

MEETING OF THE BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Jointly with the

PLANNING & OPERATIONS COMMITTEE

September 3, 2019, 8:30 a.m.

Conference Room 101

P&O Committee:

Director Yoo Schneider, Chair
Director Tamaribuchi
Director Dick

Staff: R. Hunter, K. Seckel, J. Berg,
H. De La Torre, K. Davanaugh,
D. Harrison

Ex Officio Member: Director Barbre

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

1. AMENDMENT NO. 8 TO THE SANTIAGO AQUEDUCT COMMISSION (SAC) JOINT POWERS AGREEMENT (JPA)
2. ADDITIONAL AUTHORIZATION FOR RAFTELIS TO COMPLETE THE DWR GRANT MONITORING REPORT FOR THE BUDGET BASED TIERED RATE (BBTR) GRANT STUDY

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.)

3. METROPOLITAN'S ASSESSED VALUATION FOR MWDOC AND ORANGE COUNTY FOR FISCAL YEAR 2019-20
4. STATUS REPORTS
 - a. Ongoing MWDOC Reliability and Engineering/Planning Projects
 - b. WEROC
 - c. Water Use Efficiency Projects
5. 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 18, 2019

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Yoo Schneider, Dick, Tamaribuchi)

Robert Hunter, General Manager

Staff Contact: Karl Seckel

SUBJECT: Amendment No. 8 to the Santiago Aqueduct Commission (SAC) Joint Powers Agreement (JPA)

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to execute Amendment No. 8 to the SAC JPA, as attached.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

It should be noted that this item was discussed at the MWDOC P&O Committee meeting in August and the Committee recommended the item be pushed over to the P&O Meeting in September to provide time to work out the following items between MWDOC, IRWD and EOCWD:

- (1) Working out the hydraulic and water quality issues associated with EOCWD's 10.0 cfs of capacity in Reach 1U of the Baker pipeline;
- (2) Agreeing that the capacity swaps implemented with previously approved Amendment No. 7 to the SAC JPA to align capacities with the Baker Water Treatment Plant do not infringe on EOCWD's capacity.

Budgeted (Y/N): n/a	Budgeted amount:	Core ✓	Choice __
Action item amount: n/a	Line item: MWDOC Staff time and Legal time		
Fiscal Impact (explain if unbudgeted):			

- (3) The 1961 JPA included a provision that the SAC shall have the right to commingle water so transmitted with other water transmitted in said aqueduct. This agreement allows water of other quality to be conveyed in the pipeline and EOCWD does not have the right to assert an impact on the quality of water they receive.
- (4) In the event EOCWD is not satisfied with what is decided in the above three issues, the decision will be brought back to the MWDOC Board for consideration.

On August 15, MWDOC staff met with staff from IRWD and EOCWD to discuss the above issues. Based on the discussions and information presented at the meeting, all three agencies were in agreement that MWDOC should proceed with the approval of Amendment #8 to the SAC JPA and that all issues had been adequately addressed and resolved.

MWDOC's Legal Counsel reported concurrence with the staff discussions from August 15.

SUMMARY FROM AUGUST 5 P&O COMMITTEE

EOCWD has raised questions regarding their ownership of capacity in Reach 1U of the Baker Pipeline, whether the capacity swaps completed for the Baker Water Treatment Plant infringed on their capacity, and whether the pump-in of Irvine Lake water into Reach 1U of the Baker Pipeline creates an issue for a potential future treatment plant they are considering at the end of Reach 1U. Staff has researched the various issues. They are complicated and involve agreements running back to 1961. Staff has requested input from Legal Counsel to research issues regarding EOCWD's 10.0 cfs of capacity that was assigned to them in 1962 by MWDOC out of MWDOC's capacity in the Santiago Aqueduct Pipeline (later renamed the Baker Pipeline). The issue of commingling water of multiple sources is also being reviewed by Legal Counsel. Staff from IRWD, EOCWD and MWDOC have a meeting coming up on August 15 to discuss these issues. Depending on the outcome of the meeting and whether the questions have been fully addressed to the satisfaction of EOCWD, this issue may be pushed over to a future date.

DETAILED REPORT FROM AUGUST 5 P&O COMMITTEE

Background Regarding SAC and the Baker Pipeline

MWDOC has a position on the SAC Commission representing EOCWD and other interests. SAC was formed as a JPA in 1961 primarily by ETWD and LAWD; MWDOC was included for the purposes of oversizing the pipeline as shown below for Reaches 1 through 5. Note that the original make-up of the Santiago Aqueduct Commission was 3 appointees of ETWD and 3 appointees of LAWD and none for MWDOC.

SECTION 3 - CAPACITY RIGHTS

The Orange County Municipal Water District shall acquire capacity rights in each reach of the Santiago Aqueduct as follows:

Reach I - Santiago Lateral to Peters Reservoir	35.5 c.f.s.
Reach II - Peters Reservoir to Little Joaquin Valley	23.0 c.f.s.
Reach III- Little Joaquin Valley to Rattlesnake Reservoir	22.0 c.f.s.
Reach IV - Rattlesnake Reservoir to West Boundary of Los Alisos Water District	13.5 c.f.s.
Reach V - West Boundary of Los Alisos Water District to Los Alisos Service Connection	7.5 c.f.s.

1961 JPA, Page 2

Following is a listing of the JPA Formation, Amendments thereto and related agreements relative to this write-up:

Agreements and Amendments Related to the SAC JPA	
Year	Agreement Topic
1961	SAC JPA formed
1962	MWDOC assigns 10.0 cfs of capacity to EOCWD
1970±	SAC agencies consider emergency storage in Irvine Lake
1974	Amendment #1 to the SAC JPA = Changes make-up of the Commission, Adds MWDOC
1978	Amendment #2 to the SAC JPA – Brings the Baker Pipeline into the AMP, Changes Make-up of the Commission, MWDOC represents EOCWD, Santiago CWD, County of Orange, TIC and Western
1978	Amendment #3 to the SAC JPA – Increases Capacity in Lower Reaches of the AMP
1981	Amendment #4 to the SAC JPA – Settles AMP Bid Issue
1986	Amendment #5 to the SAC JPA – Flexibility in MWDOC Commissioner Appointment
1999	Amendment #6 to the SAC JPA - Flexibility in Appointments of SAC Commissioners
2013	Baker O&M Agreement and Capacity Swaps in the Baker
2014	Amendment #7 to the SAC JPA – Baker Treatment Plant Capacity Swaps
2019	Amendment #8 to the SAC JPA – TIC Capacity to IRWD

In 1962 MWDOC “assigned and set over” 10.0 cfs of capacity to EOCWD (the previously executed JPA between MWDOC, ETWD and LAWD provided MWDOC the right to assign capacity and so ETWD and LAWD did not have to sign off). EOCWD’s acquisition of capacity did not include them acquiring a seat on the Commission. The Agreement between MWDOC and EOCWD was silent on any sort of representation on SAC, likely because MWDOC did not have any representation on the Commission at the time.

In 1974, the make-up of the Commission changed to 9 directors, 3 from ETWD, 3 from LAWD and 3 from MWDOC; MWDOC picked up a larger share of the overall cost, going from 48.5% to 56.35%. Staff is not clear on the logic behind this change and could not find a clear explanation regarding the change.

<u>EXHIBIT A</u>	
<u>AGENCY</u>	<u>PERCENTAGE</u>
El Toro Water District	22.20
Los Alisos Water District	21.45
Municipal Water District of Orange	<u>56.35</u>
	TOTAL: 100.00

1974 Amendment 1, Page 6

SAC Amendment #2 occurred in 1978 as a result of construction of the AMP (called the Diemer Intertie in the agreements). This involved downsizing the Baker Pipeline hydraulic capacity starting in Reaches 2U through 5U because agencies were transferring from the untreated Baker Pipeline to the treated AMP. Amendment #2 provided that the Baker Pipeline, including all rights of way, were leased to MWDOC because of the integration between the Baker and AMP. A new make-up of the Commission was called for consisting of 7 members as shown below; it was stated that MWDOC’s representation covered EOCWD, County of Orange, TIC and Western. This is the first time where representation of EOCWD was specifically identified.

El Toro Water District;
 Los Alisos Water District;
 Irvine Ranch Water District;
 Santa Margarita Water District;
 Santa Ana Mountains County Water
 District;
 Moulton-Niguel Water District; and
 Municipal Water District of Orange County.

Each member shall have one vote. It is understood that MWDOC will be representing its agency and East Orange, Santiago, the County of Orange, The Irvine Company, and Western. The new Commission shall take over the management and operation of the Aqueduct System on the date of its creation.

1978 Amendment 2, Page 23

By virtue of IRWD taking over Santiago County Water District and consolidating with LAWD, the Commission has been operating with a Commission of 6 members for some time now. Currently, MWDOC still represents EOCWD, TIC and the County of Orange. With the proposed Amendment No.8 which effectively drops TIC from having any ownership in the Baker Pipeline, MWDOC will only represent EOCWD and the County of Orange on a 6 person Commission.

EOCWD Concerns with the Capacity Swaps for the Baker Treatment Plant

EOCWD has raised an issue as to whether or not the capacity swaps completed to realign and adjust capacity in the Baker Pipeline reaches 1U through 5U for purposes of supplying water to the Baker Treatment Plant infringed on their 10.0 cfs of capacity in Reach 1U. Previously the SAC Commission and all parties to the JPA approved JPA Amendment No. 7 which included the realigned capacities. For purposes of readjusting capacities, a flow test was conducted on the Baker Pipeline and the Hazen Williams flow coefficient was agreed to be set at 140. The calculations were performed in such a way as to utilize as much capacity as could be achieved in reaches 2U through 5U to flow water to the Baker Treatment Plant without impacting capacity owners in Reach 1U. IRWD, who had excess water in Reach 1U, reduced capacity to allow more flow to be taken further south in the pipeline. The calculations were performed by "fixing" EOCWD's capacity at 10 cfs, TIC's capacity at 2.5 cfs and the County of Orange's 1.0 cfs in Reach 1U (these were the only agencies not participating in the Baker Treatment Plant). By inspection, one would conclude the three agencies ended up with the same capacity they previously had, and by way of other agencies taking less water in Reach 1U, the calculations increased the Hydraulic Grade Line (HGL) by 1 foot at the end of Reach 1U, thus providing slightly higher pressure than in the previous capacity allocations.

An argument can be made that by increasing the flow coefficient to 140 (reduces friction factor and increases the capacity of the pipeline slightly) also created more capacity in Reach 1U and EOCWD should/could have been given the opportunity to secure that

additional capacity. MWDOC was looking out for EOCWD and at the time was convinced that EOCWD's capacity was protected at 10.0 cfs and were under the belief that EOCWD was not really in the market for additional capacity - that was the underlying basis for the recommendation and approval by MWDOC of Amendment No. 7 in 2013. Assuming we went back to 2013 and EOCWD was provided an opportunity to secure capacity in Reach 1U, our calculations are that the extra capacity to EOCWD would have been about 0.3 cfs, and they would have had to "pay for the capacity" at a cost of about \$24,355 per cfs. However, potentially confounding this argument is a provision in the original SAC JPA which controlled the assignment of MWDOC capacity to others (this provision is how EOCWD originally acquired their capacity in Reach 1U, by assignment from MWDOC in 1962) that indicates that "all capacity in the Santiago Aqueduct (Baker Pipeline) in excess of that allocated to Orange County Municipal Water District shall be distributed between Los Alisos Water District and El Toro Water District at the downstream end of Reach V in proportion to their respective percentages of ownership in Reaches I through V, inclusively". Legal Counsel will have to review and make a determination as to whether this provision might still apply.

In staff's opinion, the questions for Legal Counsel are:

1. Should EOCWD at least have been offered the capacity increase of 0.3 cfs at the agreed upon unit cost for the 2013 Capacity Swaps?, or
2. Do the increases in capacity continue to accrue to the original forming members of SAC (one being ETWD and the other being LAWD which was subsequently consolidated into IRWD)?, or
3. Did the capacity swaps "reset" the ability to change capacity in the pipeline, since the capacity swaps were agreed upon and approved by all owners of capacity including MWDOC on behalf of EOCWD?

At a minimum, MWDOC's staff is comfortable that EOCWD's 10.0 cfs of capacity was protected and not infringed upon.

MWDOC and EOCWD have an upcoming August 15 meeting scheduled with IRWD staff to further discuss these issues. Staff has submitted the questions noted above to MWDOC's Legal Counsel. Because there are many agreements to sort through, Legal Counsel may not be ready to provide an opinion prior to the Board meeting. Other issues may also be brought up by way of the August 15 meeting.

There is one additional issue EOCWD is concerned about. They are investigating building a treatment plant at the end of Reach 1U. Irvine Lake water can be pumped into the Baker Pipeline at the end of Reach 1U just upstream of where EOCWD would take water should they decide to build a new treatment plant. The Irvine Lake water requires a higher level of treatment, which the Baker Treatment Plant was designed to treat. EOCWD is concerned that the cost of their treatment plant may be increased by having to potentially treat Baker water that is co-mingled MET water and Irvine Lake water, as opposed to simply treating MET water. The original SAC JPA governing MWDOC's capacity states "The Commission shall have the right to comingle water so transmitted with other water transmitted in said aqueduct, ..." In addition, there were a number of agreements dating back to 1970 that

involved the various SAC agencies working together to secure storage rights in Irvine Lake and to convey Irvine Lake water through the Irvine Lake Pipeline and introduce it into the Baker Pipeline at the end of Reach 1U. This would seem to indicate that alternative sources of water were always reserved to be conveyed in the Baker Pipeline. Interestingly, EOCWD considered, but did not participate in the 1970 agreements with respect to storage in Irvine Lake. Staff will request Legal Counsel to review this issue as well.

BOARD OPTIONS

Option #1

- It is recommended that the General Manager be authorized to execute Amendment no. 8 to the SAC JPA.

Fiscal Impact: No impact to MWDOC, other than time for staff and Legal Counsel.

Business Analysis: MWDOC sits on the SAC Commission and represents EOCWD. We want to be assured that EOCWD is comfortable prior to moving forward; the meeting held on August 15 confirmed this understanding.

Option #2

- Ultimately, staff does not feel there are any options to proceeding with some form of Amendment No. 8

Fiscal Impact: n/a

Business Analysis: n/a


STAFF RECOMMENDATION

Option # 1

Attached is the write up from SAC for Amendment #8 to the SAC JPA.

March 21, 2019

Prepared and

submitted by: K. Burton 

Approved by: Paul A. Cook 

SANTIAGO AQUEDUCT COMMISSION

AMENDMENT NO. 8 TO THE SANTIAGO AQUEDUCT COMMISSION JOINT POWERS AGREEMENT

SUMMARY:

Irvine Ranch Water District (IRWD) and The Irvine Company have executed an agreement to transfer the Irvine Company's 2.5 cubic feet per second (cfs) capacity in Reach 1U of the Baker Pipeline to IRWD. Amendment No. 8 to the Santiago Aqueduct Commission (SAC) Joint Powers Agreement recognizes the transfer of capacity and the resulting allocation of costs of maintenance, capital repairs and capital improvements to the Baker Pipeline. Amendment No. 8 also updates the member and represented agencies of the Santiago Aqueduct Commission following IRWD's consolidation with former member agency Los Alisos Water District and IRWD's capacity transfer with The Irvine Company. Staff recommends that the member agencies of the Santiago Aqueduct Commission approve Amendment No. 8 to the Santiago Aqueduct Commission Joint Powers Agreement.

BACKGROUND:

IRWD and The Irvine Company have executed an *Assignment and Assumption Agreement (Transfer Agreement)* to transfer The Irvine Company's 2.5 cfs capacity in Reach 1U of the Baker Pipeline to IRWD. The Transfer Agreement is attached as Exhibit "A". The transfer of capacity rights and the resulting allocations of maintenance, capital repairs, and capital improvement costs became effective July 1, 2018.

The intent of Amendment No. 8 to the SAC Joint Powers Agreement is to memorialize the effect of the Transfer Agreement and acknowledge that each of the SAC member and represented agencies not participating in the Transfer Agreement will retain the same capacity rights identified in Amendment No. 7 to the SAC Joint Powers Agreement. Additionally, Amendment No. 8 updates the member and represented agencies of SAC following IRWD's consolidation with former member agency Los Alisos Water District and IRWD's capacity transfer with The Irvine Company. Amendment No. 8 is attached as Exhibit "B".

The capacity of each SAC member and represented agency in each reach of the Baker Pipeline is shown in Exhibit "A" of Amendment No. 8. The maintenance, capital repair and capital improvement cost shares for each member and represented agency in each reach, and for the Baker Pipeline as a whole, are shown in Exhibit "B" of Amendment No. 8. The capacities and allocation of costs of maintenance, capital repairs and capital improvements of the non-participating Transfer Agreement SAC member and the represented agencies remain unchanged from Amendment No. 7.

FISCAL IMPACTS:

Effective July 1, 2018 the allocation of costs for maintenance, capital repairs and capital improvements will be allocated between the participating member agencies and represented agencies as shown in Exhibit “B”.

ENVIRONMENTAL COMPLIANCE:

This activity is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15306 which provides exclusion for projects involving basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

RECOMMENDATION:

That the Commission recommend that the member agencies approve Amendment No. 8 to the Santiago Aqueduct Commission Joint Powers Agreement.

LIST OF EXHIBITS:

- Exhibit “A” – Assignment and Assumption Agreement between Irvine Ranch Water District and The Irvine Company
- Exhibit “B” – Amendment No. 8 to the Santiago Aqueduct Commission Joint Powers Agreement

EXHIBIT "A"

ASSIGNMENT AND ASSUMPTION AGREEMENT

This ASSIGNMENT AND ASSUMPTION AGREEMENT ("**Agreement**") is dated July 1, 2018 (the "**Effective Date**") and is between **IRVINE RANCH WATER DISTRICT**, a California water district, organized under Division 13 of the California Water Code ("**IRWD**"), and The Irvine Company LLC, a Delaware limited liability company, as successor-in-interest to The Irvine Company, a Delaware corporation ("**TIC**"). IRWD and TIC are each a "**Party**" and together are the "**Parties**."

On or about April 13, 1961, the Los Alisos Water District, the El Toro Water District, and the Orange County Municipal Water District entered into the Santiago Aqueduct Commission Joint Powers Agreement (the "**JPA**"). The JPA created the Santiago Aqueduct Commission ("**Commission**") to construct, maintain, repair and manage the Santiago Aqueduct ("**Aqueduct**"), which would transmit water to the parties to the JPA.

The JPA was amended seven times, by: Amendment to the JPA (on or about September 11, 1961); Amendment No. 2 to the JPA (on or about January 1, 1978) ("**Amendment 2**"); Amendment No. 3 to the JPA (on or about January 13, 1978) ("**Amendment 3**"); Amendment No. 4 to the JPA (on or about September 1, 1981) ("**Amendment 4**"); Amendment No. 5 to the JPA (on or about October 22, 1986); Amendment No. 6 to the JPA (on or about July 8, 1999); and Amendment No. 7 to the JPA (on or about June 19, 2014). These Amendments, along with all exhibits and attachments thereto, are collectively identified in this Agreement as the "**Amendments**." TIC was not a signatory to the JPA nor any of the Amendments other than Amendment 3 and Amendment 4.

Amendment 2 added IRWD as a party and as a member of the Commission and TIC as a party to the JPA with respect to certain matters. That amendment, and various other leases and subleases issued pursuant to the Amendments, granted the Parties certain rights and obligations with respect to the construction, maintenance, operation of water lines to be constructed parallel to the Aqueduct to supply water to, among others, the Parties. Pursuant to the JPA Amendments, TIC possesses 2.5 cfs capacity in Reach 1U of the Aqueduct, also known as the Baker Pipeline.

The Parties intend by this Agreement to assign and transfer TIC's rights and obligations under the JPA, the Amendments, and any other leases or subleases related thereto, to IRWD for valuable consideration.

The Parties therefore agree as follows:

1. Assignment. In exchange for IRWD's payment to TIC of the sum of \$56,410.00 (the "**Transfer Fee**") concurrent with the delivery of this Agreement, TIC hereby assigns and transfers to IRWD all of TIC's right, title, interest and obligations under the JPA and the Amendments (collectively, the "**TIC Interest**") effective as of July 1, 2018. Upon assignment and transfer of the TIC Interest as set forth in this section, IRWD accepts from TIC all such TIC Interest, subject to the terms and conditions set forth in this Agreement.

2. Assumption. IRWD assumes and agrees to perform and fulfill all the terms, covenants, conditions, and obligations required to be performed and fulfilled by TIC under the JPA and the Amendments.

3. Assignor Representations. TIC represents that, to TIC's knowledge, (a) TIC has not transferred or assigned any portion of the TIC Interest (including the 2.5 cfs capacity in Reach 1U as set forth in the Amendments), (b) TIC has not amended, modified or terminated the JPA or the Amendments except as set forth therein, and (c) TIC has not breached the JPA or the Amendments. As used herein, "to TIC's knowledge" shall mean and refer to the current knowledge of Peter Changala, who is the employee of TIC's affiliate (Irvine Management Company) who is most likely to know about the status of the TIC Interest.

4. As-Is; Where-Is. Except as otherwise set forth in Section 3 above, IRWD acknowledges and agrees that it is accepting the assignment and conveyance of the TIC Interest based solely upon IRWD's inspection and investigation of the same and all documents related thereto, or its opportunity to do so, and the TIC Interest is assigned in an "AS IS, WHERE IS" condition, without relying upon any representation or warranties, express, implied or statutory, of any kind. Notwithstanding anything to the contrary, TIC's aggregate liability in connection with this Agreement shall not exceed the amount of the Transfer Fee.

5. Successors and Assigns. This Agreement will be binding on and inure to the benefit of the Parties, their heirs, executors, administrators, successors in interest, and assigns.

6. Choice of Law and Venue. All matters relating to this Agreement are governed by the laws of the State of California, and venue for any action related to the Agreement shall be the Superior Court of Orange County.

7. Notice. Any notice will be deemed given by depositing it in the United States Mail, first class, return receipt requested, or by courier or overnight delivery service and addressed as follows:

If to IRWD:

Irvine Ranch Water District
16500 Sand Canyon Avenue
P.O. Box 5700
Irvine, CA 92619-7000
Attn: Paul A. Cook, General Manager

If to TIC:

The Irvine Company LLC
550 Newport Center Drive
Newport Beach, CA 92660
Attn: General Counsel

8. Amendment. Any amendment or modification of this Agreement must be written and properly executed by both Parties.

9. Interpretation. Each Party has participated in negotiating and drafting this Agreement, so if an ambiguity or a question of intent or interpretation arises, this Agreement is to be construed as if the Parties had drafted it jointly, as opposed to being construed against a party because it was responsible for drafting one or more provisions of this Agreement.

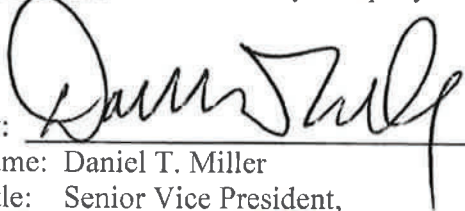
10. Further Assurances. The Parties shall take such actions, or execute, acknowledge and deliver, or obtain the execution, acknowledgment, and delivery of such instruments as are reasonably necessary, appropriate or desirable to give effect to the provisions of this Agreement.


11. Entire Agreement. This Agreement constitutes the entire agreement between the Parties regarding TIC's assignment and IRWD's assumption of all of the TIC Interest. This Agreement supersedes all prior or contemporaneous agreements, commitments, conditions, discussions, instruments, offers, promises and/or proposals between the Parties regarding TIC's assignment and IRWD's assumption of all of the TIC Interest, whether oral or written.

12. Authority. The Parties represent that the individuals executing this Agreement have the legal power, right and actual authority to bind that Party to the terms and conditions of this Agreement.

IRWD and TIC are signing this Agreement to be effective as of the Effective Date.

THE IRVINE COMPANY LLC,
a Delaware limited liability company

By: 
Name: Daniel T. Miller
Title: Senior Vice President,
Entitlement & Public Affairs

By: 
Name: Peter J. Changala
Title: Vice President, Ag Operations

IRVINE RANCH WATER DISTRICT

By: 
Paul A. Cook, General Manager

APPROVED AS TO FORM:
Lewis Brisbois Bisgaard & Smith, LLP

By: 
General Counsel

EXHIBIT "B"

AMENDMENT NO. 8 TO THE SANTIAGO AQUEDUCT COMMISSION JOINT POWERS AGREEMENT

This Amendment No. 8 to the Santiago Aqueduct Commission Joint Powers Agreement (“**Amendment No. 8**”) is effective March 21, 2019, and is between the following six member agencies of the SANTIAGO AQUEDUCT COMMISSION (the “**Commission**”) created by a Joint Powers Agreement dated September 11, 1961 (as amended, the “**Joint Powers Agreement**”):

EL TORO WATER DISTRICT;
IRVINE RANCH WATER DISTRICT (“**IRWD**”) on its own behalf and as assignee of
The Irvine Company;
MOULTON NIGUEL WATER DISTRICT;
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (formerly known as Orange
County Municipal Water District) (“**MWDOC**”) on behalf of represented
agencies EAST ORANGE COUNTY WATER DISTRICT (“**EOCWD**”) and the
County of Orange (the “**County**”);
SANTA MARGARITA WATER DISTRICT; and
TRABUCO CANYON WATER DISTRICT (formerly known as Santa Ana Mountains
County Water District).

The member agencies are also sometimes referred to as the “**Parties**.” Together EOCWD and the County are the “**represented agencies**” but are not member agencies.

The Joint Powers Agreement has been previously amended by the following amendments: the first Amendment (December 20, 1974); Amendment No. 2 (January 13, 1978); Amendment No. 3 (November 1, 1978); Amendment No. 4 (September 1, 1981); Amendment No. 5 (October 22, 1986); Amendment No. 6 (July 8, 1999); and Amendment No. 7 (June 19, 2014).

The Joint Powers Agreement (as amended) establishes certain hydraulic grade lines and capacity rights for the member agencies and represented agencies in the various reaches of the Santiago Aqueduct, also known as the Baker Pipeline. The costs of maintenance, capital repairs and capital improvements to the Baker Pipeline are allocated to the member agencies and represented agencies in proportion to each party’s capacity rights in each reach as compared with the total capacity for each reach and in proportion to the length of each reach as compared with the entire length of the Baker Pipeline.

Capacity rights in the Baker Pipeline have been transferred among various member agencies and represented agencies, as previously reflected in the tables set forth in Amendment No. 7.

In 2018, IRWD and The Irvine Company executed an *Assignment and Assumption Agreement* (the “**Transfer Agreement**”) to transfer The Irvine Company’s capacity in the Baker

Pipeline to IRWD. The transfer of capacity rights and the resulting allocations of maintenance, capital repairs, and capital improvement costs became effective as of July 1, 2018. The Parties intend by this Amendment No. 8 to memorialize the effect of the Transfer Agreement and acknowledge that each of the Parties and represented agencies not participating in the Transfer Agreement will retain the same capacity rights identified in Amendment No. 7. The Parties also intend by this Amendment No. 8 to clarify the members of the Commission following IRWD's consolidation in 2010 with former member agency Los Alisos Water District.

Therefore, the Parties amend the Joint Powers Agreement as follows:

SECTION 1. Exhibit A to this Amendment No. 8 depicts the capacities and hydraulic grade lines in the Baker Pipeline resulting from the Transfer Agreement. Exhibit B to this Amendment No. 8 depicts the corresponding allocation of costs of maintenance, capital repairs, and capital improvements for each reach of the Baker Pipeline and the Baker Pipeline in its entirety. Both exhibits are incorporated by reference into the Joint Powers Agreement and shall amend and supersede in their entirety the capacities and hydraulic grade lines in the Baker Pipeline as well as the allocation of costs previously set forth in the Joint Powers Agreement.

SECTION 2. In order to reflect the consolidation of Los Alisos Water District with IRWD, and the transfer of The Irvine Company's capacity to IRWD, the first two paragraphs of Section 3 of the Joint Powers Agreement, as amended by Amendment No. 6, are amended to read as follows:

"The Commission shall consist of six (6) regular members, one (1) regular member to be selected by each of the following member agencies:

El Toro Water District;
Irvine Ranch Water District;
Moulton Niguel Water District;
Municipal Water District of Orange County;
Santa Margarita Water District; and
Trabuco Canyon Water District.

The Commission shall maintain and operate the Baker Pipeline. Each member agency shall have one vote. MWDOC shall represent itself, EOCWD and the County of Orange. Each member agency may appoint two alternate members, designated a first alternate member and a second alternate member, to the Commission."

SECTION 3. Except as modified by this Amendment No. 8, the Parties reaffirm the Joint Powers Agreement as amended by the prior seven amendments described above. The Parties shall execute this Amendment No. 8 in duplicate, each identical duplicate of which will be considered an original.

[Signatures appear on following pages.]

The Parties have executed this Amendment No. 8 on the dates set forth below.

DATED: _____

EL TORO WATER DISTRICT

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
Redwine and Sherrill, LLP

By: _____
District Counsel

DATED: _____

IRVINE RANCH WATER DISTRICT

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
Lewis Brisbois Bisgaard & Smith, LLP

By: _____
District Counsel

DATED: _____

MOULTON NIGUEL WATER DISTRICT

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
Best Best & Krieger LLP

By: _____
District Counsel

DATED: _____

MUNICIPAL WATER DISTRICT OF ORANGE
COUNTY

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
Best Best & Krieger, LLP

By: _____
District Counsel

DATED: _____

SANTA MARGARITA WATER DISTRICT

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
Best Best & Krieger, LLP

By: _____
District Counsel

DATED: _____

TRABUCO CANYON WATER DISTRICT

By: _____
President

By: _____
Secretary

APPROVED AS TO FORM:
Atkinson, Andelson, Loya, Ruud & Romo, LLP

By: _____
District Counsel

EXHIBIT A

SANTIAGO AQUEDUCT COMMISSION
BAKER PIPELINE
PIPELINE CAPACITIES

	Reach 1U	Reach 2U	Reach 3U	Reach 4U	Reach 5U
Length (LF)	9,400	10,425	7,950	28,500	6,070
HGL Elevation at End of Reach ¹	816	788	770	703	690
Agency	CFS	CFS	CFS	CFS	CFS
East Orange County Water District	10.00	-	-	-	-
County of Orange	1.00	1.06	1.06	1.06	-
Irvine Ranch Water District	49.00	14.59	10.54	10.54	10.50
Santa Margarita Water District	13.00	13.08	13.05	13.05	13.00
Trabuco Canyon Water District	8.00	8.05	8.03	8.03	8.00
El Toro Water District	5.00	5.00	5.00	5.00	5.00
Moulton Niguel Water District	13.00	13.00	13.00	13.00	13.00
Total Capacity	99.00	54.78	50.68	50.68	49.50

¹ Beginning HGL elevation of 832 at OC-33

Exhibit B

Pipeline Capacities
Maintenance, Capital Repair, and Capital Improvement Share, Total and By Reach

Length (LF)	Reach 1U 9,400		Reach 2U 10,425		Reach 3U 7,950		Reach 4U 28,500		Reach 5U 6,070		Total Pipeline 62,345	
	Capacity Length	%	Capacity Length	%	Capacity Length	%	Capacity Length	%	Capacity Length	%	Capacity Length	%
East Orange County Water District	94,000	9.53%	-	-	-	-	-	-	-	-	94,000	2.58%
County of Orange	9,400	0.95%	11,051	2.33%	8,427	2.33%	30,210	2.33%	-	-	59,088	1.62%
Irvine Ranch Water District	460,600	49.84%	152,101	26.52%	83,793	20.73%	300,390	20.73%	63,735	21.22%	1,060,619	29.06%
Santa Margarita Water District	122,200	13.35%	136,359	23.65%	103,747	25.61%	371,925	25.61%	78,910	26.26%	813,141	22.28%
Trabuco Canyon Water District	75,200	8.15%	83,921	14.64%	63,839	15.81%	228,855	15.81%	48,560	16.16%	500,375	13.71%
El Toro Water District	47,000	5.05%	52,125	9.13%	39,750	9.87%	142,500	9.87%	30,350	10.10%	311,725	8.54%
Moulton Niguel Water District	122,200	13.13%	135,525	23.73%	103,350	25.65%	370,500	25.65%	78,910	26.26%	810,485	22.21%
Total	930,600	100%	571,082	100%	402,906	100%	1,444,380	100%	300,465	100%	3,649,433	100%



ACTION ITEM

September 18, 2019

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Yoo Schneider, Dick, Tamaribuchi)

Robert Hunter, General Manager

Staff Contact: Karl Seckel

SUBJECT: **Additional Authorization for Raftelis to Complete the DWR Grant Monitoring Report for the Budget Based Tiered Rate (BBTR) Grant Study**

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to increase the cost authorization towards completion of the BBTR DWR Grant Monitoring Study from \$41,721, by \$17,707, to a total cost of \$59,428. Staff also requests an additional contingency of \$4,000 if needed, under staff's authority, in the event additional complications occur.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

Budgeted (Y/N): No	Budgeted amount:	Core ✓	Choice __
Action item amount: \$17,707 to \$21,707 for Raftelis; requires authorization of \$10,944 to \$14,944 from current year funds.		Line item: for Raftelis = 02-21-7010; MWDOC Staff time estimated at 20 hours = 02-21-6010	
Fiscal Impact (explain if unbudgeted): In 2017, there were sufficient funds to cover the Raftelis costs and MWDOC would retain a remaining amount of \$6,763. To cover the current recommendation, current year funds current year funds in the amount of \$10,944 to \$14,944 are required to cover the recommended action. In addition, there will be time commitments by MWDOC on the order of approximately 20 hours.			

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Raftelis was hired by MWDOC to work with the three grant participants (ETWD, MNWD and EOCWD) to conduct a study to document the detailed water savings for each of the three agencies from having implemented BBTR or having used BBTR to communicate water use efficiency savings with their consumers during the drought. The report is required by DWR as a condition of the grant to conduct 5-year follow-up monitoring and reporting.

Extra time was spent by Raftelis to work on the savings estimates under a large variety of options. The work was complicated by the nature of the 2012 to 2016 drought and confusion to a referenced “UC Riverside (UCR) methodology” which ultimately turned out to be two different methodologies for two different purposes. Raftelis hit the 80% of authorization from the August 2017 contract award and alerted MWDOC of the situation. Quite a bit of time has been spent in working with UCR, MNWD and MWDOC to understand the modeling issues and arrive at a recommendation. After much discussion and debate, staff recommends increasing the authorization for Raftelis and including a potential contingency depending on the sufficiency of the results (the work has not been completed and the required report has not yet been prepared – an additional 3 to 4 months will be required to complete the work and report).

DETAILED REPORT

In July 2008, DWR advertised for Grants to deal with Urban Drought Assistance. MWDOC was able to partner with a number of its agencies and utilized the assistance of Raftelis Financial Consultants to submit a grant application. MWDOC was awarded a \$685,000 grant to assist a number of its agencies to examine and implement budget based tiered rates. The project involved MWDOC assisting 13 of its agencies with various aspects of implementing budget based tiered rates (irrigable area mapping, rate study development, billing system modifications, outreach, etc). The original proposal made to DWR included total project costs for all agencies of \$2,390,695 and local costs of \$1,640,695 (71%). The difference was made up of DWR funds from the grant in the amount of \$685,000. The MWDOC Board authorized the General Manager to enter into an Agreement with DWR in November 2008 and various consultants.

The Final Grant Report documenting the project was completed and submitted to DWR in March 2015. The terms of the DWR Grant include five years of monitoring to document results following completion of the grant. The five-year follow-up is from 2012 through 2016. The monitoring is directed at the three agencies who proceeded to implement Budget Based Tiered Rates (BBTR) in some format. This includes:

- MNWD
- ETWD
- EOCWD

In May 2017, MWDOC called together the Grant Participants and Raftelis Financial Consultants to discuss various approaches to meet the monitoring requirements of the Grant. The three Participants concurred with the suggested evaluation procedure (which followed a study conducted by UC Riverside on the MNWD system) and indicated they could supply the necessary data to Raftelis. Raftelis put together a scope of work and proposal to conduct the work.

In August 2017, the MWDOC Board authorized consulting work in the amount of \$41,721 for Raftelis to complete the DWR Grant Monitoring Report for the Budget Based Tiered Rate Grant Study. At that time, staff reported to the Board that funds brought into the Grant by MWDOC were sufficient to cover the costs of the work. Even with the additional work proposed, we believe the above statement is correct (staff brought in considerable funding to offset MWDOC's costs in the Grant). DWR paid a total of \$685,000 to MWDOC to disburse to ourselves and the participating agencies. MWDOC's portion of the funds received was \$165,430; in 2017, there were sufficient funds to cover MWDOC's expenses, including the Raftelis contract authorization in 2017 and MWDOC would have a remaining amount of \$6,763 remaining to be used to offset some of MWDOC's time for managing the grant contract.

The purpose of the 2017 study by Raftelis was to document the potential savings by ETWD, MNWD and EOCWD from having implemented Budget Based Tiered Rates (BBTR) between 2012 and 2016 or having used BBTR during that same timeframe to communicate with customers individually regarding how they were doing with water use efficiency efforts. Raftelis has continued working on the project, but ran into a number of issues, some communication based, some technical based, and some based on the historical nature and magnitude of the 2012 to 2016 drought (some documenting it as the worst drought in 1200 years). The following should be noted:

- Difficulties were encountered by all three participants in mining their prior data systems to pull out the data required by Raftelis. All three agencies had changed billing systems over time and records are not transferred into the new systems; to secure older data, required by Raftelis, multiple systems had to be accessed and the data compiled and sent to Raftelis. This process took the better part of a year.
- Essentially Raftelis went over budget due to unforeseen issues reproducing the results of the previous UCR study due to the significant drought that occurred in 2012 to 2016 timeframe. Extra modeling time was spent trying to figure out how much of the water reduction during that period was due to the messaging associated with the drought and media reports and how much was associated specifically with the adoption of water budget rates. Attempting to discern the difference was time consuming and required testing of savings under a number of options and in different consumption classes within each agency.
- There was some miscommunication/confusion associated with the actual regression methodology used by UCR as UCR had previously published two separate reports in an attempt to tease out different information for the MNWD service area. Eventually the methodology was clarified by the Professor at UCR, but in the interim, extra time was spent in the formulation of models that had to be re-calculated.
- Additional unforeseen time requirements occurred due to the very large datasets involved in the study and the time required to run the models, even on the fastest 64 GB-RAM Raftelis desktop - the run time was on the order of a number of hours for each run. Different regression techniques were developed in an attempt to specifically capture the saving associated with the water budgets, given the

magnitude of the drought and other media messaging. This required considerable testing of parameters.

- In simplest terms, the study became more complicated and time consuming than anticipated because the methods that were agreed to be utilized in the study were complex, and the methods referenced in the UCR Research Paper were different from those used to document the MNWD savings in a previous study. It took significant time to figure out the differences between the models, which was further complicated by the long processing times needed to run the models.

BOARD OPTIONS

Option #1

- It is recommended that the General Manager be authorized to augment the cost authorization for Raftelis to complete the DWR Grant Monitoring Report for the Budget Based Tiered Rate (BBTR) Grant.

Fiscal Impact: Increases expenditures by \$17,707 to \$21,707. MWDOC had previously secured sufficient grant funds to cover the 2017 Raftelis authorization and had \$6,763 remaining. MWDOC will have to utilize current year funds in the amount of \$10,944 to \$14,944 to cover the recommended action. In addition, there will be time commitments by MWDOC on the order of approximately 20 hours.

Business Analysis: Our goal in this process is to have a technically unbiased and robust report on the savings estimates for the three agencies. The plan outlined by MWDOC and Raftelis will work towards these goals, but it is possible that the analysis may come out inconclusive at a significant level of confidence. The plan outlined is the best option we have.

Option #2

- Do not authorize the additional request.

Fiscal Impact: In this event, staff will have to develop a final report for DWR. It is possible, but not probable that DWR would request a refund of previously authorized grant funds. DWR could look negatively towards future requests by MWDOC as being unreliable. This is not a good outcome.

Business Analysis: MWDOC prides itself on producing high quality, unbiased and technically robust reports. Not authorizing the additional funds would not support the business analysis. Staff looked at the possibility of bringing in another consultant, but ruled out this option based on the learning curve and how much time has already been spent.

STAFF RECOMMENDATION

Option # 1



INFORMATION ITEM

September 3, 2019

TO: Planning & Operations Committee
(Directors Yoo Schneider, Dick, Tamaribuchi)

FROM: Robert Hunter, General Manager

Staff Contact: Melissa Baum-Haley

SUBJECT: Metropolitan's Assessed Valuation for MWDOC and Orange County for Fiscal Year 2019-20

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee to 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 2019-20, as of August 20, 2019. 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 \$3.1 trillion for FY 2019-20. Based on the assessed valuations for FY 2019-20 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.

MWDOC's certified assessed valuation for FY 2019-20 totals \$525,156,784,056, a 5.6% increase from FY 2018-19 assessed valuation. As a result, this gives MWDOC a voting entitlement of 52,516 or voting percentage of 17.07%; a decrease of 0.06% from last year. In addition, MWDOC's vote percentage of 17.07% entitles the District to four seats on the MET Board of Directors.

Budgeted (Y/N): N	Budgeted amount: None	Core <u>_X_</u>	Choice <u>__</u>
Action item amount: N/A	Line item:		
Fiscal Impact (explain if unbudgeted):			

For all of Orange County; MWDOC, Anaheim, Santa Ana, and Fullerton have a combined certified assessed valuation for FY 2019-20 of \$622,404,649,276. 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 20.23% at MET. Thus giving Orange County a total entitlement of seven Directors; four for MWDOC (17.07%) and one each for the cities of Anaheim (1.58%), Santa Ana (0.90%), and Fullerton (0.68%).

Attachment: Metropolitan staff letter on Item 5A: *Report on list of certified assessed valuations for fiscal year 2019/20 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 20, 2019.*



- Board of Directors
Finance and Insurance Committee

8/20/2019 Board Meeting

5A

Subject

Report on list of certified assessed valuations for fiscal year 2019/20 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 20, 2019

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) 2019/20 on August 12, 2019.

Based on the information received, staff reports that certified assessed valuations for Metropolitan's six-county service area totaled \$3.1 trillion for FY 2019/20. The percentage participation and vote entitlement by member agencies as of August 20, 2019, 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 2019/20, the number of representatives for each agency remains the same and is also reported in **Attachment 1.**

Details

This letter reports the certified assessed valuations for FY 2019/20 and member agency percentage participation, vote and director entitlement (**Attachment 1**), which become effective for all purposes at the August 20, 2019, 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. This 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 2019/20, neither the assessed valuations or AB1220 affects the number of directors of any member agencies.

The certificates of the county auditors for the six counties covering Metropolitan's area, certifying the FY 2019/20 assessed valuations of all property used for calculating Metropolitan's FY 2019/20 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	\$ 1,504,905,237,114
Orange	625,233,056,720
Riverside	196,187,628,838
San Bernardino	120,149,133,064
San Diego	537,708,515,445
Ventura	108,243,210,879
Total:	\$ 3,092,426,782,060

A comparison of FY 2018/19 and FY 2019/20 assessed valuations and the percentage of change (**Attachment 2**) and a comparison of FY 2018/19 and FY 2019/20 vote entitlement and the percentage change (**Attachment 3**) are attached for your information.

Policy

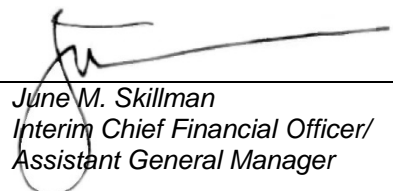
Metropolitan Water District Act Section 52: Additional Directors

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


 June M. Skillman
 Interim Chief Financial Officer/
 Assistant General Manager

8/14/2019

Date


 Jeffrey Kightlinger
 General Manager

8/15/2019

Date

Attachment 1 – Assessed Valuations, Percentage Participation, and Vote and Director Entitlement of Member Public Agencies as of August 20, 2019

Attachment 2 – Comparison of Assessed Valuations for the Fiscal Years 2018/19 and 2019/20

Attachment 3 – Comparison of Vote Entitlement Percentage for the Fiscal Years 2018/19 and 2019/20

**The Metropolitan Water District of Southern California
Assessed Valuations, Percentage Participation, and
Vote and Director Entitlement of Member Public Agencies
As of August 20, 2019**

<u>Member Agency</u>	<u>*Assessed Valuation Amount Certified</u>	<u>Percent of Total</u>	<u>** Vote Entitlement</u>	<u>*** Director Entitlement</u>
Anaheim	\$ 48,568,783,806	1.58%	4,857	1
Beverly Hills	36,552,337,574	1.19%	3,655	1
Burbank	24,909,512,242	0.81%	2,491	1
Calleguas MWD	107,538,044,879	3.49%	10,754	1
Central Basin MWD	155,564,037,395	5.06%	15,556	2
Compton	4,876,981,322	0.16%	488	1
Eastern MWD	83,693,290,625	2.72%	8,369	1
Foothill MWD	19,509,683,114	0.63%	1,951	1
Fullerton	20,933,154,592	0.68%	2,093	1
Glendale	33,577,916,589	1.09%	3,358	1
Inland Empire Utilities Agency	119,479,399,567	3.88%	11,948	1
Las Virgenes MWD	26,152,946,182	0.85%	2,615	1
Long Beach	53,043,370,401	1.72%	5,304	1
Los Angeles	637,879,436,775	20.73%	63,788	5
MWD of Orange County	525,156,784,056	17.07%	52,516	4
Pasadena	32,287,517,552	1.05%	3,229	1
San Diego County Water Authority	534,420,062,742	17.37%	53,442	4
San Fernando	2,031,612,609	0.07%	203	1
San Marino	6,827,065,283	0.22%	683	1
Santa Ana	27,745,926,822	0.90%	2,775	1
Santa Monica	39,250,741,765	1.28%	3,925	1
Three Valleys MWD	72,047,603,949	2.34%	7,205	1
Torrance	30,525,650,699	0.99%	3,053	1
Upper San Gabriel Valley MWD	110,164,081,915	3.58%	11,016	1
West Basin MWD	213,221,019,324	6.93%	21,322	2
Western MWD	111,090,656,554	3.61%	11,109	1
TOTAL ASSESSED VALUATIONS WITHIN METROPOLITAN	\$ 3,077,047,618,333	100%	307,705	38

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 2018/19 and 2019/20

Member Agency	FY 2018/19 Assessed Valuation	FY 2019/20 Assessed Valuation	Percentage Change
Los Angeles County:			
Beverly Hills	\$ 34,286,487,211	\$ 36,580,540,574	6.7%
Burbank	23,946,886,076	25,002,647,242	4.4%
Glendale	31,629,390,783	33,711,265,189	6.6%
Los Angeles	599,677,084,566	640,175,002,878	6.8%
Pasadena	30,658,235,134	32,409,521,952	5.7%
San Marino	6,537,142,145	6,846,700,283	4.7%
Santa Monica	37,288,442,874	39,316,267,365	5.4%
Long Beach	50,599,943,529	53,299,586,877	5.3%
Torrance	29,097,794,463	30,680,242,440	5.4%
Compton	4,597,476,207	4,928,389,062	7.2%
West Basin MWD	199,697,256,735	213,987,806,089	7.2%
Three Valleys MWD	69,310,713,559	72,538,027,913	4.7%
Foothill MWD	18,642,640,500	19,621,347,114	5.2%
Central Basin MWD	147,162,822,284	156,584,724,071	6.4%
Las Virgenes MWD	25,203,574,511	26,249,192,792	4.1%
Upper San Gabriel Valley MWD	105,006,092,501	110,865,559,035	5.6%
San Fernando	1,941,557,848	2,044,793,609	5.3%
Total Los Angeles County	1,415,283,540,926	1,504,841,614,485	6.3%
Orange County:			
Anaheim	45,664,235,615	48,780,882,406	6.8%
Santa Ana	26,464,260,473	27,889,308,938	5.4%
Fullerton	19,982,651,004	21,047,887,392	5.3%
MWD of Orange County	499,331,766,502	527,514,977,984	5.6%
Total Orange County	591,442,913,594	625,233,056,720	5.7%
Riverside County:			
Eastern MWD	79,004,560,399	84,345,758,934	6.8%
Western MWD	105,627,536,161	111,841,869,904	5.9%
Total Riverside County	184,632,096,560	196,187,628,838	6.3%
San Bernardino County:			
Inland Empire Utilities Agency	112,941,852,371	120,149,133,064	6.4%
San Diego County:			
San Diego County Water Authority	508,571,874,321	537,702,536,141	5.7%
Ventura County:			
Calleguas MWD	103,677,243,594	108,243,210,879	4.4%
Total Within Metropolitan	2,916,549,521,366	3,092,357,180,127	6.0%
Excluded Areas	70,481,386	69,601,933	-1.2%
*Total Taxable by Metropolitan	\$ 2,916,620,002,752	\$ 3,092,426,782,060	6.0%

The Metropolitan Water District of Southern California
Comparison of Vote Entitlement Percentage for the Fiscal Years 2018/19 and 2019/20

<u>Member Agency</u>	<u>FY 2018/19</u>		<u>FY 2019/20</u>		<u>Change</u>	
	<u>Vote Entitlement</u>	<u>Vote Entitlement Percentage</u>	<u>Vote Entitlement</u>	<u>Vote Entitlement Percentage</u>	<u>Vote Entitlement</u>	<u>Vote Entitlement Percentage</u>
Anaheim	4,545	1.57%	4,857	1.58%	312	0.01%
Beverly Hills	3,426	1.18%	3,655	1.19%	229	0.01%
Burbank	2,385	0.82%	2,491	0.81%	106	-0.01%
Calleguas MWD	10,296	3.55%	10,754	3.49%	458	-0.05%
Central Basin MWD	14,613	5.04%	15,556	5.06%	943	0.02%
Compton	455	0.16%	488	0.16%	33	0.00%
Eastern MWD	7,834	2.70%	8,369	2.72%	535	0.02%
Foothill MWD	1,853	0.64%	1,951	0.63%	98	0.00%
Fullerton	1,987	0.68%	2,093	0.68%	106	0.00%
Glendale	3,149	1.09%	3,358	1.09%	209	0.01%
Inland Empire Utilities Agency	11,227	3.87%	11,948	3.88%	721	0.01%
Las Virgenes MWD	2,511	0.87%	2,615	0.85%	104	-0.02%
Long Beach	5,034	1.74%	5,304	1.72%	270	-0.01%
Los Angeles	59,735	20.59%	63,788	20.73%	4,053	0.14%
MWD of Orange County	49,696	17.13%	52,516	17.07%	2,820	-0.06%
Pasadena	3,053	1.05%	3,229	1.05%	176	0.00%
San Diego County Water Authority	50,533	17.42%	53,442	17.37%	2,909	-0.05%
San Fernando	193	0.07%	203	0.07%	10	0.00%
San Marino	652	0.22%	683	0.22%	31	0.00%
Santa Ana	2,632	0.91%	2,775	0.90%	143	-0.01%
Santa Monica	3,722	1.28%	3,925	1.28%	203	-0.01%
Three Valleys MWD	6,881	2.37%	7,205	2.34%	324	-0.03%
Torrance	2,894	1.00%	3,053	0.99%	159	-0.01%
Upper San Gabriel Valley MWD	10,430	3.60%	11,016	3.58%	586	-0.02%
West Basin MWD	19,892	6.86%	21,322	6.93%	1,430	0.07%
Western MWD	10,486	3.61%	11,109	3.61%	623	0.00%
Total	290,114	100%	307,705	100%	17,591	0.00%

Percentages may not foot due to rounding.

ENGINEERING & PLANNING

Doheny Ocean Desalination Project

(Nothing New to Report)

On June 27, 2019 the South Coast WD (SCWD) Board certified the Final Environmental Impact Report (FEIR) for the Phase I Local Doheny Ocean Desalination Project, which would produce up to 5 million gallons per day (MGD) of new, drinking water supplies for the area.

SCWD subsequently filed its Notice of Determination and is beginning the permitting process with various permitting agencies.

In March 2018, SCWD was awarded a \$10 million grant from the State Department of Water Resources for the Doheny Ocean Desalination Project.

In April 2019, U.S. Representative Mike Levin announced that SCWD is set to receive more than \$8.3 million in US Bureau of Reclamation (USBR) WaterSMART Desalination Construction Program grant funding for the Project. The grant is subject to pending federal appropriations and needs to be included in the E&W Appropriations list of projects for which the Secretary of Interior intends to award grants. Congressman Levin is acting as the lead office on this request in the House.

On July 11, 2019 South Coast WD's Board adopted a resolution pursuing a second year (round) of the USBR WaterSMART Desalination Construction Program grant funding. SCWD is eligible to receive a cumulative total of \$20 million for the Project from USBR. Approximately two to six awards are expected to be made by USBR with up to \$12 million available in this round. The recipient must provide at least 75% of the total project costs.

Next Steps:

1. Alternative Power Supply Management Study –SCWD staff is currently reviewing a proposal from engineering consultant Burns & McDonnell for a 6 month detailed study of alternative power alternatives. The study would include a District-wide assessment and Conceptual Management Plan including studying a community choice aggregation option.
2. Legislative – SCWD is working on AB 1752 to allow the District to proceed with a DBO Contract while maintaining access to State funding for the Project (both DWR grant money and SRF loans). A vote is anticipated in mid-October.
3. Project Delivery – Beginning work on the development of several documents including; Request for State of Qualifications (SOQ) for potential bidders, contract documents, and a RFP package.
4. Peer Review Cost Estimate – California American Water (CalAm), who developed the 6.4 MGD Monterey Ocean Desal Project using slant well technology, is completing a peer review cost estimate. A Board workshop, tentatively scheduled for August 22, 2019, will present the assumptions, costs, and lessons learned.

	<p>5. Slant Well Risk Evaluation – A second workshop will be scheduled to get CalAm’s perspective on the risks of slant well technology.</p> <p>6. SCWD Local Potable Water System Integration – Updated hydraulic modeling and surge analysis of the SCWD system.</p> <p>7. Project Partners – continuing to discuss partnering opportunities with interested agencies</p> <p>8. High Level Schedule –</p> <table> <tr> <td>a. Environmental permitting</td><td>Summer 2020</td></tr> <tr> <td>b. DBOM Contract Develop/Award</td><td>Fall 2020</td></tr> <tr> <td>c. Funding</td><td>Fall 2020</td></tr> <tr> <td>d. Final Design</td><td>Dec. 2020</td></tr> <tr> <td>e. Construction</td><td>Late 2022</td></tr> </table>	a. Environmental permitting	Summer 2020	b. DBOM Contract Develop/Award	Fall 2020	c. Funding	Fall 2020	d. Final Design	Dec. 2020	e. Construction	Late 2022
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MET 2019-20 Shutdown Schedule	<p>MWDOC staff have held several meetings with MET and MWDOC member agencies since July 11, 2019 to review the MET 2019-2020 Shutdown Schedule. One of the proposed shutdowns involves the complete shutdown of the Diemer Water Treatment Plant to accommodate four construction projects at the plant. Currently MWDOC staff is working with potentially affected agencies to see what options are available to accommodate a Diemer shutdown; given the likely reduction in PFOA & PFOS Response Level triggers in the fall of 2019, and its impact to multiple groundwater wells. MWDOC is planning a workshop (in September or October) with the member agencies and three cities to discuss whether a 7-day shutdown can be accommodated in early 2020.</p>										
South Orange County Emergency Service Program	NO NEW INFORMATION										
Strand Ranch Project	NO NEW INFORMATION										
Poseidon Resources	NO NEW INFORMATION										
SMWD Rubber Dams Project (San Juan Watershed Project)	NO NEW INFORMATION										
Meetings											
	<p>Charles Busslinger and Karl Seckel continue to participate in meetings of the Buried Utilities Coalition (BUC) regarding Air Quality Management District permitting of Asbestos Emissions from Demolition/Renovation Activities (Proposed Amended Rule 1403). AQMD adopted several recommendations made by the BUC into the July 25, 2019 draft of the Proposed Amendment to Rule 1403, but a few technical issues remain to be worked out.</p>										

	<p>The BUC will be meeting with South Coast AQMD staff again on August 29, 2019 in an attempt to clarify notification requirements, and to continue to push AQMD to treat asbestos cement pipe differently from asbestos containing building materials; as Cal/OSHA has been doing since 1987.</p> <p>A Public Workshop has been scheduled for September 4, 2019.</p>
	<p>MWDOC and MET staff held a meeting on August 27, 2019 to discuss a variety of pending issues at AMP service connection OC-70. The meeting included a conference call with Utah State Water Research Laboratory (Utah State). MWDOC and MET staff have agreed to a course of action to test the accuracy of service connection OC-70 using the services of Utah State. Agreements between MWDOC and MET for the meter testing are currently in progress.</p>
EOCWD Issues with Capacity in the Baker Pipeline	<p>On August 15, MWDOC staff met with staff from IRWD and EOCWD to discuss several issues related to the Baker Pipeline. Based on the discussions and information presented at the meeting, the group concluded that the previously approved capacity swaps had not infringed on EOCWD's ownership of 10.0 cfs of capacity in Reach 1U of the Baker Pipeline, and agreed that the basic Santiago Aqueduct Commission JPA agreement included a provision that water from other sources can be commingled with Baker Pipeline water.</p>
Meter Testing at Utah State with MET	<p>Karl Seckel and Charles Busslinger met with MET staff Brent Yamasaki and Sergio Escalante and also had on the phone, Steven Barfuss, Director of Utah State Water Research Laboratory. The discussions involved coordination of information to conduct the testing work once it has been fully coordinated. Prior to the testing work, OC-70 will have to be shutdown to obtain specific measurements on the pipe wall thickness and mortar thickness so the Lab can replicate the exact specifications of the pipe; a measurement of the internal diameter of an EOCWD pipeline downstream will occur. Mr. Barfuss believes the laboratory calibration of MET's portable meter for field testing at OC-70 can be accomplished in a very precise manner.</p>
Discussions with SMWD RE Water Quality Issues	<p>Karl Seckel and Charles Busslinger met with the SMWD Water Quality and Innovations Committee to discuss various water quality issues (their Committee has periodically requested an update from MWDOC on various water quality issues). The issues updated in the discussions included:</p> <ol style="list-style-type: none"> 1. MET Update on Colorado River Water Quality Issues (from MET's July 2019 E&O update) <ol style="list-style-type: none"> a. Chromium 6 Remediation – clean-up began in 2004; 1 billion gallons of chromium-6 being cleaned-up on an interim basis; about 25% cleaned-up; construction began in 2018 on the permanent clean-up and should be completed in 2023 and

	<p>operate for about 30 years. The levels of chromium-6 upstream and downstream are at non-detect levels.</p> <ul style="list-style-type: none"> b. Perchlorate Remediation – identified in 1997; treatment has reduced loading into Lake Mead from 1000 pounds per day to less than 100 pounds per day with levels of perchlorate at MET’s CRA intake having dropped from about 9 ppb to about 1 ppb; the long-term solution is being worked on. c. Moab Uranium Mill Tailings Clean-up – 16 million tons of uranium mill tailings are located within 750 feet of the Colorado River and are within the 100 year flood plain. DOE started moving the tailings about 30 miles inland where they will be buried and encased; about 60% has been moved. Only very low levels of radioactivity have been picked up at MET’s CRA intake. Additional Federal funding is speeding up the process. d. Paradox Valley Salinity Control – 200,000 tons of salts are being picked up in the Dolores River from natural salt formations; the salinity control project has shallow extraction wells and injection wells 16,000 feet deep to help keep the saline groundwater from commingling with the Dolores River. The system eliminates 100,000 tons of salts per year from the Colorado River. The injection well is past its useful life and was recently shutdown due to seismic activity from the injection process (operates at over 5,000 psi). This system represents 10% of all of the salinity control measures on the Colorado River system. A Federal EIR/EIS is scheduled for completion later this year (although it has been in progress since 2013) on alternatives that include replacing the existing system, using evaporation ponds or using a “salt-maker” system with near zero discharge of liquids to create salt-cake as a product. The shutdown of this system will ultimately result in about a 10 mg/l increase at MET’s intake to the Colorado River in 4 to 6 years as the additional salt makes its way through the system. <p>2. PFAS issues in the OCWD Basin and impacts thereof</p> <ul style="list-style-type: none"> a. OCWD conducting research on treatment options b. State still considering what to do c. Depending on State outcome, OCWD could suffer the loss of production of 100,000 AF per year, about 1/3 of their production; currently, it makes shutting the Diemer Plant down for 7 days very difficult
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	<p>3. MET Allowing Emergency Water Pump-in to their facilities</p> <p>a. MET has adopted a change to their administrative code that allows member agencies to use the MET pipelines for delivery of local water in the event MET cannot make deliveries of their water. This would allow a pump-in of groundwater into the EOCF#2; the PFAS issue has probably delayed work on this project.</p> <p>4. Recommendations from White Papers by Black & Veatch & Hazen Sawyer on Issues Related to Future Operations and Integration of NEW Supplies within the Orange County Distribution System. MWDOC staff discussed some of the work being investigated on potential water quality issues associated with bringing on new supplies and introducing them into the regional, sub-regional or local pipeline systems as well as other occurrences such as low flow conditions, nitrification and stranding of assets. Staff noted the White Papers have not yet been released, but will be circulated soon and MWDOC will conduct a workshop.</p> <p>Overall, SMWD's committee thanked MWDOC for flagging these issues and presenting them to the Committee so they had an improved understanding. Input from the Committee included the following:</p> <ul style="list-style-type: none"> • They felt that salinity control was a much more critical issue than people are aware of and should be given a higher visibility and attention. Some of the work being updated in the next several years, including the Colorado River Sanitary Survey, the Water Quality Standards for the Colorado River System, and the economic impacts of salinity to the end user. • They asked about the ability to lobby/provide input on National, Colorado River and State issues and how to get ahead of the regulation setting process and where local agencies could help. • They suggested that one of MWDOC's Joint Workshop Meetings with its MET Directors should focus on Water Quality at least once per year to provide an overview and update; wide advertisement of the meeting should be solicited to get a large audience in attendance, with the goal of raising the intelligence quotient on water quality and its potential impacts.
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Status of Ongoing WEROC Projects
August 2019

Description	Comments
<i>Coordination with WEROC Member Agencies</i>	<p>Final: WEROC, with Michael Baker as the lead consultant, has facilitated 19 agencies through the process of updating the Orange County Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan. Plan binders have arrived this week and are currently being delivered to all participating agencies.</p> <p><i>Ongoing: WEROC launched an effort to facilitate a joint RFP and contract with participating WEROC member agencies to address the new requirements of America's Water Infrastructure Act (AWIA). On October 23, 2018, Congress signed into law the American Water Infrastructure Act (AWIA) (S.3021, Law 115-270). Per Section 2013 of Title II, the AWIA requires utilities to conduct a Risk and Resilience Assessment (RRA) of their community water systems and develop a corresponding Emergency Response Plan (ERP). March 31, 2020 for systems serving population of 100,000 or more. New actions:</i></p> <ul style="list-style-type: none"> • HSG assistant project managers are currently reviewing submitted materials from participating agencies and conducting weekly conference calls to obtain additional details • Karl Seckel is working with Legal Counsel and Participating Agencies to finalize an Agreement between MWDOC and Participating Agencies for their participation and costs for Phase 2 & 3. • The first draft of the compliance crosswalk is being released . The crosswalk will be filled in by the HSG staff working with each agency and the initial document will be serve as a compliance GAP analysis. <p>Daniel attended the UAWG (Urban Area Working Group) meeting to build rapport with the grant approving committee for UASI (Urban Area Security Initiative) Homeland Security funds. An initial discussion was had regarding future support for water projects such as additional emergency water trailers and emergency water bags to use at points of distribution.</p>
<i>Training and Programs</i>	<p>MWDOC and WEROC will be participating in the Diemer Water Treatment Plant tabletop exercise on 8/29/19 and facilitating any WEROC multi-point ordering or communication for the training incident. The key element for WEROC will be to coordinate response needs between any affected agency WEROC, the OA and assisting entities and aid in coordination to ensure a more efficient response.</p>
<i>Coordination with the County of Orange</i>	<p><i>Ongoing: OC OA Alert and Warning Working Group is a new committee to develop county-wide public Alert and Warning policies, procedures and tools such as to request and approval forms. This will be a 6-month planning effort.</i> Daniel attended the August meeting and started to work with the County's Control One to address some of WEROC's concerns with the plans associated forms.</p>

<i>Coordination with the County of Orange (cont.)</i>	<p><i>Ongoing: WEROC staff participation in the OA Agreement Revision Working Group. Update: The OA Agreement Working Group met for the first time in several months. The Draft Revised Agreement developed by the working group has been reviewed and approved by the County's Legal Counsel. The OA shared this revised draft to all OC government entities on August 15 to start the review process. Agencies will need to take the agreement to their legal counsel and provide feedback to the OA. UPDATE 8/21/2019 Legal Counsel currently reviewing the draft OA Agreement.</i></p>
<i>Coordination with Outside Agencies</i>	<p><i>On-going: California Public Utilities Commission (PUC) proceedings regarding the Impacts from De-Energization with a Focus on First Responders and Local Government. MWDOC has received party status to these proceedings. Party Status ensures that we receive all communications regarding the proceedings and that our comments are included officially for consideration.</i></p> <p>Daniel is in the initial stages of identifying potential partners to bolster EOC response in a manner that mirrors level 4 incident management team. Level 4 teams include local fire, ems and possibly law enforcement that have significant experience and certifications to manage/assist in major or complex incidents during the first 6-12 hours.</p>
<i>EOC Readiness</i>	<p>Janine Schunk and Daniel participated in the OA and MET radio tests and WebEOC tests. Janine also facilitated the WEROC monthly radio test.</p> <p>Janine scheduled and oversaw the install of the satellite phone fixed base antennas on all WEROC EOC locations. She also identified a discrepancy with one of the radios at the NEOC which is actively being addressed.</p> <p>Leah Frazier assisted WEROC staff with ordering the newly updated WEROC Water and Wastewater county-wide wall maps on large magnetic whiteboards. WEROC EOC staff will now be able to mark up the wall maps with dry erase markers during exercises and real events to track damages. Staff is working on ordering picture icon magnets as symbols for certain types of impacts. Janine facilitated the installation of those maps at the South EOC.</p> <p>Daniel and Janine purchased various equipment to support the Alt EOC at MWDOC such as clean agent fire extinguisher, appropriate locks, and brackets in an effort to better prepare the Alt EOC and harden MWDOC and member agencies. Also working with two electrical contractors to provide quotes on temporary power cable that would allow the connection of the newly acquired generator to be used during mutual aid to member agencies.</p> <p>Janine coordinated the maintenance of the South EOC.</p>

Status of Water Use Efficiency Projects

August 2019

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	Ongoing	In July 2019, 137 smart timers were installed in Orange County. To date, 25,317 smart timers have been installed through this program.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	In July 2019, 0 rotating nozzles were installed in Orange County. To date, 567,470 rotating nozzles have been installed through this program.
SoCal Water\$mart Residential Indoor Rebate Program	MWDSC	Ongoing	Ongoing	In July 2019, 87 high efficiency clothes washers and 13 premium high efficiency toilets were installed in Orange County. To date, 119,385 high efficiency clothes washers and 60,390 high efficiency toilets have been installed through this program.
SoCal Water\$mart Commercial Rebate Program	MWDSC	Ongoing	Ongoing	In July 2019, 79 residential premium high efficiency toilets were installed in Orange County. To date, 105,031 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 914 AFY and 3,907 AF cumulatively.
Turf Removal Program	MWDOC	Ongoing	Ongoing	In July 2019, 41 rebates were paid, representing \$202,309 in rebates paid this month in Orange County.

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
				To date, the Turf Removal Program has removed approximately 22.4 million square feet of turf.
Spray to Drip Conversion Program	MWDOC	Ongoing	Ongoing	<p>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.</p> <p>To date, 249 residential sites and 69 commercial sites have completed spray to drip conversion projects.</p>
Recycled Water Retrofit Program	MWDSC	Ongoing	Ongoing	<p>This program provides incentives to commercial sites for converting dedicated irrigation meters to recycled water.</p> <p>To date, 155 sites, irrigating a total of 1,559 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 3,357 AFY and 10,059 AF cumulatively.</p>