outdoor water consumption. Secondary benefits include reductions in energy use, reductions in dry and wet weather runoff and associated non-point source pollution, reductions in carbon emissions, and increases in urban biomass and carbon sequestration. Additionally, this Program will provide support to Orange County retailers in complying with SB 606 and AB 1668, which establishes agency water budgets that consider outdoor irrigation efficiencies.

The FOA requires all applications to include an official Board Resolution supporting the grant application. The proposed Resolution containing the required content is attached for your consideration.

BOARD OPTIONS

Option #1: Staff recommends the Board of Directors adopt the attached resolution in support of MWDOC's 2020 WaterSMART Water and Energy Efficiency grant application to be submitted to the Bureau of Reclamation on September 17, 2020.

Fiscal Impact: This grant proposal may result in an award of up to \$2 million in federal funds that will directly benefit water agencies and consumers in Orange County. Utilization of Metropolitan's Conservation Credits Program funding to meet matching requirements results in nothing more than staff time to implement this program.

Business Analysis: The award of this grant is estimated to result in saving more than 10,000 acre feet of water over the useful life of the transformations/devices.

Option #2: Do not approve the staff recommendation.

Fiscal Impact: A potential loss of up to \$2 million in grant funds competitively awarded to MWDOC.

Business Analysis: Significantly less water savings would be realized as a result of lower incentive levels and program participation rates.

RESOLUTION OF THE BOARD OF DIRECTORS OF MUNICIPAL WATER DISTRICT
OF ORANGE COUNTY SUPPORTING A BUREAU OF RECLAMATION 2021
WATERSMART: WATER AND ENERGY EFFICIENCY GRANT APPLICATION

WHEREAS, the Municipal Water District of Orange County submitted an application to the Bureau of Reclamation requesting funding for an Orange County Sustainable Landscapes Program to promote water conservation in the Municipal Water District of Orange County service area through the transformation of high water using landscapes to landscapes utilizing a combination of California Friendly/Native installations and high efficiency irrigation.

WHEREAS, the Municipal Water District of Orange County is committed to developing and implementing a comprehensive water use efficiency program designed to meet our local water supply reliability goals, make conservation a California way of life, and meet water budgets as established by SB 606 and AB 1668,

NOW, THEREFORE, BE IT RESOLVED, that the Municipal Water District of Orange County Board of Directors designates Robert J. Hunter, General Manager, as the official who has reviewed and supports the application submittal and the legal authority to enter into an agreement on behalf of the District, and designates Joseph M. Berg, Director of Water Use Efficiency, as the District's representative to sign the progress reports and approve reimbursement claims.

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Municipal Water District of Orange County Board of Directors assures its capability to provide the amount of funding and in-kind contributions specified in the funding plan.

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the Municipal Water District of Orange County will work with the Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement.

Said Resolution was adopted on September 16, 2020, by the following roll call vote:

AYES:

NOES: ABSENT ABSTAIN	
Resolution No.	HEREBY CERTIFY the foregoing is a full, true, and correct copy ofadopted by the Board of Directors of Municipal Water District of at its meeting held on September 16, 2020.
	Maribeth Goldsby, Secretary Municipal Water District of Orange County



DISCUSSION ITEM September 8, 2020

TO: Planning & Operations Committee

(Directors McVicker, Yoo Schneider, Dick)

FROM: Robert Hunter, General Manager

Staff Contact: Vicki Osborn

SUBJECT: WEROC Assessment Presentation - Part 1

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee: Review and discuss the presentation.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

The WEROC Department in three part series is presenting the WEROC Assessment performed by the Director of Emergency Management. Part One covers what emergency management is, the structure of the State and Orange County, the history of WEROC and the process used to perform the assessment.

Attached is the presentation slides.

Budgeted (Y/N):	Budgeted amount:		Core	Choice	
Action item amount:	Line item:				
Fiscal Impact (explain if unbudgeted):					



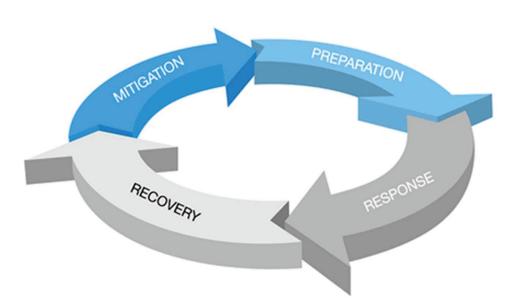




WEROC Program Assessment

Planning and Operations Committee 08.03.2020

The Emergency Management Cycle





2







Preparedness

- Activities, programs, and systems are those that exist prior to an emergency and are used to support and enhance response to an emergency or disaster.
- Planning, training, and exercises are among the activities conducted under this phase.



3





Response

- Activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster that helps to reduce affects to water infrastructure and speeds recovery.
- Response activities include alert and notification, EOC activation, direction and control, mutual aid, etc.



4





Recovery

- Restoring systems to normal
- Short-term recovery actions are taken to assess damage and return vital lifesupport systems to minimum operating standards; long-term recovery actions may continue for many years.



* This includes agency disaster cost recovery

5





Mitigation/Prevention

Mitigation activities are those that either prevent the occurrence of an emergency or reduce the district's vulnerability in ways that minimize the adverse impact of a disaster or other emergency. Mitigation is a best practice that can protect lives and save money.



(







ICS - Malibu Fire 1970



SEMS -East Bay Hills Fire 1991



NIMS – 9/11 Attacks

-



California Emergency Services Act CA Govt. Code 8605:

- Each county is designated as an operational area
- The governing bodies of each county and of the political subdivisions in the county may organize and structure their operational area; for the coordination of emergency activities

8





The Operational Area

Political subdivisions within the county boundaries

- Cities
- Schools
- Special Districts

2020 OA Agreement **Structure Overview**

FOR REFERENCE ONLY: In case of discrepancy, the Agreement itself shall prevail. This chart depicts the OA structure only and does not describe the entirety of the OA Agreement.

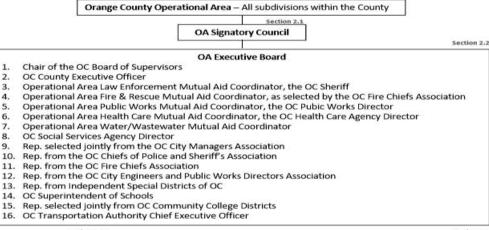
Section 3.1

OA Jurisdiction Responsibilities

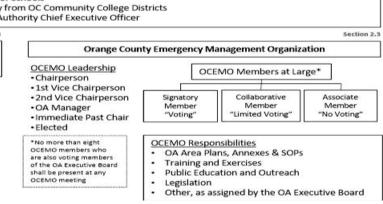
- Participate
- Cooperate
- **Emergency Management** Program
- Emergency Plan and Organization
- Procedures
- Training and Exercises
- **Emergency Assistance**
- Resource Lists
- Critical Points of Contact
- Disaster Recovery

County Specific Responsibilities

- as OA Lead Agency 24 hour contact
- Operational Area Emergency Operation Center
- Initial EOC Activation Staffing
- Disaster Recovery
- Operational Area Emergency Plan and Annexes
- Operational Area Executive **Board Support**
- **Executive Board** Subcommittee and Working **Group Support**



Other Sub Committees & Working Groups formed by OA Board







- County Specific Responsibilities as OA Lead Agency
 - ♦ 24 hour contact
 - Operational Area Emergency Operation Center
 - Initial EOC Activation Staffing
 - Disaster Recovery
 - Operational Area Emergency Plan and Annexes
 - Operational Area Executive Board Support
 - Executive Board Subcommittee and Working Group Support



- Participate
- Cooperate
- Emergency Management Program
- Procedures
- Training and Exercises
- Emergency Assistance
- Resource Lists
- Critical Points of Contact
- Disaster Recovery









Orange County Emergency Management Organization

- Subcommittee to OA Executive Board
 - Cities
 - Schools
 - Special Districts
 - ♦ COAD Private non profits Volunteer Organizations
 - Private Sector
- OA Area Plans, Annexes & SOPs
- **Training and Exercises**
- Public Education and Outreach
- Legislation
- Other, as assigned by the OA Executive Board









Changing Times and Influencers





- SEMS-NIMS & Regulations
- Past Events
- Knowledge Skills and Abilities
- Technology
- Expectations











Background

Created in 1983 (37 years ago)

Volunteer Emergency Preparedness Organization

- WEROC's primary mission was originally to coordinate and support emergency preparedness activities
- Radio Communication (1st Radio System)
- Mutual Assistance Agreement (VEPO Agreement)
- Part time job duty
 - MCI Mail was launched in 1983; an early step into email
 - In 1983 the first analog cellular system was widely deployed in the US

^{*} Note the County Operational Area Agreement was not created until 1995



The Name Change - April 8, 1999

- ♦ VEPO IS NOW "WEROC" Municipal Water District of Orange County Resolution No. 1623
- Water Emergency Response Organization of Orange County or WEROC, is now the new name for the organization formerly known as VEPO (Volunteer Emergency Preparedness Organization).
- ▶ The old name (used since the organizations beginning in 1983) continued to cause misunderstanding and confusion even among the water industry e.g. initial reaction to the word "Volunteer", no mention of the word "Water", and no clue given as to a geographic location. The new name addresses these concerns and should enhance recognition of the organization.

17



2004 WEROC Assessment

- New program coordinator assumed the responsibilities of WEROC
- Program Assessment
- Additional mission activities added as WEROC's core functions and capabilities identified and changed with new statues and expectations.

The Present WEROC Foundation

Preparedness

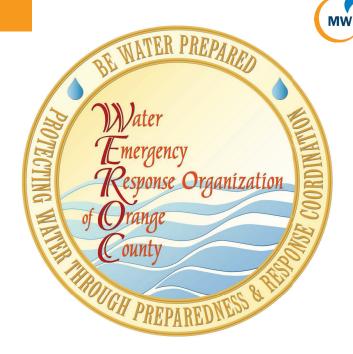
- Training, Planning and Exercises
- Day to Day Member Agency Support
- WEROC EOC Preparedness
- Required Planning and Plans

WEROC Emergency Response Coordination

- MWDOC Staff Commitment to Respond
- Information Collection/Intelligence Sharing
- Inter-Agency Cooperation
- Communication Systems
- Resource Needs
- WEROC EOCs

Representation

- Local and Regional Meetings
- WEROC became an integral member of the County's Operational Area



19

WEROC Funding Structure



- 1983 MWDOC & OCWD
- 2005 Expansion of Funding Agencies
 - MWDOC & OCWD
 - Addition of 3 MET Cities
 - Anaheim
 - Fullerton
 - Santa Ana
 - Wastewater added to WEROC
 - OCSD
 - SOCWA

Operational Revenue Share	Op. Budget Share (%)
Anaheim	3.8%
Fullerton	3.8%
Santa Ana	3.8%
SOCWA	3.8%
OCSD	9.8%
OCWD	25.0%
MWDOC	50.0%

Other Funding Sources?





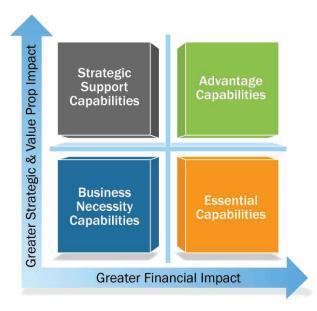
- UASI Urban Areas Security Initiative & Homeland Security Grants
 - ♠ Regional Projects -3 to 5 years out
 - ♦ Shovel ready projects maybe now Grant Dust
 - Some training \$\$ available
- Hazard Mitigation
 - Pre-Disaster
 - ▲ 404 or 406 monies
- Emergency Management Performance Grant (EMPG)
 - **\$\$0**
 - Not open to Special Districts
- Fire Grants
 - Competitive, but possibly





2020 WEROC Assessment

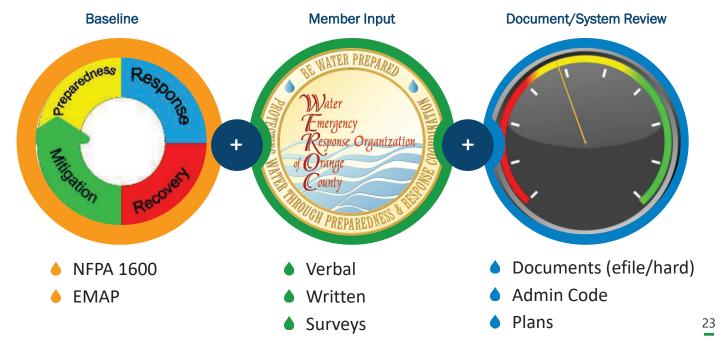




Assessment Process Used







National Fire Protection Association NFPA 1600

- 6 categories
- > 32 areas



Next Meeting





Strengths & Accomplishments

Current Sustained Programs

Key Findings



25



INFORMATION ITEM

September 8, 2020

TO: Planning & Operations Committee

(Directors McVicker, Yoo Schneider, Dick)

FROM: Robert Hunter, General Manager

Staff Contact: Charles Busslinger

SUBJECT: OC-70 Flow Meter Accuracy Testing Update

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file this report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

MWDOC staff continue to work with staff from Metropolitan Water District (MET) and East Orange County Water District (EOCWD) on an investigation of the accuracy of the billing meter at Service Connection OC-70 under MET Administrative Code Section 4506 - Metering of Water. As part of this investigation, MET and MWDOC agreed to a testing methodology using Utah State Water Research Laboratory (UWRL). Two days of testing at UWRL commenced on August 5, 2020. During UWRL testing, the new portable ultrasonic flow meter, provided by MET for this investigation, failed. MET is currently; working to replace the meter, scheduled a meeting with MWDOC, EOCWD, and UWRL hydraulic experts on September 2, 2020 to review the test, and then plans to proceed with testing.

DETAILED REPORT

In January 2015, EOCWD informed MWDOC of what they believed to be a flow metering error at OC-70. Subsequently, MWDOC notified MET of the concern and requested the meter be tested under the provisions of MET's Administrative Code.

Budgeted (Y/N):	Budgeted amount:		Core	Choice	
Action item amount:	Line item:				
Fiscal Impact (explain if unbudgeted):					

MET Administrative Code Section 4506 - Metering of Water

Section 4506 states:

"Any member public agency may have any meter through which water is served from the District's facilities to any area within such member public agency tested by the District at any time. Any member public agency affected shall have the right to be represented by a qualified observer at and during any such tests. In the event that any such test shall disclose an error exceeding 2 percent, an adjustment shall be made in charges made to the affected member public agency, covering the known or estimated period of duration of such error, but in no event exceeding six months, and the expenses of such test shall be borne by the District; otherwise, such expense shall be borne by the member public agency requesting such test."

MWDOC staff believe a metering discrepancy may exist at OC-70 because of the original design of the facility. There is a tee one pipe diameter downstream of the existing venturi that connects to the pumps. When in a pumping condition, we believe turbulence is created at that juncture which may disrupt the accuracy of the venturi meter. Venturi meters without flow interferences are very accurate as long as they have sufficient upstream and downstream straight pipe runs. Newer MET design guidelines incorporate standards for straight runs of pipe of 10-pipe diameters upstream and 5-pipe diameters downstream of a meter to help eliminate flow interferences. The OC-70 installation does not meet MET's 5-pipe diameter downstream design guidelines and therefore does not comply as a MET standard meter installation.

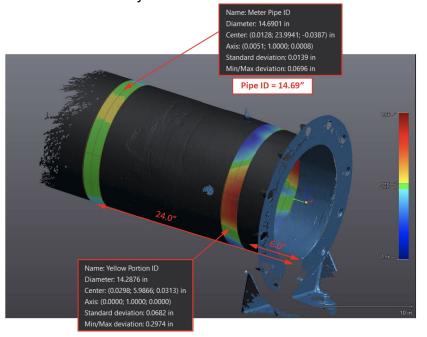
Testing Methodology

Work over the past 5-½ years has been spent on a variety of issues relating to the OC-70 metering and flow control facility, and coming to agreement on an acceptable method to determine the accuracy of the billing meter:

- How to conduct an acceptable meter test comparison. Multiple testing methodologies were explored including the use of meters in the field and contracting for the use of the facilities and staff at Utah State Water Research Laboratory (UWRL) to conduct meter testing work. One method that was investigated was the use of existing meters in the field to conduct a meter comparison. Comparison of the OC-70 meter reads to a summation of the EOCWD downstream meter reads indicated a metering error of about 5%, but the accuracy of this method did not meet MET's standards for resolving metering errors. EOCWD also conducted its own meter testing which indicated a metering error of about 10%, but the accuracy of the testing also did not meet MET's standards for resolving metering errors. These methods could not be worked out to MET's satisfaction, as MET desires to only use meters that have recently been calibrated under controlled conditions, and to minimize the number of flow meters used in comparison tests to reduce testing inaccuracies.
- In the fall of 2019, MET and MWDOC agreed to utilize UWRL to;
 - Build a hydraulic replica of the OC-70 metering and flow control structure at UWRL facilities, then

- Calibrate a portable (clamp-on) ultrasonic flow meter to UWRL's highly accurate National Institute of Standards and Technology (NIST) certified weight tank using the hydraulic replica of OC-70 to capture hydraulic issues, and finally
- Install the calibrated portable flow meter in the field at OC-70 and compare flow results to the existing venturi meter (the billing meter).

In order to create a hydraulic replica of the OC-70 metering facility, MET had to take very accurate 3-Dimensional measurements of the inside of the OC-70 piping and venturi meter during an AMP shutdown in January 2020.



MET 3D Survey of Pipe at OC-70 – January 22, 2020

These measurements were then used to manufacture pipe spools replicating the existing piping at OC-70 for use in testing at the UWRL facility. Manufacturing of the spools took several months to get the lining applied to match the OC-70 conditions, and MET also encountered time delays due to COVID-19. MET completed the pipe work and sent a new Flexim portable ultrasonic flow meter and the newly manufactured pipe spools to UWRL in July 2020.



Pipe spools with lining (in white) at UWRL August 5, 2020

The UWRL calibration testing of a portable ultrasonic flow meter, when installed at the OC-70 facility, will be able to determine how accurate the venturi meter is under three operating conditions, with no pumps operating, with one pump operating, and with two pumps operating. This information can then be used to determine if the variance exceeds the 2 percent maximum from the MET Administrative Code, and what the actual meter variance has been over many years.

UWRL Testing

Calibration tests of the new Flexim portable ultrasonic flow meter to the UWRL NIST certified weight tank, using the hydraulic replica of OC-70, began on August 5, 2020. During the calibration of the new Flexim meter to the weight tank, the Flexim meter failed. MET is currently working to replace the meter, has scheduled a meeting with MWDOC, EOCWD, and UWRL hydraulic experts on September 2, 2020 to review the test; and then plans to proceed with testing. MET has also verified that the costs for the failed testing at UWRL is solely MET's responsibility.



Hydraulic Replica Test of OC-70 at UWRL August 5, 2020 (Note: pipe configuration is flipped 180 degrees due to space limitations.)



NIST Certified Weight Tank at UWRL August 5, 2020

Next Steps

The following schedule to resolve the metering issue is anticipated:

- Staff worked with MET to expedite the retesting at UWRL. MET indicated a new meter should arrive at UWRL by September 3, 2020 and that retesting can begin as early as the week of September 14-18, 2020.
- MET has also scheduled a meeting with MWDOC, EOCWD, and UWRL hydraulic experts on September 2, 2020 to review the test. Potential transfer of ownership of the OC-70 facility to MWDOC/EOCWD will also be a topic of discussion for this meeting.
- The calibrated ultrasonic flow meter will then be used to field test the venturi meter at OC-70. We anticipate testing at OC-70 can be completed by the end of September 2020.
- The metering error can then be quantified in October 2020.
- An item will need to be taken to the MET Board for action. If this item is combined with the transfer of the OC-70 facility to MWDOC/EOCWD, it may not be ready for action until early 2021.
- There is additional work being considered at OC-70 besides resolution of the meter accuracy issue. Staff is continuing to work with MET and EOCWD on the following issues and will keep the Board informed with periodic updates:
 - Pump test of a portable pump at the facility
 - Rehabilitation work on the existing pumps and motors
 - Work to allow a permanent generator or a permanent portable generator to be located at the site and adoption of the protocol to change from grid power to generator power



INFORMATION ITEM

September 8, 2020

TO: Planning & Operations Committee

(Directors Yoo Schneider, Dick, McVicker)

FROM: Robert Hunter, General Manager

Staff Contact: Melissa Baum-Haley

SUBJECT: Metropolitan's Assessed Valuation for MWDOC and Orange County for

Fiscal Year 2020-21

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file the information provided below.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

This letter reports on Metropolitan's (MET) certified assessed valuations for Fiscal Year 2020-21, as of August 18, 2020. The assessed valuation is used at MET to determine each member agency's percentage participation, vote and director entitlement.

MET's certified assessed valuations for Metropolitan's six-county service area totaled \$3.3 trillion for FY 2020-21. As of last year, AB1220 (Garcia) added subsection (b) to Section 52 of the MET Act, which provides, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019." Based on the assessed valuations for FY 2020-21 and pursuant to Section 52 of the MET Act, the number of representatives for each agency remains the same, thereby MET's Board of Directors remains at 38.

Budgeted (Y/N): N	Budgeted amount: None		Core _X_	Choice	
Action item amount: N/A		Line item:			
Fiscal Impact (explain if unbudgete		d):			

MWDOC's certified assessed valuation for FY 2020-21 totals \$550,132,942,332¹, a 4.7% increase from FY 2019-20 assessed valuation. As a result, this gives MWDOC a voting entitlement of 55,013 or voting percentage of 16.94%; a decrease of 0.13% from last year. In addition, MWDOC's vote percentage of 16.94% entitles the District to four seats on the MET Board of Directors.

For all of Orange County; MWDOC, Anaheim, Santa Ana, and Fullerton have a combined certified assessed valuation for FY 2020-21 of \$652,220,818,937. The total certified assessed valuation has been reduced to reflect Homeowners' Property Exemptions and do not include areas excluded from MET, in accordance with Section 305 of the Metropolitan Water District Act. This provides Orange County a voting share of 20.08% at MET. Thus giving Orange County a total entitlement of seven Directors; four for MWDOC (16.94%) and one each for the cities of Anaheim (1.56%), Santa Ana (0.89%), and Fullerton (0.69%).

Attachment: Metropolitan staff letter on Item 5G: Report on list of certified assessed valuations for fiscal year 2020/21 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 18, 2020.

¹Certified valuations have been reduced to reflect Homeowners' Property Exemptions and do not include areas excluded from Metropolitan.

INFORMATION



Board of Directors Finance and Insurance

8/18/2020 Board Meeting

5G

Subject

Report on list of certified assessed valuations for fiscal year 2020/21 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 18, 2020

Executive Summary

Every year, Metropolitan receives the certified assessed valuation from the county auditors for the six counties where Metropolitan provides water service. All county auditors have until the 15th day of August to provide the certified assessed valuation to Metropolitan, which is why Metropolitan's Board adjourns its August regular and committee meetings to the third week of the month. Metropolitan received the last of the counties' information for fiscal year (FY) 2020/21 on August 9, 2020.

Based on the information received, staff reports that certified assessed valuations for Metropolitan's six-county service area totaled \$3.3 trillion for FY 2020/21. The percentage participation and vote entitlement by member agencies as of August 18, 2020, have been updated accordingly and are reported in this letter and in **Attachment 1**. Assessed valuation is also used to determine how many representatives an agency has on the Metropolitan Board. Based on the assessed valuations for FY 2020/21, the number of representatives for each agency remains the same and is also reported in **Attachment 1**.

Details

Background

This letter reports the certified assessed valuations for FY 2020/21 and member agency percentage participation, vote, and director entitlement (**Attachment 1**), which become effective for all purposes at the August 18, 2020, regular Board meeting.

As part of the Metropolitan Water District Act, the process of determining assessed valuation is made each August, based on submissions from the auditors of each of the six counties in the Metropolitan service area. Metropolitan uses a weighted voting system based on assessed valuation. Under Section 55 of the Metropolitan Water District Act, each member agency gets one vote for every \$10 million of assessed valuation of property taxable for Metropolitan's purposes. Under Section 52 of the Metropolitan Water District Act, assessed valuation is also used to determine how many representatives an agency has on the Metropolitan Board. Each member agency is entitled to one board member and may appoint an additional representative for each full 5 percent of Metropolitan's assessed valuation of taxable property that is within such member agency's service area. As of last year, AB1220 (Garcia) added subsection (b) to Section 52 of the Metropolitan Water District Act, which provides, "A member public agency shall not have fewer than the number of representatives the member public agency had as of January 1, 2019. This subdivision does not affect Section 55." Based on the assessed valuations for FY 2020/21, neither the assessed valuations nor AB1220 affects the current number of directors of any member agencies.

The certificates of the county auditors for the six counties covering Metropolitan's area, certifying the FY 2020/21 assessed valuations of all property used for calculating Metropolitan's FY 2020/21 vote and director entitlement, are on file in the office of the Controller.

The assessed valuations by the respective county auditors are as follows:

County	Assessed Valuations Taxable by Metropolitan	
Los Angeles	\$ 1,593,580,889,093	
Orange	654,987,416,111	
Riverside	209,015,948,025	
San Bernardino	127,116,540,150	
San Diego	566,343,031,902	
Ventura	112,311,699,205	
Total:	\$ 3,263,355,524,486	

A comparison of FY 2019/20 and FY 2020/21 assessed valuations and the percentage of change (**Attachment 2**) and a comparison of FY 2019/20 and FY 2020/21 vote entitlement and the percentage change (**Attachment 3**) are attached for your information.

Policy

Metropolitan Water District Act Section 52: Additional Directors

Metropolitan Water District Act Section 55: Voting by Board

Metropolitan Water District Act Section 305: Certification of Assessed Valuations; Segregation of Valuations

Fiscal Impact

None

Katano Kasaine
Assistant General Manager/

8/12/2020 Date

Chief Financial Officer

8/12/2020 Date

Jeffrey Kightlinger

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Attachment 1 – Assessed Valuations, Percentage Participation, and Vote and Director Entitlement of Member Public Agencies as of August 18, 2020

Attachment 2 - Comparison of Assessed Valuations for the Fiscal Years 2019/20 and 2020/21

Attachment 3 – Comparison of Vote Entitlement Percentage for the Fiscal Years 2019/20 and 2020/21

Ref# cfo12674825

The Metropolitan Water District of Southern California Assessed Valuations, Percentage Participation, and Vote and Director Entitlement of Member Public Agencies As of August 18, 2020

	*Assessed Valuation	Percent	** Vote	*** Director
Member Agency	Amount Certified	of Total	Entitlement	Entitlement
Anaheim \$	50,827,184,760	1.56%	5,083	1
Beverly Hills	38,956,717,957	1.20%	3,896	1
Burbank	26,141,123,217	0.80%	2,614	1
Calleguas MWD	111,618,780,405	3.44%	11,162	1
Central Basin MWD	163,841,107,803	5.04%	16,384	2
Compton	5,317,323,800	0.16%	532	1
Eastern MWD	89,360,565,565	2.75%	8,936	1
Foothill MWD	20,523,777,475	0.63%	2,052	1
Fullerton	22,375,441,140	0.69%	2,238	1
Glendale	35,169,758,778	1.08%	3,517	1
Inland Empire Utilities Agency	126,454,139,655	3.89%	12,645	1
Las Virgenes MWD	26,486,631,207	0.82%	2,649	1
Long Beach	55,981,628,720	1.72%	5,598	1
Los Angeles	679,724,957,408	20.93%	67,972	5
MWD of Orange County	550,132,942,332	16.94%	55,013	4
Pasadena	33,945,712,922	1.05%	3,395	1
San Diego County Water Authority	563,102,159,967	17.34%	56,310	4
San Fernando	2,162,763,122	0.07%	216	1
San Marino	7,112,212,432	0.22%	711	1
Santa Ana	28,885,250,705	0.89%	2,889	1
Santa Monica	41,988,358,140	1.29%	4,199	1
Three Valleys MWD	75,351,151,920	2.32%	7,535	1
Torrance	31,358,048,464	0.97%	3,136	1
Upper San Gabriel Valley MWD	115,436,487,268	3.55%	11,544	1
West Basin MWD	227,757,273,626	7.01%	22,776	2
Western MWD	118,236,059,481	3.64%	11,824	<u>1</u>
TOTAL ASSESSED VALUATIONS WITHIN METROPOLITAN \$	3,248,247,558,269	100%	324,826	<u>38</u>

Percentage may not foot due to rounding.

- * The above valuations include only those which have been certified by the County Auditors, in accordance with Section 305 of the Metropolitan Water District Act, Statutes of 1969, as amended. The certified valuations have been reduced to reflect Homeowners' Property Exemptions and do not include areas excluded from Metropolitan.
- ** Each member of the Board shall be entitled to cast one vote for each ten million dollars (\$10,000,000) of assessed valuation of property taxable for district purposes, in accordance with Section 55 of the Metropolitan Water District Act.
- *** In addition to one representative, pursuant to Section 52 of the MWD Act (Chapter 781, Stats. 1998), each member agency shall be entitled to one additional representative for each full five percent of the assessed valuation of property taxable for Metropolitan purposes. Pursuant to AB1220 (Garcia), a member public agency shall not have fewer than the number of representatives the member agency had as of January 1, 2019.

The Metropolitan Water District of Southern California Comparison of Assessed Valuations for the Fiscal Years 2019/20 and 2020/21

	FY 2019/20 Assessed Valuation			FY 2020/21	Percentage
Member Agency			Assessed Valuation		Change
Los Angeles County:					
Beverly Hills	\$	36,580,540,574	\$	38,984,209,757	6.6%
Burbank		25,002,647,242		26,232,053,217	4.9%
Glendale		33,711,265,189		35,299,922,378	4.7%
Los Angeles		640,175,002,878		681,956,634,299	6.5%
Pasadena		32,409,521,952		34,064,564,522	5.1%
San Marino		6,846,700,283		7,131,517,032	4.2%
Santa Monica		39,316,267,365		42,052,273,740	7.0%
Long Beach		53,299,586,877		56,231,422,772	5.5%
Torrance		30,680,242,440		31,509,046,749	2.7%
Compton		4,928,389,062		5,367,588,584	8.9%
West Basin MWD		213,987,806,089		228,506,171,874	6.8%
Three Valleys MWD		72,538,027,913		75,830,420,346	4.5%
Foothill MWD		19,621,347,114		20,633,179,075	5.2%
Central Basin MWD		156,584,724,071		164,837,540,712	5.3%
Las Virgenes MWD		26,249,192,792		26,576,523,807	1.2%
Upper San Gabriel Valley MWD		110,865,559,035		116,125,000,182	4.7%
San Fernando		2,044,793,609		2,175,734,122	6.4%
Gairr cinando	-	2,044,730,000		2,170,704,122	0.470
Total Los Angeles County		1,504,841,614,485		1,593,513,803,168	5.9%
Orange County:					
Anaheim		48,780,882,406		51,034,279,760	4.6%
Santa Ana		27,889,308,938		29,025,884,820	4.1%
Fullerton		21,047,887,392		22,487,669,340	6.8%
MWD of Orange County		527,514,977,984		552,439,582,191	4.7%
Total Orange County		625,233,056,720		654,987,416,111	4.8%
Riverside County:					
Eastern MWD		84,345,758,934		90,029,050,008	6.7%
Western MWD		111,841,869,904		118,986,898,017	6.4%
Total Dispusit to Occupto					
Total Riverside County		196,187,628,838		209,015,948,025	6.5%
San Bernardino County:					
Inland Empire Utilities Agency		120,149,133,064		127,116,540,150	5.8%
San Diego County:					
San Diego County Water Authority		537,702,536,141		566,336,932,422	5.3%
Ventura County:					
Calleguas MWD		108,243,210,879		112,311,699,205	3.8%
Total Within Metropolitan		3,092,357,180,127		3,263,282,339,081	5.5%
Excluded Areas		69,601,933		73,185,405	5.1%
*Total Taxable by Metropolitan	\$	3,092,426,782,060	\$	3,263,355,524,486	5.5%

* Gross Before HOE Page 31 of 50

The Metropolitan Water District of Southern California Comparison of Vote Entitlement Percentage for the Fiscal Years 2019/20 and 2020/21

	FY 2019/20		FY 2020/21		Change	
Member Agency	Vote Entitlement	Vote Entitlement Percentage	Vote Entitlement	Vote Entitlement Percentage	Vote Entitlement	Vote Entitlement Percentage
Anaheim	4,857	1.58%	5,083	1.56%	226	-0.01%
Beverly Hills	3,655	1.19%	3,896	1.20%	241	0.01%
Burbank	2,491	0.81%	2,614	0.80%	123	0.00%
Calleguas MWD	10,754	3.49%	11,162	3.44%	408	-0.06%
Central Basin MWD	15,556	5.06%	16,384	5.04%	828	-0.01%
Compton	488	0.16%	532	0.16%	44	0.01%
Eastern MWD	8,369	2.72%	8,936	2.75%	567	0.03%
Foothill MWD	1,951	0.63%	2,052	0.63%	101	0.00%
Fullerton	2,093	0.68%	2,238	0.69%	145	0.01%
Glendale	3,358	1.09%	3,517	1.08%	159	-0.01%
Inland Empire Utilities Agency	11,948	3.88%	12,645	3.89%	697	0.01%
Las Virgenes MWD	2,615	0.85%	2,649	0.82%	34	-0.03%
Long Beach	5,304	1.72%	5,598	1.72%	294	0.00%
Los Angeles	63,788	20.73%	67,972	20.93%	4,184	0.20%
MWD of Orange County	52,516	17.07%	55,013	16.94%	2,497	-0.13%
Pasadena	3,229	1.05%	3,395	1.05%	166	0.00%
San Diego County Water Authority	53,442	17.37%	56,310	17.34%	2,868	-0.03%
San Fernando	203	0.07%	216	0.07%	13	0.00%
San Marino	683	0.22%	711	0.22%	28	0.00%
Santa Ana	2,775	0.90%	2,889	0.89%	114	-0.01%
Santa Monica	3,925	1.28%	4,199	1.29%	274	0.02%
Three Valleys MWD	7,205	2.34%	7,535	2.32%	330	-0.02%
Torrance	3,053	0.99%	3,136	0.97%	83	-0.03%
Upper San Gabriel Valley MWD	11,016	3.58%	11,544	3.55%	528	-0.03%
West Basin MWD	21,322	6.93%	22,776	7.01%	1,454	0.08%
Western MWD	11,109	3.61%	11,824	3.64%	715	0.03%
Total	307,705	100%	324,826	100%	17,121	0.00%

Percentages may not foot due to rounding.

ENGINEERING & PLANNING

Economic
Studies to
Quantify the
Benefits of Local
Projects

MWDOC held a workshop in July 2020 with MWDOC Member Agencies (MAs) and invited Dr. David Sunding to discuss his approach to a study to quantify the benefits of local projects.

In the 2018 OC Water Reliability Study, staff developed and utilized an analysis methodology to look at the benefits of projects to Orange County that was based on the MET Water Shortage Allocation Plan (WSAP). The WSAP defines the price of MET water during emergencies or droughts when an agency cannot conform to a requested allocation cutback level. During such times, MET water can still be purchased, but MET includes an allocation surcharge on each acrefoot of water over the allocation that more than doubles the cost of water. Our concern with this methodology was whether or not it captured the full extent of benefits that might accrue on a socioeconomic basis for the average citizen, or business, from avoiding either drought or emergency shortages. Dr. Sunding discussed his analysis approach which is based on willingness to pay (WTP), a methodology that looks to determine the maximum price at or below which a purchaser will definitely buy one unit of a product. Based on feedback from member agencies, Dr. Sunding's approach to determining WTP for residential customers would no longer include surveys of residential consumers in OC (i.e. a survey of local consumers was not supported by our agencies).

Dr. Sunding discussed how droughts and earthquakes both pose water supply reliability challenges, but are quite different in nature and analytical approach. Drought impacts, which generally occur in the 10% to 30% shortage range, have been experienced in the past by consumers. Consumers can therefore provide their input based upon experience and recent history regarding their WTP to avoid drought impacts. Earthquake-related reliability estimates are more difficult to characterize. Earthquake shortages (i.e. outages) could be much higher than droughts and in some cases could reach 100% until water system operation can be restored. Extended outages of water systems due to earthquakes typically have not been experienced by consumers. Earthquakes can cause a wide variety of shortages from a short duration of low magnitude (similar to a drought, but of shorter duration), to a longer duration outage of substantial magnitude. It is difficult to use observed consumption behavior to estimate the value of avoiding shortages of the larger magnitudes.

To capture business WTP, Dr. Sunding discussed the work Dr. Wallace Walrod and Dr. Marlon Boarnet would conduct through surveys of businesses within OC to collect information on business impacts to water shortages. The business survey would update the limited amount of work that has previously been completed on the impacts of water outages to businesses.

Several ideas were provided during these discussions:

One suggestion was that the study should be focused on MWDOC's role
of accessing imported water from MET for MWDOC's MAs and that by
working with the MAs, the study would be of high value. The study

could focus on potential MET investments to augment supplies and how the reliability benefits and costs accrue to MWDOC agencies.

- Other thoughts were that various changes in the MET rate structure (such as MET increasing fixed costs or changes in the LRP Program) could be evaluated to understand the cost and reliability impacts to Orange County. Further, the study might tease out the cost and reliability impacts to Orange County from investments MET is making in the Carson Project, the Delta Conveyance, or other projects.
- Understanding the costs and benefits of these projects specific to Orange County could provide valuable information to MWDOC to provide input into, and help to influence the outcome of, the MET IRP, rate structure changes, and changes to the LRP. MWDOC would be able to compare costs and reliability improvements at the MET level and compare those costs to the costs and reliability benefits of local projects.
- It was suggested that the study could be used as a basis for which agencies could build their own reliability efforts off of. If the study could come up with a methodology (or model) that agencies could use to evaluate their reliability, and help them achieve greater resiliency then that would be helpful to all MWDOC agencies.

MWDOC is currently working with Dr. Sunding and Dan Rodrigo of CDM Smith to consider this input. Another workshop with MAs will be scheduled in September.

OC-70 Meter Testing Update

A full report is included in the P&O packet this month.

Doheny Ocean Desalination Project

South Coast Water District (SCWD) continues working on the project:

- SCWD submitted their NPDES permit application on March 13, 2020. SCWD anticipates approval of the NPDES permit in the Fall 2020. The next step would be the Coastal Commission with a permit anticipated in Feb 2021.
- Work is progressing on the Financial Analysis for a 2 mgd and 5 mgd scenario through Clean Energy Capital. A workshop is currently being planned.
- Work is also progressing on an Alternative Energy Study for the project.
 A draft report is under review by SCWD.
- Working groups are underway for a third party hydrogeology review. Two meetings have taken place in July and a third in August.

On June 25, 2020 the SCWD Board approved an amendment to the Clean Energy Capital Financial Analysis to evaluate alternative project options that meet reliability benefits for SCWD similar to the Doheny Desalination Project, along with reducing overall life-cycle costs in light of the uncertain economic situation moving forward due to the COVID-19 pandemic.

The Doheny Desalination Project is currently sized at a capacity of up to 5 MGD, which exceeds SCWD's average potable water demand expected during

emergency situations. SCWD has only received interest from SMWD for about 1 mgd of supply from Doheny. This leaves South Coast with potential capacity for others in a 5 MGD facility. Based on this, along with regional financial hardships caused by the COVID-19 pandemic and potential economic recession, SCWD believes that it is necessary to consider alternative, and potentially lower cost project options, to utilize and potentially expand existing assets as a means to meet their reliability needs.

This amended study will review design parameters and existing conditions at SCWD's existing Groundwater Recovery Facility (GRF), to obtain a comprehensive understanding of actual production capacity of the GRF and current limitations and reliability concerns. A range of additional water production volumes needed to maintain emergency reliability for SCWD will be developed. Current estimates are that 1.2 to 2.2 mgd of additional reliability will be needed for SCWD based on a GRF production volume of 0.8 mgd.

SMWD San Juan Watershed Project

Santa Margarita WD continues to focus on diversifying its water supply portfolio for south Orange County residents, businesses, schools, and visitors through the San Juan Watershed Project.

The original project had three Phases; Phase 1 was three rubber dams recovering about 700 AFY; Phase 2 added up to 8 more rubber dams with the introduction of recycled water into the creek to improve replenishment of the basin for up to 6,120 AFY, and Phase 3 added more recycled water topping out at approximately 9,480 AFY. Under this arrangement, most or all of the production and treatment involved the existing San Juan Groundwater Desalter with expansions scheduled along the way to increase production beyond 5 mgd. Fish passage and regulatory hurdles to satisfy subsurface travel time requirements are being tackled.

SMWD is working with the Ranch on the next phase of development within SMWD and have access to riparian groundwater from the Ranch. Furthermore, they have discovered that the local geology has high vertical percolation rates and sufficient groundwater basin travel time to potentially allow percolation of treated recycled water with an ability to meet the required travel time. SMWD is of opinion that groundwater production and treatment of the groundwater can be initiated in a relatively short time-frame while permitting for percolation augmentation using recycled water from the nearby Trampas reservoir can be added as permitting allows. SMWD believes the new project area may be able to ultimately produce 4,000 to 5,000 AF per year; they believe the original project will continue to be developed for production out of the wells and treatment provided by San Juan Capistrano as the two agencies merge. Ultimate production out of the basin could exceed 10,000 AF per year if all goes well.

South Orange County Emergency Service Program

MWDOC, IRWD, and Dudek have completed the study to determine if the existing IRWD South Orange County Interconnection capacity for providing

emergency water to South Orange County can be expanded and/or extended beyond its current time horizon of 2030. Dudek participated in the November 6, 2019 SOC workshop to re-engage with the SOC agencies on this project. Support from the agencies was expressed to take a small next step to install Variable Frequency Drives at a pump station within IRWD which would be paid for by SOC to help move water from the IRWD system to SOC in an emergency. The Variable Frequency Drives will provide more flexibility to the IRWD operations staff to allow additional water to be sent to SOC while meeting all of the IRWD needs. **Strand Ranch** MWDOC and IRWD are continuing to exchange ideas on how to implement the **Project** program to capture the benefits that can be provided by the development of "extraordinary supplies" from the Strand Ranch Project. Staff from MWDOC and IRWD met in August and will begin reaching out to other agencies to determine the level of interest in the project. **Poseidon** The Santa Ana Regional Water Quality Control Board (SARWQCB) continues Resources to work with Poseidon on renewal of the National Pollutant Discharge Elimination System (NPDES) Permit for the proposed HB Desalination Project. Huntington **Beach Ocean** The renewal of the NPDES permit for the proposed desalination facility requires **Desalination** a California Water Code section 13142.5(b) determination in accordance with **Project** the State's Ocean Plan (a.k.a. the Desalination Amendment). To make a consistency determination with the Desalination Amendment, the Regional Board is required to analyze the project using a two-step process: 1. Analyze separately as independent considerations, a range of feasible alternatives for the best available alternative to minimize intake and mortality of all forms of marine life: a. Site b. Design c. Technology d. Mitigation Measures 2. Then consider all four factors collectively and determine the best combination of feasible alternatives. Regional Board staff reviewed hundreds of documents and input from both an independent reviewer and a neutral 3rd party reviewer to develop Tentative Order R8-2020-0005. The key areas required by the Ocean Plan on which the Santa Ana Water Board is required to make a determination, includes: Facility onshore location; • Intake considerations including subsurface and surface intake systems;

- Identified need for the desalinated water:
- Concentrated brine discharge considerations;
- Calculation of the marine life impacts; and
- Determination of the best feasible mitigation project available.

In evaluating the proposed project, Santa Ana Regional Board staff interpreted "the identified need for the desalinated water" as whether or not the project is included in local area water planning documents, rather than a reliability need as analyzed in the OC Water Reliability Study. The Regional Board staff referenced several water planning documents; Municipal Water District of Orange County's (MWDOC) 2015 Urban Water Management Plan (UWMP), the OC Water Reliability Study, OCWD's Long Term Facilities Plan, and other OCWD planning documents in their evaluation of Identified Need.

On December 6, 2019, SARWQCB, Regional Board staff conducted a workshop in Huntington Beach that was heavily attended with a considerable range of views expressed at the meeting. Several of the SARWQCB members were somewhat confused about the evaluation of "Identified Need" for the project (inclusion in local water planning documents vs. an identified reliability need for the project) and requested staff to help them understand the issue better.

On May 15, 2020, SARWQB held a second workshop, which focused on the identified need for the desalinated water and marine life mitigation requirements. Karl Seckel presented to the Regional Board on a number of topics including: MWDOC's role in Orange County, alternative definitions of "need" for a water supply project and the role of water agencies, Urban Water Management Plans, non-mandated planning documents, and what was and was NOT in the 2018 OC Water Reliability Study.

On August 7, 2020, the Regional Board postponed a decision on the permit renewal and agreed to reconvene on September 17, 2020. Regional Board members raised questions about the need and cost of the facility, adequacy of the mitigation measures at the Bolsa Chica Wetlands, and asked Regional Board staff to provide additional information.

Assuming success at the Regional Board, Poseidon would then seek its final permits from the California Coastal Commission (CCC). The CCC has committed to reviewing the permit within 90 days of the SARWQCB NPDES permit issuance.

Trampas Canyon Dam and Reservoir

Trampas Canyon Reservoir and Dam (Trampas Reservoir) is a seasonal recycled water storage reservoir, with a total capacity of 5,000 AF, of which 2,500 AF is available to meet Santa Margarita Water District's projected base recycled water demands, and 2,500 AF to meet future water supply needs. When completed, the Trampas Reservoir will allow SMWD to store recycled water in the winter and draw on that water during the peak summer months.

The construction of the Trampas Canyon Recycled Water Seasonal Storage Reservoir consists of three main components:

- 1. Trampas Canyon Dam (Dam)
- 2. Conveyance facilities to transport recycled water into and out of the Reservoir (Pipelines)
- 3. Trampas Canyon Pump Station (Pump Station)

The construction of the facilities is being completed in three phases:

1. Preconstruction/Site Preparation for the Dam and Pump Station Construction

Project Status - Complete

2. Dam and Pipelines

Project Status – Extensive and productive work continues on this project, but the Critical Path on the overall schedule has become constrained by the following issues:

- a. Defective concrete that requires repair at the Inlet/Outlet Structure.
- b. Potential for the need to replace structural slurry in the cut off wall of the West Dam.
- c. The need to replace 5 piezometer deep wells on the Main Dam face.
- d. Material and equipment shipping delays resulting from the effects of the Covid-19 Pandemic.

SMWD is operating under the intentions that the basic Project Overview will be suitable for presentation at the Dedication Ceremony currently scheduled for October 9, 2020.

3. Pump Station

Project Status – The construction period for the Pump Station began in January and remains on track to be substantially complete by September 30, 2020.

The project is currently projected to be substantially complete by late September/early October 2020.

NAWI – National Alliance of Water Innovation

Karl Seckel has continued meeting as part of the Municipal Water Core Team process. The overall vision of NAWI is developing non-traditional water sources at pipe-parity costs of existing water sources today - this is an *aspiration*, not a *prediction!*

Roadmaps are being prepared for five water end-user types and will be blended into an overall Roadmap by the end of the calendar year:

- 1. Power
- 2. Resource Extraction
- 3. Industrial
- 4. Municipal
- 5. Agricultural

The Roadmapping Process includes the following steps:

- 1. Vision (current step, soon moving into the others)
- 2. Targets/Milestones
- 3. GAPS/Challenges
- 4. Solutions
- 5. Action Plans

Hopefully by the end of this calendar year, solutions and action plans to fill the GAPS and resolve challenges will emerge to prioritize investments starting with \$100M from the Electric Power Research Institute. Water sources being considered in the Water Roadmap includes:

- 1. ocean water
- 2. inland brackish groundwater
- 3. industrial wastewater
- 4. municipal wastewater
- 5. mining wastewater
- 6. conventional produced water
- 7. unconventional produced water
- 8. power/cooling wastewater
- 9. agricultural wastewater

AMP Shutdown in 2021 to Replace PCCP Sections

In 2016, MET initiated a Prestressed Concrete Cylinder Pipe (PCCP) rehabilitation program to install 26 miles of steel liner throughout the MET system to address structural issues associated with prestressed steel wire failures in PCCP. As part of the program, MET monitors PCCP for wire breaks on a regular basis.

MWDOC staff was notified that a recent internal inspection of the AMP which included an electromagnetic surveys of the pipeline revealed two pipe segments with increased wire breaks within the PCCP portion South of OC-70. Metropolitan Engineering considers this section of the pipeline high-risk which will require relining. The minimum relining length needed would be approximately 1,000 feet, which would require a minimum 1-month shutdown only South of OC-70. A longer shutdown duration would allow Metropolitan to reline approximately 3,300 feet, which would reduce the number of shutdowns

needed for future relining of the entire PCCP portion of the AMP and would reduce the overall construction and shutdown costs. MET had originally scheduled the AMP PCCP relining to begin in about 5 years, but based on the survey, the relining of this initial section has been accelerated.

MET's engineering group considers three segments of pipe within a 1,000 linear foot reach downstream of OC-70 as increased risk due to the segments having 20 or more wire breaks. MET does not recommend that repairs to these segments wait until Fall 2021 and is looking to schedule the shutdown in early 2021.

MWDOC staff coordinated a meeting with all AMP participants on May 13, 2020 to discuss the options for the proposed shutdown.

Two MWDOC member agency projects are also scheduled around the same time as the pending AMP shutdown; a South Coast Water District vault rehabilitation on the JTM that was previously postponed due to the previous Diemer shutdown, and Santa Margarita Water District relocation of a portion of the Aufdenkamp Connection Transmission Main (ACTM) to accommodate the I-5 widening project. The South Coast project is scheduled for completion by the beginning of February 2021.

SMWD notified MWDOC staff of pipe supply delays that could cause delays in returning the ACTM to service. As the ACTM is needed to provide water during an AMP shutdown, this would subsequently delay the AMP shutdown. MWDOC staff asked SMWD to explore options for expediting the ACTM project. The pipe manufacturer indicated that overtime work would expedite pipe delivery at a cost of approximately \$35,000 which would increase the likelihood of completing the ACTM relocation by March 31, 2021 and allow time for the AMP shutdown to occur prior to high water demand months.

MWDOC staff coordinated a meeting with all affected AMP participants on August 12, 2020 to discuss the regional value of expediting the ACTM relocation and possible cost sharing options. The SOC agencies agreed to share the costs of expediting the pipe manufacture work.

Staff is continuing to work with affected agencies and will keep both the Board and the AMP Participants informed as more information becomes available.

Other Shutdowns

Orange County Feeder

MET is planning to reline and replace valves in a section of the Orange County Feeder from Bristol Ave to Corona Del Mar – this is the last section of this 80-year old pipeline to be lined. A meeting was held on August 27, 2020 between staff from MET, MWDOC, and Mesa WD and a plan was developed to allow the shutdown to move forward, while addressing MWDOC member agency concerns. Staff will continue to work with our member agencies and MET through this shutdown.

Second Lower Feeder



MET is currently completing a shutdown of the Second Lower Feeder just below the Diemer Treatment Plant. A recent pipeline survey identified increased wire breaks in some of the Prestressed Concrete Cylinder Pipe (PCCP) sections, which required an accelerated replacement schedule. This shutdown impacts Golden State Water Company's (GSWC) service connection OC-56 and began on June 22, 2020. The shutdown is scheduled to run through September 1, 2020. MWDOC and GSWC have been coordinating with MET on this shutdown. MET completed the installation of a bulkhead on June 30, 2020 to allow GSWC to take water through OC-56 while the remaining repairs were completed. In

early August 2020, MET notified MWDOC and GSWC that the pressure on the Second Lower Feeder had to be lowered because the bulkhead had potentially been impacted by a surge event and the safety of the workers on the other side of the bulkhead was a concern. GSWC agreed to take OC-56 out of service earlier than scheduled in order to remove the bulkhead. GSWC has been working with the City of Fullerton to potentially take water through a shared interconnection in the event GSWC would need additional supplies. MWDOC staff worked with MET and Fullerton to assist with transferring the accounting for any increased flows over to GSWC in the event Fullerton peaks their capacity charge during the period (May – September). MET expects the Second Lower Feeder shutdown to be complete by August 31, 2020.

West Orange County Feeder

MET will be shutting down the West Orange County Feeder from September 28-30, 2020 to perform maintenance. During the shutdown, the City of Buena Park's service connection OC-25, will be out of service.

Joint Transmission Main

SCWD is planning a rehabilitation project of their CM-10 vault in early 2021 on the Joint Transmission Main (JTM). We are coordinating with MET and SCWD, so the above referenced AMP shutdown and this project do not overlap.

Aufdenkamp Connection Transmission Main

SMWD is currently working on a relocation of the ACTM pipeline for the I-5 widening project. We are also coordinating with MET and SMWD, so the above referenced AMP shutdown and this project do not overlap.

	OC Feeder extension						
	MET is planning to reline 300-linear feet of the OC Feeder extension affecting the City of Newport Beach. MWDOC staff coordinated with MET and the City of Newport Beach to move this work to November $1-20$, 2020 to accommodate Newport's needs during the Summer.						
	Lake Mathews Forebay						
	MET is also planning a shutdown of the Lake Mathews Forebay for maintenance and repair work which will affect the Santiago Lateral from March 1-14, 2021. Staff is currently coordinating with MET and IRWD & Trabuco Canyon WD on this shutdown.						
	Irvine Cross Feeder						
	MET is planning a PCCP Inspection of the Irvine Cross Feeder November 2-8, 2020 affecting Newport Beach, Huntington Beach, and Mesa WD. Staff is currently coordinating with MET and our affected agencies on this shutdown.						
Meetings							
	Karl Seckel, Charles Busslinger and Chris Lingad participated in a conference call on July 30, 2020 with MET and SMWD to discuss MET's AMP shutdown scheduled for April 2021.						
	Charles Busslinger and Chris Lingad hosted a bid opening for the MWDOC building remodel project on July 31, 2020. Seven bids were received prior to t deadline.						
	Chris Lingad and Katie Davanaugh met with the move management consultant, Blackman and Forsyth on August 4, 2020 to go over the office layout for the MWDOC building remodel project.						
	Charles Busslinger and Chris Lingad participated in a conference call on August 10, 2020 with Black & Veatch to discuss MWDOC's hydraulic model.						
	Karl Seckel, Charles Busslinger and Chris Lingad participated in a conference call on August 11, 2020 with Mesa Water District to discuss MET's OC Feeder shutdown.						
	Karl Seckel, Charles Busslinger and Chris Lingad participated in a conference call on August 12, 2020 with the southern AMP participants to discuss MET's AMP shutdown scheduled for April 2021.						
	Charles Busslinger and Chris Lingad participated in a CDR Management Oversight Committee meeting on August 13, 2020.						
	Charles Busslinger, Cathy Harris, Katie Davanaugh, Hilary Chumpitazi, Patrick Dinh and Chris Lingad participated in a conference call on August 24, 2020 with MWDOC owner's representative and MWDOC move management consultant Blackman and Forsyth to discuss phase 1 of the MWDOC building remodel project.						

Karl Seckel, Charles Busslinger and Chris Lingad participated in a conference call on August 25, 2020 with Golden State Water Company and the City of Fullerton to discuss the use of their shared interconnection and capacity charge issues with MET.
Karl Seckel, Charles Busslinger and Chris Lingad participated in a conference call on August 27, 2020 with MET and Mesa Water District to discuss planning for the OC Feeder shutdown.

Planning and Operations Committee WEROC Status Report

August 2020

COVID-19 (CORONA VIRUS) COORDINATION

- Current Action Items:
 - WEROC is monitoring the Federal Public Assistance Grant Program. The emergency work category-B, emergency protective measures is set to expire on September 21, 2020. Both FEMA and the State have indicated they are working on an extension. If this does not occur by the beginning of September, WEROC will be working with agencies on the letter required to request an extension under CFR44206.
 - WEROC is tracking on the County being off the state watchlist as of August 23rd. WEROC is providing updated information received from the County Health Care Agency and the state as it is released and available.
 - Agencies continue to provide updates to the WEROC COVID-19 Matrix including business practices with the changes occurring for field and office staff (50/50 schedule, full staffed, staggered, telecommuting)
- On August 28, Governor Newsom unveiled a new color-coded, tiered system for reopening California businesses amid the coronavirus pandemic. Counties will be allowed to move through the four-tier system based on the following three criteria:
 - Case Rate 7-day average of new cases per 100,000
 - Test Positivity Rate 7-day average percentage of positive cases per number of people tested
 - Health Equity Measure (yet to be determined)

A breakdown of the tiers is as follows:

- PURPLE Highest risk tier and includes counties with a case rate of 7 new cases per 100,000 and a positivity rate of more than 8%.
- RED Second highest risk tier and includes counties with a case rate of 4-7 new cases per 100,000 and a positivity rate of 5-8%.
- ORANGE Third highest risk tier and includes counties with a case rate of 1-3.9% new cases per 100,000 and a positivity rate of 2-4.9%.
- YELLOW Lowest risk tier and includes counties with a case rate of less than 1 new case per 100,000 and a positivity rate less than 2%.

- WEROC continues to monitor the State and County for changing information and is sharing information with agencies as it becomes available.
- WEROC is participating in the weekly Operational Area Conference calls.
- WEROC continues to hold bi-weekly conference calls on Tuesdays with member agencies to report on Federal, State, and County changes. Calls continue to support the sharing of information between agencies, logistics, legislation, and recovery updates. Additionally, agencies have an opportunity to share best practices or ask other agencies for input on an issue they are encountering. Post COVID-19, these calls will transition into different topics and will continue as long as the information benefits the agencies.
- WEROC continues to support logistic requests from agencies. On August 28,
 WEROC will be receiving pallets of hand sanitizer, n95 masks and nitrile gloves for
 distribution from the state. WEROC has procured, transported, warehoused and
 distributed over 110,000 various pieces of personal protective equipment and
 sanitizing products. These supplies have been and will continue to be made available
 to all WEROC member agencies in times of need. Daniel is leading logistics
 coordination.
- WEROC remains in contact with County Emergency Management Division and the Orange County Health Care Agency.
- WEROC is monitoring the legislation related to COVID-19, including the Special Districts Provide Essential Services Act (HR 7073).
- WEROC continues to support agencies daily by answering their questions. Vicki has been providing agency assistance with OSHA training and guidance on requirements due to the current COVID conditions.

AUGUST HEAT EVENT AND CAISO STAGE 3 POWER EMERGENCY (ROLLING OUTAGES) COORDINATION

- WEROC coordinated with agencies and provided information via email on the potential rolling outages occurring during the Excessive Heat event beginning on August 14th.
- WEROC held a conference call and covered the circuits and areas impacted through Thursday August 20th.
- No agencies have immediate needs or impacts.
- Governor Newsom issued a Proclamation of Emergency granting exception from the statues for emergency generator use through Thursday August 20, 2020 at 11:59pm. Two agencies ran their generators during this time.

- Vicki has spoken to both SCE and SDGE directly regarding notifications and is working with SDGE on access to the circuit maps.
- Vicki participated on the Operational Area (OA) Conference Call on August 17th and provided information to the OA.

WEROC PROGRAM ASSESSMENT

 Vicki has completed the WEROC Assessment Report. She conducted interviews with employees, member agencies, used governing documents, and national standards to perform her assessment. This document will be shared with the MWDOC Board of Directors in a three part series during the P&O Committee meetings.

AMERICA'S WATER INFRASTRUCTURE ACT (AWIA)

- WEROC and its consultant, Herndon Solutions Group (HSG), are continuing to work with WEROC agencies to achieve compliance with America's Water Infrastructure Act (AWIA).
- There are 18 agencies (both Tier I & II) working concurrently on their AWIA requirements. There were 12 virtual meetings scheduled in August.
- Final Emergency Response Plan presentation workshops will be occurring in September for the Tier 1 agencies with their plans due to EPA by September 30, 2020.
- Tier II virtual meetings are taking place for the Risk and Resiliency Assessments (RRA) due in December 2020.
- Janine is processing all AWIA contact hour requests received.

PUBLIC SAFETY POWER SHUTOFF (PSPS) AND CA PUBLIC UTILITIES COMMISSION HEARINGS

- MWDOC has party status to the California Public Utilities Commission (CPUC)
 proceedings regarding the Impacts from De-Energization with a Focus on First
 Responders and Local Government. Party Status ensures that MWDOC receives all
 communications regarding the proceedings and that our comments are included
 officially for consideration.
- Vicki reviewed and provided input to the Operational Area regarding the Orange County Operational Area PSPS Standard Operating Procedure (SOP).

Vicki developed and shared with agencies the WEROC PSPS SOP matrix.

COMMUNICATION AND COORDINATION WITH MEMBER AGENCIES AND OUTSIDE AGENCIES

- Daniel is sharing cybersecurity information with member agencies received from the Orange County Intelligence Assessment Center and the Department of Homeland Security. OCIAC notified of a regional water agencies outside of Orange County that had a cyber-breach the week of August 10th. Member agencies were advised.
- On August 4th, Vicki attended the EOCWD Hazard Mitigation Virtual Public Meeting. This was a great presentation and outreach opportunity to the community on the work done by the agency. Vicki is currently reviewing the Hazard Mitigation Plan.
- On August 6th, Vicki attended the Orange County Emergency Management Organization (OCEMO) meeting. Topics included the Training and Exercise Program, and COVID-19 testing sites.
- On August 12th, Vicki attended the Operational Area Executive Board Meeting. The Operational Area Public Safety Power Shut Off Standard Operating Procedure was approved by the board. The agenda packet and information is available upon request through WEROC.
- On August 12th, Daniel attended the Urban Area Security Initiative (UASI) grant roll out meeting. WEROC received the UASI FY19 grant documents. WEROC will be looking at regional projects to submit for consideration for the FY21 application.
- On August 21st, Vicki attended meeting with the Orange County Fire Authority Fire
 Marshal Tim Kurbrat and Robert Distaso on a joint projects to expand collaboration
 with the Fire Authority and the water agencies. Discussion topics included:
 establishing communications between agencies, attendance and collaboration with the
 WEROC planning group by attending quarterly meetings, creation of the water
 handbook, and GIS mapping interface. More information will be provided as this
 partnership moves forward.
- On August 21st, Vicki submitted an article to the California Special District Association (CSDA) at their request for their California Special District Magazine "What's So Special" section which will highlight the WEROC program.
- Janine is working with member agencies on updating the WEROC Contact Lists as there has been a number of changes in multiple agencies.
- On August 21st, Vicki obtained the newly update Emergency Response Guidebooks (ERG) handbooks and will be distributing these to the member agencies.

- On August 27th, Vicki attended the PRADO and Carbon Canyon Dam Seminar conducted by the US Army Corps of Engineers (USACE). Initially, this was to be a tabletop exercise on the emergency operation plans, but the exercise was cancelled due to COVID-19 instead on overview of the programs, plans and mapping capabilities was provided to the attendees. WEROC will be working with the USACE to obtain the GIS layer maps of all dams owned and operated by the Corp.
- On August 27th, Vicki participated in the South Orange County College District Hazard Mitigation kick off meeting. The District is preparing a hazard mitigation plan that will cover their 2 campuses and their facilities in the county. WEROC was asked to participate as a coordinating community partner.
- On August 27th, Vicki participated in a meeting with the Amateur Radio Emergency Data Network (AREDN) Group as referred by Director Yoo-Schneider. This group is trying to get awareness of their network and is seeking partnerships with placement of nodes for communication redundancy if normal means fail. WEROC will be working with connecting the group with agencies and seeing if this collaboration can move forward..
- As of August 26th, Daniel has completed permitting for the WEROC emergency generator including all the permitting, licensing and inspection required by the California Air Quality Regional Board.
- WEROC Quarterly Meeting has been scheduled for September 8th with member agencies. Focus items include training, PSPS, planning action items and CalOES Dam Division will be speaking to changes to the program and going over challenges with plan approvals.

TRAINING AND EXERCISES

- On August 26th, the state approved Vicki's ICS 300 Intermediate Incident Command and the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) virtual lesson plans. Classes will be conducted virtually in October and November.
- Vicki has created the WEROC Training and Exercise Plan for the next 5 years. This
 document will be finalized at the September 8th, WEROC Quarterly Meeting.
- On August 11th, Daniel attended the terrorism training on targeting and sabotage offered by the Joint Regional Intelligence Center (JRIC).
- On August 25th, Daniel conducted an 800 MHz radio training class for Trabuco Canyon Water District.

Status of Water Use Efficiency Projects

August 2020

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	Ongoing	In June 2020, 228 smart timers were installed in Orange County. To date, 27,423 smart timers have been installed through this program.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	In June 2020, zero rotating nozzles were installed in Orange County. To date, 570,818 rotating nozzles have been installed through this program.
SoCal Water\$mart Residential Indoor Rebate Program	MWDSC	Ongoing	Ongoing	In June 2020, 91 high efficiency clothes washers and 8 premium high efficiency toilets were installed in Orange County. To date, 121,432 high efficiency clothes washers and 60,567 high efficiency toilets have been installed through this program.
SoCal Water\$mart Commercial Rebate Program	MWDSC	Ongoing	Ongoing	In June 2020, 584 commercial devices were installed in Orange County. To date, 110,302 commercial devices have been installed through this program.
Industrial Process/ Water Savings Incentive Program (WSIP)	MWDSC	Ongoing	Ongoing	This program is designed to improve water efficiency for commercial customers through upgraded equipment or services that do not qualify for standard rebates. Incentives are based on the amount of water customers save and allow for customers to implement custom water-saving projects. Total water savings to date for the entire program is 1,257 AFY and 5,149 AF cumulatively.

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Turf Removal Program	MWDOC	Ongoing	Ongoing	In July 2020, 21 rebates were paid, representing \$210,312 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 23 million square feet of turf.
Spray to Drip Rebate Program	MWDOC	Ongoing	Ongoing	This is a rebate program designed to encourage residential and commercial property owners to convert their existing conventional spray heads to low-volume, low-precipitation drip technology. To date, the Spray to Drip Rebate Program has converted approximately 991,692 square feet of area irrigated by conventional spray heads to drip irrigation.
Recycled Water Retrofit Program	MWDSC	Ongoing	Ongoing	This program provides incentives to commercial sites for converting dedicated irrigation meters to recycled water. To date, 163 sites, irrigating a total of 1,589 acres of landscape, have been converted. MWDOC has paid a total of \$56,950.00 in grant funding to 20 of those sites. The total potable water savings achieved by these projects is 3,471 AFY and 13,461 AF cumulatively.