

REGULAR MEETING  
OF THE BOARD OF DIRECTORS  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
18700 Ward Street, Board Room, Fountain Valley, California  
January 16, 2019, 8:30 a.m.

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**AGENDA**

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

**PUBLIC COMMENTS/PARTICIPATION**

At this time, members of the public will be given an opportunity to address the Board concerning items within the subject matter jurisdiction of the Board. Members of the public may also address the Board about a particular Agenda item at the time it is considered by the Board and before action is taken. If the item is on the Consent Calendar, please inform the Board Secretary before action is taken on the Consent Calendar and the item will be removed for separate consideration.

The Board requests, but does not require, that members of the public who want to address the Board complete a voluntary "Request to be Heard" form available from the Board Secretary prior to the meeting.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

Determine need and take action to agendize items(s) which arose subsequent to the posting of the Agenda. (ROLL CALL VOTE: Adoption of this recommendation requires a two-thirds vote of the Board members present, or, if less than two-thirds of the Board members are present, a unanimous vote of those members present.)

**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>.

**NEXT RESOLUTION NO. 2079**

**CONSENT CALENDAR (Items 1 to 6)**

(All matters under the Consent Calendar will be approved by one motion unless a Board member requests separate action on a specific item)

**1. MINUTES**

- a. December 5, 2018 Workshop Board Meeting
- b. December 19, 2018 Regular Board Meeting
- c. December 6, 2018 Special Board Meeting

*Recommendation: Approve as presented.*

**2. COMMITTEE MEETING REPORTS**

- a. Planning & Operations Committee Meeting: December 3, 2018
- b. Administration & Finance Committee Meeting: December 12, 2018
- c. Public Affairs & Legislation Committee Meeting: December 17, 2018
- d. Executive Committee Meeting: December 20, 2018

*Recommendation: Receive and file as presented.*

**3. TREASURER'S REPORTS**

- a. MWDOC Revenue/Cash Receipt Register as of December 31, 2018
- b. MWDOC Disbursement Registers (December/January)

*Recommendation: Ratify and approve as presented.*

- c. Summary of Cash and Investment and Portfolio Master Summary Report (Cash and Investment report) as of November 30, 2018
- d. PARS Monthly Statement (OPEB Trust)
- e. Water Use Efficiency Projects Cash Flow

*Recommendation: Receive and file as presented.*

**4. FINANCIAL REPORT**

- a. Combined Financial Statements and Budget Comparative for the Period ending November 30, 2018

*Recommendation: Receive and file as presented.*

**5. STANDING COMMITTEE AND AD HOC COMMITTEE APPOINTMENTS FOR 2019; SCHEDULE OF COMMITTEE MEETING DATES FOR 2019**

*Recommendation: (1) Ratify the list of Standing Committee and Ad Hoc Committee Appointments as presented by the President of the Board; and (2) ratify Committee meeting dates/times for 2019.*

**6. PRUDENT COMPANION POLICY**

*Recommendation: Approve Option 5 (Eliminate the Prudent Companion Policy). The General Manager was directed to prepare a written statement as to how this new practice will be implemented so as to plan and coordinate travel and meetings between Directors, and the General Manager and staff, and report the outcomes of said meetings.*

**End Consent Calendar**

**ACTION ITEMS**

**7-1 ASSOCIATION AND COMMISSION APPOINTMENTS FOR 2019 RES. NO. \_\_\_\_**

*Recommendation: (1) Ratify the appointment of Representatives and Alternates to Associations as presented by the President of the Board; and (2) Adopt Resolution approving the appointment of one Representative and one Alternate to the Santiago Aqueduct Commission (SAC), for submission to SAC.*

**7-2 CONTINUATION OF WATER LOSS CONTROL TECHNICAL ASSISTANCE PROGRAM**

*Recommendation:* (1) Authorize the General Manager to extend the professional services contract with Water Systems Optimization, Inc. for two additional years in order to provide Choice-funded one-on-one Technical Assistance to member agencies for water loss control program development as described in staff write up, and support the Orange County Water Loss Control Work Group and the development of recommendations for water loss standards setting as a Core-funded effort at an annual cost not to exceed \$55,000, and (2) Authorize the General Manager to extend Choice-based Technical Assistance agreements with agencies for two additional years.

**7-3 OCWD PROPOSED GROUNDWATER STORAGE AGREEMENT STUDY WITH MNWD**

*Recommendation:* Receive recommendation from the Planning & Operations Committee (which meets on January 14, 2019).

**7-4 RECEIVE AND FILE FINAL REPORT: 2018 ORANGE COUNTY WATER RELIABILITY STUDY**

*Recommendation:* Receive and file the FINAL report for the 2018 Orange County Water Reliability Study.

**INFORMATION CALENDAR** (All matters under the Information Calendar will be Received/Filed as presented following any discussion that may occur)

**8. GENERAL MANAGER'S REPORT, JANUARY 2019 (ORAL AND WRITTEN)**

*Recommendation:* Receive and file report(s) as presented.

**9. MWDOC GENERAL INFORMATION ITEMS**

- a. Board of Directors - Reports re: Conferences and Meetings
- b. Requests for Future Agenda Topics

*Recommendation:* Receive and file as presented.

**ADJOURNMENT**

Note: 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 contacting 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.

**MINUTES OF THE WORKSHOP BOARD MEETING  
OF THE BOARD OF DIRECTORS OF  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (MWDOC)  
WITH THE MWDOC MET DIRECTORS**  
December 5, 2018

At 8:30 a.m. President Barbre called to order the Workshop Board Meeting of the Board of Directors of Municipal Water District of Orange County (MWDOC) at the District facilities located in Fountain Valley. Director Finnegan led the Pledge of Allegiance and Secretary Goldsby called the roll.

**MWDOC DIRECTORS**

Brett R. Barbre\*  
Larry Dick\*  
Joan Finnegan  
Wayne Osborne (absent)  
Megan Yoo Schneider  
Sat Tamaribuchi  
Jeffery M. Thomas (absent)

**MWDOC STAFF**

Robert Hunter, General Manager  
Karl Seckel, Assistant General Manager  
Joe Byrne, Legal Counsel  
Maribeth Goldsby, Secretary  
Harvey De La Torre, Associate General Manager  
Melissa Baum-Haley, Sr. Water Resource Analyst  
Kevin Hostert, Water Resources Analyst  
Joe Berg, Dir. of Water Use Efficiency  
Charles Busslinger, Principal Engineer

\*Also MWDOC MET Directors

**OTHER MWDOC MET DIRECTORS**

Larry McKenney

**OTHERS PRESENT**

Mark Monin  
Jose Vergara  
Mike Dunbar  
Ken Vecchiarelli  
Doug Reinhart  
Paul Weghorst  
Jim Atkinson  
Jim Fisler  
Mike Markus  
John Kennedy  
Kelly Rowe  
Rick Erkeneff  
Dennis Erdman  
Bill Green  
Brooke Jones  
Liz Mendelson-Goossens  
Ed Means

El Toro Water District  
El Toro Water District  
Emerald Bay Service District  
Golden State Water Company  
Irvine Ranch Water District  
Irvine Ranch Water District  
Mesa Water  
Mesa Water  
Orange County Water District  
Orange County Water District  
Orange County Water District  
South Coast Water District  
South Coast Water District  
South Coast Water District  
Yorba Linda Water District  
San Diego County Water Authority  
Means Consulting



**PUBLIC PARTICIPATION/PUBLIC COMMENTS**

President Barbre inquired whether any members of the public wished to comment on agenda items.

No public comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED** - Determine need and take action to agendize item(s), which arose subsequent to the posting of the Agenda. (ROLL CALL VOTE: Adoption of this recommendation requires a two-thirds vote of the Board members present or, if less than two-thirds of the Board members are present, a unanimous vote.)

No items were presented.

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

President Barbre inquired as to whether there were any items distributed to the Board less than 72 hours prior to the meeting.

No items were distributed.

**PRESENTATION/DISCUSSION/INFORMATION ITEMS****INPUT OR QUESTIONS ON MET ISSUES FROM THE MEMBER AGENCIES/MET DIRECTOR REPORTS REGARDING MET COMMITTEE PARTICIPATION**

Director Ackerman advised that November was a fairly light month at MET, but that the continuing major issues include the California WaterFix and the Drought Contingency Plan.

Director McKenney highlighted MET's Conservation & Local Resources Committee's discussion regarding high technology tools (aerial imagery) for irrigation.

Director Dick noted that the Board elected its Board Secretary, Leticia Vasquez-Wilson (Central Basin Municipal Water District).

President Barbre highlighted activities relating to the California WaterFix and the Delta Stewardship Council.

**WATER SUPPLY UPDATE**

MWDOC Water Resources Analyst, Kevin Hostert, provided a presentation on the U.S. drought monitor, climate outlook, Santa Ana precipitation statistics, northern California Accumulated precipitation, storage level data throughout the state, the State Water Project Table A allocations (currently at 10%), and MET estimated storage levels.

Following the presentation, the Board received and filed the report as presented.

## **DISCUSSION OF A METROPOLITAN IN-LIEU DELIVERY PROGRAM**

Associate General Manager Harvey De La Torre provided an overview on MET's potential In-Lieu Delivery Program, noting such a program would provide operational flexibility to maximize storage during surplus conditions, provide opportunities to enhance groundwater basin levels, and add to MET's multiple storage programs.

Mr. De La Torre's presentation included information on the Cyclic Storage Program (including a summary of water deliveries), an overview of the 2017 water year, and an overview of the 2017-18 Limited-Term In-Lieu Program. He highlighted the main terms of proposed In-Lieu Deliver Program which include (1) provides the General Manager the authority to enter into agreements, (2) member agencies would accept supplies in addition to base deliveries, (3) supplies would be purchased within five years at full service untreated rate on an agreed upon schedule, and (4) would include certifications/reconciliations. Mr. De La Torre concluded his presentation with an overview of the financial terms (credit up to \$225/af, member agency would be billed treatment surcharge, credit and reconciliation terms, and member agency pays full service rate on a defined schedule).

Discussion ensued following the presentation, with specific emphasis on surface storage (in addition to groundwater storage), the importance of such a program, and how the MET member agencies feel about the program (positive feedback)

The Board received and filed the report as presented.

## **CALIFORNIA WATERFIX ACTIVITIES UPDATE**

Sr. Water Resources Analyst Melissa Baum-Haley updated the Board on the status of the State Resources Control Board and Delta Stewardship Council activities, noting that Governor-Elect Newsom, along with Governor Brown requested a postponement of the Bay Delta Water Quality Control Plan (to December 12<sup>th</sup>).

The Board received and filed the staff report without any discussion.

## **MWD ITEMS CRITICAL TO ORANGE COUNTY**

- a. MET's Water Supply Conditions
- b. MET's Finance and Rate Issues
- c. Colorado River Issues
- d. Bay Delta/State Water Project Issues
- e. MET's Ocean Desalination Policy and Potential Participation by MET in the Doheny Desalination Project
- f. Orange County Reliability Projects
- g. East Orange County Feeder No. 2
- h. South County Projects

The Board received and filed the information as presented.

**METROPOLITAN (MET) BOARD AND COMMITTEE AGENDA DISCUSSION ITEMS**

- a. Summary regarding November MET Board Meetings
- b. Review items of significance for the upcoming MET Board and Committee Agendas

The Board received and filed the information.

**CLOSED SESSION**

**CONFERENCE WITH LABOR NEGOTIATORS**

District Designated Representatives: Joseph Byrne, Legal Counsel

Unrepresented Employee: General Manager

At 9:34 a.m., the Board adjourned to closed session to confer with Legal Counsel regarding labor negotiations with respect to the General Manager.

**RECONVENE INTO OPEN SESSION**

The Board reconvened at 10:09 a.m., and Legal Counsel Byrne announced that no reportable action was taken in closed session.

**CONSIDERATION OF AMENDMENTS TO GENERAL MANAGER CONTRACT**

Upon MOTION by Director Dick, seconded by Director Tamaribuchi, and carried (5-0), the Board awarded the General Manager a 4.5% salary increase, authorized technical changes to the General Manager's contract, as well as changes to align with the Administrative Code, as presented by Legal Counsel, and authorized the General Manager's vacation accrual/implementation to mirror the employee's vacation accrual (with the General Manager's maximum vacation cap remaining at 300 hours, and the contract term remaining through September 8, 2021). Directors Barbre, Dick, Finnegan, Tamaribuchi, and Yoo Schneider voted in favor. Directors Osborne and Thomas were absent.

**ADJOURNMENT**

There being no further business to come before the Board, the meeting adjourned at 10:14 a.m.

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Maribeth Goldsby  
Board Secretary

**MINUTES OF THE REGULAR MEETING  
OF THE BOARD OF DIRECTORS  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
December 19, 2018**

At 8:30 a.m., President Barbre called to order the Regular Meeting of the Municipal Water District of Orange County in the Board Room at the District facilities located in Fountain Valley. Director Yoo Schneider led the Pledge of Allegiance and Secretary Goldsby called the roll.

**MWDOC DIRECTORS**

Brett R. Barbre  
Larry Dick  
Joan Finnegan (absent)  
Wayne Osborne  
Sat Tamaribuchi  
Jeffery M. Thomas  
Megan Yoo Schneider

**STAFF**

Robert Hunter, General Manager  
Karl Seckel, Assistant General Manager  
Joe Byrne, Legal Counsel  
Maribeth Goldsby, Board Secretary  
Charles Busslinger, Principal Engineer  
Tiffany Baca, Public Affairs Manager  
Melissa Baum-Haley, Sr. Water Resources Analyst  
Kelly Hubbard, WEROC Programs Manager  
Harvey De La Torre, Associate General Manager  
Sarah Wilson, Public Affairs Specialist

**ALSO PRESENT**

Linda Ackerman  
Larry McKenney  
Jose Vergara  
Kathryn Freshley  
Paul Weghorst  
Kelly Rowe  
John Kennedy  
Dennis Erdman  
Rick Shintaku  
Brooke Jones  
Ray Hiemstra  
Mandy Sackett

MWDO MET Director  
MWDOC MET Director  
El Toro Water District  
El Toro Water District  
Irvine Ranch Water District  
Orange County Water District  
Orange County Water District  
South Coast Water District  
South Coast Water District  
Yorba Linda Water District  
OC CoastKeepers  
Surfrider Foundation

**PUBLIC PARTICIPATION/PUBLIC COMMENT**

President Barbre announced members of the public wishing to comment on agenda items could do so after the item has been discussed by the Board and requested members of the public identify themselves when called on. Mr. Barbre asked whether there were any comments on other items which would be heard at this time.

No public comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were received.

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

President Barbre inquired as to whether there were any items distributed to the Board less than 72 hours prior to the meeting. No items were distributed.

**CONSENT CALENDAR**

President Barbre stated all matters under the Consent Calendar would be approved by one MOTION unless a Director wished to consider an item separately.

Upon MOTION by Director Thomas, seconded by Director Yoo Schneider, and carried (6-0), the Board approved the Consent Calendar items as follows. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

**MINUTES**

The following minutes were approved.

November 7, 2018 Workshop Board Meeting  
November 21, 2018 Regular Board Meeting

**COMMITTEE MEETING REPORTS**

The following Committee Meeting reports were received and filed as presented.

Planning & Operations Committee Meeting: November 13, 2018  
Administration & Finance Committee Meeting: November 14, 2018  
Public Affairs & Legislation Committee Meeting: November 19, 2018  
Executive Committee Meeting: November 20, 2018

**TREASURER'S REPORTS**

The following items were ratified and approved as presented.

MWDOC Revenue/Cash Receipt Register as of November 30, 2018  
MWDOC Disbursement Registers (November/December)

The following items were received and filed as presented.

MWDOC Summary of Cash and Investment and Portfolio Master Summary Report (Cash and Investment report) as of October 31, 2018  
  
PARS Monthly Statement (OPEB Trust)  
  
Water Use Efficiency Projects Cash Flow

**FINANCIAL REPORT**

The following items were received and filed as presented.

Combined Financial Statements and Budget Comparative for the period ending October 31, 2018

**NOVEMBER 2018 ELECTION CERTIFICATES**

The Board received and filed the Certificate of Election for Brett R. Barbre (Division 1), and the Certificates of Appointment In Lieu of Election for Larry D. Dick (Division 2), and Satoru Tamaribuchi (Division 5).

**2018 WATER RELIABILITY FOLLOW-UP ANALYSES WITH CDM-SMITH**

The Board: (1) acknowledged the nature of these two authorization requests as sole source requests for work by CDM-Smith because CDM-Smith has completed the prior work on the OC Water Reliability Study, (2) authorized the General Manager to enter into an Agreement with CDM-Smith for "As Needed Water Resources Planning Assistance" at a cost not to exceed \$65,000, and (3) acknowledged an additional authorization under the General Manager's authority for assistance from CDM-Smith to conduct additional work and provide assistance to MWDOC staff in developing recommended terms and conditions for the Strand Ranch Extraordinary Water Supply analysis at a cost not to exceed \$16,640, with such terms and conditions to be shared with the Board and the member agencies.

**WATER LOSS CONTROL SHARED SERVICES BUSINESS PLAN**

The Board adopted the Water Loss Control Shared Services Business Plan and authorized staff to plan for implementation of shared services in the Fiscal Year 2019-20 Budget, including (1) two water loss control staff to be funded through a combination of core and choice services (approximately 0.54 and 1.46 FTE respectively), and (2) MWDOC funding of initial equipment cost of approximately \$85,400.

**RESULTS OF MWDOC ADMINISTRATION BUILDING ELECTRICAL ASSESSMENT AND APPROVAL OF ELECTRICAL ENGINEERING SERVICES**

The Board authorized the General Manager to enter into a contract with OMB Electrical Engineers, Inc. to provide electrical engineering services for the MWDOC Administration Building at a fixed fee cost of \$9,500 plus an additional contingency budget of \$5,000 for outside electrical analysis work for a combined total of \$14,500.

**- END CONSENT CALENDAR -**

**ACTION CALENDAR****REORGANIZATION OF THE MWDOC BOARD OF DIRECTORS; ELECTION OF PRESIDENT AND VICE PRESIDENT**

Upon MOTION by Director Yoo Schneider, seconded by Director Dick, and carried (6-0), the Board opted to elect the President and Vice President by separate Resolutions. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

Director Thomas made a MOTION, which was seconded by Director Osborne, nominating Brett R. Barbre as President of the Board.

Director Yoo Schneider made a SUBSTITUTE MOTION, which was seconded by Director Tamaribuchi, nominating Jeffery Thomas as President. Director Thomas expressed appreciation for the nomination, but indicated he would withdraw his name from candidacy. Director Yoo Schneider withdrew her SUBSTITUTE MOTION.

Referencing the original MOTION, and by a vote of 5-0, the Board adopted RESOLUTION NO.2076 electing Brett R. Barbre as President of the Board for a one-year term, by the following roll call vote:

AYES:	Directors Barbre, Dick, Osborne, Tamaribuchi, and Thomas
NOES:	None
ABSENT:	Director Finnegan
ABSTAIN:	Director Yoo Schneider

Upon MOTION by Director Tamaribuchi, seconded by Director Thomas, and carried (6-0), the Board adopted RESOLUTION NO. 2077 electing Joan C. Finnegan as Vice President of the Board for a one-year term, by the following roll call vote:

AYES:	Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas
NOES:	None
ABSENT:	Director Finnegan
ABSTAIN:	None

**APPOINTMENT OF SECRETARY, TREASURER(S), AND LEGAL COUNSEL**

President Barbre announced that the proposal to appoint the District's Secretary, Treasurer(s), and Legal Counsel was before the Board for consideration.

Upon MOTION by Director Dick, seconded by Director Thomas, and carried (6-0), the Board adopted RESOLUTION NO. 2078 appointing Maribeth Goldsby as Board Secretary, Hilary Chumpitazi as Treasurer, Robert Hunter as Deputy Treasurer, Mary Snow as Alternate Deputy Treasurer, Jeff Stalvey as Alternate Deputy Treasurer, Lina Gunawan as Alternate Deputy Treasurer, and Best, Best & Krieger and Joe Byrne as Legal Counsel, by the following roll call vote:

AYES: Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas  
NOES: None  
ABSENT: Director Finnegan  
ABSTAIN: None

#### **MWDOC LEGISLATIVE AND REGULATORY POLICY PRINCIPLES ANNUAL UPDATE**

Upon MOTION by Director Tamaribuchi, seconded by Director Yoo Schneider, and carried (6-0), the Board adopted the updated legislative policy principles for 2019. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

#### **EXTENSION OF LOCAL ADVOCACY CONTRACT WITH LEWIS CONSULTING GROUP**

Upon MOTION by Director Dick, seconded by Director Thomas, and carried (6-0), the Board approved extending the local advocacy contract with Lewis Consulting Group. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

#### **EXTENSION OF FEDERAL LEGISLATIVE ADVOCACY CONTRACT WITH JAMES C. BARKER, PC**

Upon MOTION by Director Thomas, seconded by Director Yoo Schneider, and carried (6-0), the Board approved the extension of the federal advocacy contract with James C. Barker, PC for 2019. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

#### **EXTENSION OF STATE LEGISLATIVE CONTRACT WITH BEST, BEST & KRIEGER**

Upon MOTION by Director Dick, seconded by Director Osborne, and carried (6-0), the Board approved the extension to the state advocacy contract with Best, Best & Krieger for 2019, effective January 1, 2019 at the current rate of \$7500 per month for the period January 1, 2019 through June 30, 2019, and the rate of \$8,000 per month for the period July 1, 2019 through December 31, 2019. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

#### **FINAL DRAFT OF THE 2018 ORANGE COUNTY WATER RELIABILITY STUDY**

Ms. Mandy Sackett of the Surfrider Foundation, addressed the Board and suggested that a technical memorandum (Huntington Beach Desalination Review of Sea Level Rise Hazards) be incorporated into the OC Reliability Study.

Mr. Ray Heimstra (OC CoastKeepers) noted that OC CoastKeepers previously submitted comments on the Study; he thanked the Board and staff on their efforts with respect to the OC Water Reliability Study.



Director Yoo Schneider commended staff and the consultant for producing an objective Study.

Upon MOTION by Director Dick, seconded by Director Yoo Schneider, and carried (6-0), the Board received and filed the final draft report for the 2018 Orange County Water Reliability Study.

It was noted that staff would incorporate any non-substantive changes in the process of compiling the final report for distribution. Directors Barbre, Dick, Osborne, Yoo Schneider, Tamaribuchi, and Thomas voted in favor; Director Finnegan was absent.

## **INFORMATION CALENDAR**

### **GENERAL MANAGER'S REPORT, DECEMBER 2018**

General Manager Hunter advised that the General Manager's report was included in the Board packet.

The Board received and filed the report as presented.

## **MWDOC GENERAL INFORMATION ITEMS**

### **a. BOARD OF DIRECTORS**

The Board members each reported on their attendance at the regular (and special) MWDOC Board and Committee meetings. In addition to these meetings, the following reports were made on conferences and meetings attended on behalf of the District.

Director Yoo Schneider reported on attending the Planning & Operations, Administration & Finance, and Public Affairs & Legislation Committee meetings, as well as the Workshop and Regular Board meetings, Elected Officials Forum, the Women in Water meeting, the ACWA Conference, the CCEEB meeting, a meeting with LBCWD Director/Councilmember Toni Iseman, a meeting with Emerald Bay Service District, a meeting with SCWD Director Green, and a meeting with a San Juan Capistrano Councilmember.

Director Thomas noted his attendance at the regularly scheduled MWDOC meetings (Planning & Operations, Administration & Finance, Public Affairs & Legislation, and Executive Committee meetings, as well as the Workshop and Regular Board meetings), as well as the ACWA Conference, the Colorado River Water Users Association Conference, and the OC Water Summit Planning meetings.

Director Tamaribuchi noted his attendance at most of the regularly scheduled MWDOC meetings (Planning & Operations, Administration & Finance, and Public Affairs & Legislation Committee meetings (except Executive Committee), as well as the Workshop and Regular Board meetings), as well as the ACWA Conference, and the CCEEB meeting.

Director Osborne advised that he attended the Planning & Operations and Public Affairs & Legislation Committee meetings, as well as the MWDOC Board meeting.

Director Dick reported on attending the following meetings for November and December: the Chamber of Commerce Legislative Committee meetings (two), the Planning & Operations, Administration & Finance, and Public Affairs & Legislation Committee meetings (for both November and December), the Workshop Board meeting, the South Orange County Economic Coalition, the MET Agricultural Committee meeting, the MWDOC MET Director meeting, the MET Caucus, the WACO Planning and WACO meetings, the MET Board and Committee meetings, a meeting with MET regarding inspection trip planning, a meeting with Kristy Khachigian (SDCWA), and a meeting to review the WACO Bylaws

Director Barbre advised that he submitted a written report to Secretary Goldsby. He noted that the written report included the following meetings in his capacity as MET Director: a meeting with Marty Hundley regarding MET Inspection Trips, the MWDOC MET Director caucus (early), the MET Caucus (at Inland Empire), the MET Committee and Board meetings, and a meeting with OCWD Director Tri Ta regarding MET inspection trips and infrastructure. In his capacity as MWDOC Director he attended the following meetings: the Workshop and Regular Board meetings, the Planning & Operations, Administration & Finance, and Public Affairs & Legislation Committee meetings, the OC Water Summit planning meetings (two), a legislative trip to Washington, DC, and an event honoring retiring Mayor Troy Edgar (Los Alamitos).

#### **B. REQUESTS FOR FUTURE AGENDA TOPICS**

Director Barbre suggested the Executive Committee discuss continued participation in organizations.

Director Yoo Schneider suggested Legal Counsel conduct a Brown Act refresher with the Board.

#### **CLOSED SESSION**

At 8:55 a.m., Legal Counsel Byrne announced that the Board would adjourn to closed session to conduct the performance evaluation of the General Manager (pursuant to Government Code 54957).

#### **RECONVENE**

The Board reconvened at 10:27 a.m., and Legal Counsel Byrne announced that no reportable action was taken in closed session.

#### **ADJOURNMENT**

There being no further business to come before the Board, President Barbre adjourned the meeting at 10:28 a.m.

Respectfully submitted,

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Maribeth Goldsby, Secretary

MINUTES OF THE SPECIAL MEETING  
OF THE BOARD OF DIRECTORS  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
December 6, 2018

At 6:00 p.m., President Barbre called to order the Special Meeting of the Municipal Water District of Orange County Board of Directors Board Room at the District facilities, 18700 Ward Street, Fountain Valley, California. Dick Davert led the Pledge of Allegiance, in honor of U.S. President George H.W. Bush.

**MWDOC DIRECTORS**

Brett R. Barbre  
Larry Dick (absent)  
Joan Finnegan  
Wayne Osborne (absent)  
Megan Yoo Schneider  
Sat Tamaribuchi (absent)  
Jeffery M. Thomas

**STAFF PRESENT**

Robert Hunter, General Manager  
Karl Seckel, Assistant General Manager  
Katie Davanaugh, Recording Secretary  
Harvey De La Torre, Prin. Water Res. Planner  
Joe Berg, Water Use Eff. Programs Mgr.  
Damon Micalizzi, Dir. of Public Affairs  
Heather Baez, Government Affairs Manager  
Melissa Baum-Haley, Sr. Water Res. Analyst  
Charles Busslinger, Principal Engineer

**ALSO PRESENT**

Doug Davert  
Mark Monin  
Scott Goldman  
Cheryl Brothers  
Marice DePasquale  
John Kennedy  
Doug Erdman  
Rick Erkeneff  
Rick Shintaku  
Mike Safranski  
J. Wayne Miller  
Marc Marcantonio  
Liz Mendelson-Goossens  
Stephen Dopudja  
Kathryn Freshley  
Bill Green  
Justin McCusker  
Steve Myrter  
Lisa Ohlund  
John Sears  
Schelly Sustarsic  
John Withers  
Kristy Khachigian

East Orange County Water District  
El Toro Water District  
El Toro Water District  
City of Fountain Valley  
Mesa Water  
Orange County Water District  
South Coast Water District  
South Coast Water District  
South Coast Water District  
Trabuco Canyon Water District  
Yorba Linda Water District  
Yorba Linda Water District  
San Diego County Water Authority  
Trabuco Canyon Water District  
El Toro Water District  
South Coast Water District  
Santa Margarita Water District  
City of Seal Beach  
East Orange County Water District  
East Orange County Water District  
City of Seal Beach  
Irvine Ranch Water District  
San Diego County Water Authority

**PUBLIC COMMENTS**

No public comments were received.

President Barbre invited introductions around the room.

**DISCUSSION ITEMS****DISCUSSION WITH REPRESENTATIVES FROM MWDOC'S MEMBER AGENCIES REGARDING KEY REGIONAL ISSUES AND KEY ORANGE COUNTY ISSUES, INCLUDING THE ORANGE COUNTY RELIABILITY STUDY UPDATE , WATER SUPPLY ISSUES, THE DROUGHT CONTINGENCY PLAN, AND THE ELECTION RESULTS**

President Barbre stated that the evening would consist of short presentations by members of the Board, with the remainder of the meeting consisting of open dialogue/questions between the Board and audience. The following topics were covered:

Election Results (Director Thomas)  
State Water Project & California Water Fix (Director Barbre)  
Colorado River Issues (Director Barbre)  
OC Reliability Study (Director Yoo Schneider)

Director Thomas opened the evening with a presentation and overview of the recent election results and a review of how it may impact the political climate, particularly within Orange County, as well as the water community throughout the state.

President Barbre provided a review of information pertaining to the California WaterFix and State Water Project and then gave a presentation on Colorado River Issues.

Director Yoo Schneider completed the evening's presentations with a review the 2018 Orange County Water Reliability Study.

**ADJOURNMENT**

There being no further business to come before the Board, President Barbre adjourned the meeting at 7:15 p.m.

**Respectfully submitted,**

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Maribeth Goldsby, Secretary

MINUTES OF THE MEETING OF THE  
BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Jointly with the  
**PLANNING & OPERATIONS COMMITTEE**  
December 3, 2018 – 8:30 a.m. to 11:13 a.m.  
Conference Room 101

**P&O Committee:**

Director Wayne Osborne  
Director Sat Tamaribuchi  
Director Megan Yoo Schneider

**Staff:**

Rob Hunter, Karl Seckel, Joe Berg,  
Katie Davanaugh, Harvey DeLaTorre,  
Charles Busslinger, Melissa Baum Haley,  
Kevin Hostert, Francisco Soto, Steve Hedges,  
Damon Micalizzi, Tiffany Baca, Kelly Hubbard,  
Janine Schunk, Bryce Roberto, Sarah Wilson,  
Heather Baez

**Also Present:**

Director Joan Finnegan  
Director Brett Barbre  
MWDOC MET Director Linda Ackerman  
John Kennedy, OCWD  
Ray Heimstra, OC Coastkeeper  
Paul Weghorst, IRWD  
Jose Vergara, ETWD  
Jim Atkinson, Mesa Water  
Scott Maloni, Poseidon  
Liz Mendelson-Goossens,  
San Diego County Water Authority  
Mike Markus, OCWD

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Director Osborne chaired the meeting and called it to order at 8:30 a.m.

**PUBLIC COMMENTS**

No comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were presented.

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

No items were distributed.

**ACTION ITEMS**

**2018 WATER RELIABILITY FOLLOW-UP ANALYSES WITH CDM-SMITH**

Assistant General Manager Karl Seckel explained that we are in the process of completing

the 2018 Reliability Study and we see the ongoing need for assistance on an as-needed basis. For the primary contract we asked CDM Smith to provide a summary proposal of things that might be worked on. The main contract with CDM this year would be for \$65,000 – this would get us through a variety of efforts. Pages 4 and 5 of the Staff Report laid out some of the things we'd be working on; not only things that came out of the study, but things that have been identified as coming up in the near future. A lot of this work is related to MET's 2020 Integrated Resources Plan (IRP) and other activities that are ongoing. We thought that having that linkage back to the Reliability Study work that CDM Smith has done for us would be good in providing additional assistance to staff.

There is some additional work on the Strand Ranch Water Analysis that came to us rather late in the process of completing the Reliability Study. To further the work for that we will use the services of CDM Smith to help us work through the program's terms and conditions with IRWD and then bring it back to the MWDOC board and member agencies for consideration as to whether we participate in the Strand Ranch program or not down the road.

Total combined cost is \$81,640 that has been budgeted for 2018 and moving forward.

Upon MOTION by Director Tamaribuchi, which was seconded by Director Yoo Schneider, and carried (3-0), the Committee recommended the Board approve staff's recommendation (authorize additional work by CDM-Smith) at the December 19, 2018 Board meeting. Directors Tamaribuchi, Yoo Schneider and Osborne voted in favor.

### **WATER LOSS CONTROL SHARED SERVICES BUSINESS PLAN**

In October 2015, the Board authorized staff to initiate a Water Loss Control Technical Assistance Program (Program), which included one-on-one technical support from a consultant specializing in distribution system water loss and the establishment of an Orange County Water Loss Control Work Group. This effort was intended to assist agencies in complying with Senate Bill 555, which requires all urban water suppliers to submit validated Water Balances, consistent with the American Water Works association methodology, to the California Department of Water Resources annually beginning October 1, 2017. Senate Bill 555 also requires the State Water Resources Control Board to establish a volumetric distribution system water loss standard by July 1, 2020.

Mr. Berg advised that over the past nine months, staff has been developing the Water Loss Control Shared Services Business Plan with support from Water Systems Optimization, Inc. and he presented information/recommendations for the shared services considered in the Business Plan (annual water balance validation, customer meter accuracy testing, distribution system leak detection, distribution system pressure surveys, and distribution system flushing). He noted that the staff recommendation includes both contract services and in-house staff services) which should provide ease into the shared services arena without having a huge expense in capital for meter testing and system flushing equipment). Mr. Berg included an overview of an Implementation Plan, proposed staffing, cost of shared services equipment and agreement.

Upon MOTION by Director Tamaribuchi, which was seconded by Director Yoo Schneider and carried (3-0), the Committee recommended the Board approve the staff

recommendation at the Board meeting on December 19, 2018. Directors Tamaribuchi, Yoo Schneider and Osborne voted in favor.

## **DISCUSSION ITEM**

### **PLANNING & RESOURCE DEVELOPMENT DEPARTMENT OVERVIEW**

Assistant General Manager Karl Seckel and Principal Engineer Charles Busslinger presented an overview of the Planning & Resources Department, including goals for 2019.

### **METROPOLITAN AND WATER ISSUES DEPARTMENT OVERVIEW**

Associate General Manager Harvey De La Torre presented an overview of the Metropolitan and Water Issues Department, including goals for 2019.

### **2018 ORANGE COUNTY WATER RELIABILITY STUDY**

Assistant General Manager Karl Seckel stated that the final report on the 2018 Orange County Water Reliability Study is being prepared, however it was not ready for this meeting. The final draft report is anticipated to be presented to the Board on December 19, 2018.

### **MET SHUTDOWN SCHEDULE**

Assistant General Manager Karl Seckel provided the schedule of MET's upcoming shutdowns.

## **INFORMATION ITEMS**

### **STATUS REPORTS**

- a. Ongoing MWD OC Reliability and Engineering/Planning Projects
- b. WEROC
- c. Water Use Efficiency Projects
- d. Water Use Efficiency Programs Savings and Implementation Report

The informational reports were received and filed.

### **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**

No information was presented.

## **ADJOURNMENT**

There being no further business to be brought before the Committee, the meeting adjourned at 11:13 a.m.

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

Jointly with the **ADMINISTRATION & FINANCE (A&F) COMMITTEE**

December 12, 2018 – 8:30 a.m. to 9:30 a.m.

MWDOC Conference Room 101

**Committee Members:**

Director Jeff Thomas, Chair  
Director Joan Finnegan  
Director Larry Dick

**Staff:**

Karl Seckel, Cathy Harris, Damon Micalizzi,  
Katie Davanaugh, Hilary Chumpitazi,  
Tiffany Baca, Charles Busslinger

Ex Officio Member: Director Barbre

**Also Present:**

Director Sat Tamaribuchi  
Director Brett Barbre  
Director Megan Yoo Schneider  
MWDOC MET Director Linda Ackerman  
MWDOC MET Director Larry McKenney  
Marwan Khalifa, Mesa Water  
Neely Shahbakhti, El Toro Water District  
Mark Monin, El Toro Water District  
Jim Atkinson, Mesa Water  
Jose Vergara, El Toro Water District

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Director Thomas called the meeting to order at 8:30 a.m.

**PUBLIC COMMENTS**

No comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were presented.

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

No items were distributed.

**PROPOSED BOARD CONSENT CALENDAR ITEMS**

**TREASURER'S REPORT**

- a. Revenue/Cash Receipt Report – November 2018
- b. Disbursement Approval Report for the month of December 2018
- c. Disbursement Ratification Report for the month of November 2018
- d. GM Approved Disbursement Report for the month of November 2018
- e. Water Use Efficiency Projects Cash Flow – November 30, 2018
- f. Consolidated Summary of Cash and Investment – October 2018
- g. OPEB and Pension Trust Fund monthly statement



Following review of the disbursement reports, and upon MOTION by Director Dick, seconded by Director Finnegan and carried (3-0), the Committee recommended the Treasurer's Report for approval at the December 19, 2018 Board meeting. Directors Thomas, Dick and Finnegan voted in favor.

### **FINANCIAL REPORT**

- a. Combined Financial Statements and Budget Comparative for the Period ending October 31, 2018

Upon MOTION by Director Finnegan, seconded by Director Dick and carried (3-0), the Committee recommended the Financial Report for approval at the December 19, 2018 Board meeting. Directors Thomas, Dick and Finnegan voted in favor.

### **ACTION ITEMS**

#### **PRUDENT COMPANION POLICY**

The Committee requested that General Manager Hunter be present for discussion on this item, noting that he was on vacation. The item was deferred until the January Administration & Finance Committee meeting.

#### **RESULTS OF MWDOC ADMINISTRATION BUILDING ELECTRICAL ASSESSMENT AND APPROVAL OF ELECTRICAL ENGINEERING SERVICES**

Charles Busslinger reviewed the electrical engineering services needed to improve reliability and accommodate future uses of the building as listed in the staff report.

Upon MOTION by Director Dick, seconded by Director Finnegan and carried (3-0), the Committee recommended the Financial Report for approval at the December 19, 2018 Board meeting. Directors Thomas, Dick and Finnegan voted in favor.

Director Megan Yoo Schneider arrived at 8:45 am

### **DISCUSSION ITEMS**

#### **FY 2019-20 BUDGET**

The Committee reviewed the 2019-20 budget schedule and held discussion on whether it would be beneficial to adopt a 2-year budget. It was determined that additional discussion should be held when General Manager Hunter returned from vacation.

Directors discussed the topic of Director Compensation and whether the Board should consider whether to link Director increases to those of staff so that any future increases granted to Directors for per diem meeting attendance would not exceed the percentage amount granted to employees. Staff was asked to look into this.

**ADMINISTRATION DEPARTMENT OVERVIEW**

Cathy Harris, Administrative Services Manager, provided a presentation summarizing functions and responsibilities of the administrative department. Major areas of responsibility include Board and Director support, general administration, records management, database management, facilities management, personnel, benefits administration and risk and safety.

**FINANCE AND INFORMATION TECHNOLOGY (IT) DEPARTMENT OVERVIEW**

Hilary Chumpitazi, Accounting Manager, provided a presentation and overview of areas of support that her department is responsible for, which is divided into 3 main categories that include Accounting, Finance/Database Analysis and Information Technology.

**INFORMATION ITEMS****DEPARTMENT ACTIVITIES REPORTS**

- a. Administration
- b. Finance and Information Technology

The departmental reports were received and filed.

**MONTHLY WATER USAGE DATA, TIER 2 PROJECTION, AND WATER SUPPLY INFORMATION**

The monthly water usage statistical reports were received and filed.

**OTHER ITEMS****REVIEW ISSUES REGARDING DISTRICT ORGANIZATION, PERSONNEL MATTERS, EMPLOYEE BENEFITS FINANCE AND INSURANCE**

No items were presented.

**ADJOURNMENT**

There being no further business to be brought before the Committee, the meeting adjourned at 9:30 a.m.

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

Jointly with the

**PUBLIC AFFAIRS AND LEGISLATION COMMITTEE**

December 17, 2018 – 8:30 a.m. to 10:40 a.m.

MWDOC Conference Room 101

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**Committee:**

Director Dick, Chairman  
Director Thomas  
Director Tamaribuchi

**Staff:** R. Hunter, H. Baez, D. Micalizzi,  
T. Dubuque, H. Baez, T. Baca, J.  
Berg, R. Davis, M. Baum-Haley, T.  
Muldoon, B. Roberto, S. Wilson,  
H. De La Torre, C. Harris

**Also Present:**

Congressman Ed Royce  
Director Brett Barbre  
Director Megan Yoo Schneider  
Linda Ackerman, MWDOC MET Director  
Larry McKenney, MWDOC MET Director  
Dick Ackerman, Ackerman Consulting  
Syrus Devers, BB&K  
John Lewis, Lewis Consulting  
Jim Barker, (via teleconference)  
Nick Crockett (via teleconference with  
Jim Barker)  
Jose Vergara – ETWD  
Stacy Taylor – Mesa Water  
Paige Midstokke - IRWD  
Tim Kearns, HashtagPinpoint

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Director Dick called the meeting to order at 8:30 a.m.

**PUBLIC PARTICIPATION**

No public comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were presented.

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

No items were distributed.

Congressman Royce was introduced and he shared that the current focus in Washington D.C. is to pass the remaining appropriations bills for this fiscal year. For water, the focus is to see what could be done as a guarantee for storage, a certain amount of pumping and an effort to get money for desalination.

**DISCUSSION ITEMS****LEGISLATIVE ACTIVITIES****a. Federal Legislative Report (Barker)**

Mr. Jim Barker reviewed his written report which was included in the packet, highlighting the potential government shutdown.

The approval of funds to assist with wildfire disaster relief was also discussed.

**b. State Legislative Report (BBK)**

Mr. Syrus Devers reviewed his written report that was included in the packet. He highlighted the inactivity in Sacramento, giving examples using the San Joaquin River settlement and the WaterFix. Mr. Devers discussed how Republicans are going to be spread thin amongst all of the committees due to fewer elected in November.

Mr. Devers replied to Director Dick regarding projections on the WaterFix. He stated that Governor-Elect Newsom does not have strongly formed views about the WaterFix.

**c. County Legislative Report (Lewis)**

Mr. John Lewis reviewed his written report that was included in the packet.

Mr. Lewis shared that LAFCO cancelled the December Meeting and stated that those who watch LAFCO closely, are pleased at how they have transitioned in the last couple of years.

Mr. Lewis also wanted to note the local issue in the city of Tustin. Councilman Allen Bernstein is being threatened with recall over the siting of a homeless shelter. His understanding is there will be an agenda item on the December 18<sup>th</sup> meeting to change the siting of that location. He felt this would be a huge loss to lose Councilman Bernstein from LAFCO.

**d. Legal and Regulatory Report (Ackerman)**

Mr. Dick Ackerman reviewed his written report included in the packet.

Mr. Ackerman noted that the reports he read on the salmon population showed that they have been turning it around due to the billions of dollars put into those programs. This is being used as a reason why we would need to take water from the fish and give it to the farmers.

**MWDOC LEGISLATIVE AND REGULATORY PRIORITIES FOR 2019**

Government Affairs Manager Heather Baez reported that she received great Board feedback, which has been put into the report with some suggested action items to achieve the priorities. She will be soliciting additional Board feedback after the Special Board Meeting on January 5<sup>th</sup>. Director Barbre and Tamaribuchi provided some update suggestions.

Ms. Baez stated she would combine the information and bring it to the January PAL Committee Meeting as an Action item to be presented to the Board for approval.

**SOUTHERN CALIFORNIA WATER ISSUES CONGRESSIONAL DELEGATION  
BRIEFING LUNCHEON (DC)**

Received and filed.

**GOVERNMENT AFFAIRS DEPARTMENT OVERVIEW**

Government Affairs Manager Heather Baez presented an overview of the Government Affairs Department and goals for 2019.

**PUBLIC AFFAIRS DEPARTMENT OVERVIEW**

Public Affairs Director Damon Micalizzi and Public Affairs Manager Tiffany Baca presented an overview of the Public Affairs Department and their goals for 2019.

**ACTION ITEMS****MWDOC LEGISLATIVE AND REGULATORY POLICY PRINCIPLES ANNUAL  
UPDATE**

Government Affairs Manager Heather Baez explained that the MWDOC Legislative and Regulatory Policy Principles Annual Update is an updated document for 2019. This document has been updated with suggestions from the Board, member agencies and staff. Ms. Baez stated that this document is the overarching policies which guide the Board, Staff and MWDOC advocates when it comes to legislation. Director Barbre suggested that there are areas that could evolve, be discussed or removed. This information could be expanded upon at a later date.

Director Dick made a MOTION, which was seconded by Director Tamaribuchi and carried (3-0) to be presented to the Board for approval on December 19, 2018. Directors Thomas, Tamaribuchi and Dick voted in favor.

**EXTENSION OF LOCAL ADVOCACY CONTRACT WITH LEWIS CONSULTING**

Director Thomas made a MOTION, which was seconded by Director Tamaribuchi and carried (3-0) to be presented to the Board for approval on December 19, 2018. Directors Dick, Thomas and Tamaribuchi voted in favor.

**EXTENSION OF LOCAL ADVOCACY CONTRACT WITH JAMES BARKER**

Director Thomas made a MOTION, which was seconded by Director Tamaribuchi and carried (3-0) to be presented to the Board for approval on December 19, 2018. Directors Dick, Thomas and Tamaribuchi voted in favor.

**EXTENSION OF STATE OF LEGISLATIVE ADVOCACY CONTRACT WITH BEST,  
BEST & KRIEGER**

Director Dick expressed concern with the respect to a fee increase.

Director Tamaribuchi made a MOTION, which was seconded by Director Thomas and carried (2-1) to be presented to the Board for approval on December 19, 2018. Directors Thomas and Tamaribuchi voted in favor and Director Dick voted against.

**INFORMATION ITEM**

**NEW LEGISLATOR INFORMATION PACKET**

The Committee received and filed the report.

**EDUCATION PROGRAM UPDATE**

The Committee received and filed the report.

**GIRL SCOUTS OF ORANGE COUNTY WATER RESOURCES AND  
CONSERVATION PATCH PROGRAM**

The Committee received and filed the report.

**PUBLIC AFFAIRS ACTIVITIES REPORT**

The Committee received and filed the report.

**OTHER ITEMS**

**ADJOURNMENT**

There being no further business to be brought before the Committee, the meeting adjourned at 10:40 a.m.

MINUTES OF THE MEETING OF THE  
BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
jointly with the  
**EXECUTIVE COMMITTEE**  
December 20, 2018, 8:30 a.m. to 9:20 a.m.  
Conference Room 102

**Committee:**

Director Barbre, President  
Director Finnegan, Vice President (absent)  
Director Osborne (absent)

**Staff:**

R. Hunter, M. Goldsby

**Also Present:**

Director Thomas  
Kristy Khachigian, SDCWA

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At 8:30 a.m., President Barbre called the meeting to order. In the absence of Directors Finnegan and Osborne, Director Thomas acted as Committee member.

**PUBLIC PARTICIPATION**

No public comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were presented.

**ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING**

At the beginning of the meeting, Staff distributed the draft agendas for the upcoming month.

**EXECUTIVE COMMITTEE PROPOSALS FOR FUTURE AGENDAS**

The Committee reviewed and discussed the draft agendas for each of the meetings and made revisions/additions as noted below.

a. Workshop Board Meeting

No new items were added to the agenda.

b. Planning & Operations Committee Meeting

No new items were added to the agenda.

c. Administration & Finance Committee meeting

No new items were added to the agenda.

d. Public Affairs & Legislation Committee

No new items were added to the agenda.

No new items were added to the agenda.

### **DISCUSSION REGARDING UPCOMING ACTIVITIES OF SIGNIFICANCE**

General Manager Hunter advised that Bill Hasencamp would be the featured speaker at the upcoming Orange County Business Council Infrastructure Committee meeting.

### **MEMBER AGENCY RELATIONS**

It was noted that staff is awaiting comments from the Member Agencies regarding the OC Reliability Study.

### **ANNUAL LEGISLATIVE REPORT**

The Committee discussed the recently released Annual Legislative Report by Eastern Municipal Water District which included a summary of both Federal and State legislative impacts for the year. Discussion was held regarding whether MWDOC could produce a similar document; with General Manager Hunter noting this the endeavor was not budgeted. It was suggested this issue be discussed with the General Manager.

### **ADOPT RESOLUTION/PROCLAMATION HONORING RANDY RECORD**

Following discussion, the Committee recommended a ceremonial proclamation honoring Randy Record be prepared and ready to present to Mr. Record on January 8, 2019.

### **GENERAL MANAGER'S REPORTS**

Mr. Hunter reported that he would be on vacation the week between Christmas and New Year's.

### **REVIEW AND DISCUSS DISTRICT AND BOARD ACTIVITIES**

The Committee reviewed and approved the late business expense report for Karl Seckel.

### **ADJOURNMENT**

There being no further business to be brought before the Committee, the meeting adjourned at 9:20 a.m.



**Municipal Water District of Orange County**  
**REVENUE / CASH RECEIPT REPORT**  
**December 2018**

**WATER REVENUES**

<b>Date</b>	<b>From</b>	<b>Description</b>	<b>Amount</b>
12/03/18	City of Newport Beach	October 2018 Water deliveries	289,370.78
12/03/18	City of La Palma	October 2018 Water deliveries	4,280.03
12/06/18	City of Garden Grove	October 2018 Water deliveries	479,349.35
12/06/18	Trabuco Canyon Water District	October 2018 Water deliveries	172,537.48
12/07/18	City of San Clemente	October 2018 Water deliveries	623,190.40
12/07/18	City of Brea	October 2018 Water deliveries	158,566.56
12/10/18	Santa Margarita Water District	October 2018 Water deliveries	1,928,397.50
12/10/18	Serrano Water District	October 2018 Water deliveries	195,880.07
12/10/18	South Coast Water District	October 2018 Water deliveries	529,012.80
12/10/18	City of Seal Beach	October 2018 Water deliveries	7,643.93
12/10/18	El Toro Water District	October 2018 Water deliveries	526,017.66
12/13/18	Laguna Beach County Water District	October 2018 Water deliveries	229,148.20
12/13/18	City of Buena Park	October 2018 Water deliveries	225,154.86
12/13/18	East Orange County Water District	October 2018 Water deliveries	262,281.45
12/13/18	City of Westminster	October 2018 Water deliveries	351,571.02
12/13/18	Mesa Water	October 2018 Water deliveries	40,774.26
12/13/18	City of Orange	October 2018 Water deliveries	465,365.94
12/14/18	Orange County Water District	October 2018 Water deliveries	4,222,104.02
12/14/18	City of San Juan Capistrano	October 2018 Water deliveries	497,622.97
12/14/18	Golden State Water Company	October 2018 Water deliveries	292,908.36
12/14/18	Yorba Linda Water District	October 2018 Water deliveries	489,539.24
12/14/18	Moulton Niguel Water District	October 2018 Water deliveries	2,281,156.03
12/14/18	Irvine Ranch Water District	October 2018 Water deliveries	1,098,666.71
12/21/18	City of San Clemente	November 2018 Water deliveries	564,488.76
12/26/18	City of Fountain Valley	November 2018 Water deliveries	12,392.14
12/26/18	City of Newport Beach	November 2018 Water deliveries	502,216.28
12/26/18	Trabuco Canyon Water District	November 2018 Water deliveries	155,356.13
12/28/18	City of Huntington Beach	November 2018 Water deliveries	622,092.56

TOTAL REVENUES **\$ 17,227,085.49**




**Municipal Water District of Orange County  
REVENUE / CASH RECEIPT REPORT  
December 2018**

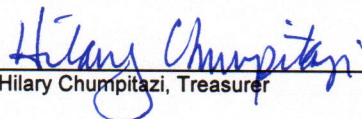
**MISCELLANEOUS REVENUES**

Date	From	Description	Amount
12/18/18	Laura Rocha	6/1/18 OC Water Summit	130.00
12/31/18	Keith Lyon	Jan 2019 Retiree Health insurance	288.99
12/31/18	Patricia Meszaros	Jan 2019 Retiree Health insurance	80.96
12/12/18	Lee Jacobi	Jan-Dec 2019 Retiree Health insurance	498.12
12/12/18	2 Checks	Movie tickets	359.00
12/21/18	2 Checks	Movie tickets	214.00
12/28/18	Katie Davanaugh	Movie tickets	35.00
12/31/18	Paypal	ISDOC Luncheon	48.63
12/03/18	Paypal	12/6/18 OCEMO Holiday Luncheon	802.74
12/31/18	Paypal	12/6/18 OCEMO Holiday Luncheon	30.77
12/10/18	Joe Berg	Donation for Paradise Irrigation District fire victims	100.00
12/12/18	3 Checks	Employee donations for Paradise Irrigation District fire victims	300.00
12/12/18	13 Checks	Reimbursement for staff apparel order	916.23
		11/15/18 Disaster Workshop expense reimbursement	
12/18/18	American Water Works Association	- K Hubbard	1,061.71
12/21/18	City of Fullerton	7/30/18 First Aid/ CPR Class registration	260.00
12/28/18	Brett Barbre	Computer purchase downpayment	1,378.83
12/31/18	US Bank	US Bank interest	44.76
12/26/18	Irvine Ranch Water District	September 2018 Smartimer rebate program	1,977.09
12/03/18	Moulton Niguel Water District	October 2018 Smartimer rebate program	4,800.00
12/26/18	Irvine Ranch Water District	October 2018 Smartimer rebate program	1,200.23
12/26/18	Mesa Water	October 2018 Smartimer rebate program	356.00
12/03/18	City of Newport Beach	September 2018 Turf Removal rebate program	2,314.05
12/26/18	Irvine Ranch Water District	October 2018 Turf Removal rebate program	12,926.00
12/26/18	City of Orange	October 2018 Turf Removal rebate program	428.00
12/03/18	Moulton Niguel Water District	September 2018 Smartimer, Rotating Nozzle & Turf Removal rebate program	27,211.70
12/07/18	City of San Clemente	October 2018 So Cal Watersmart rebate program	1,245.00
12/18/18	Irvine Ranch Water District	October 2018 So Cal Watersmart rebate program	13,236.84
12/18/18	Irvine Ranch Water District	November 2018 So Cal Watersmart rebate program	79,640.00
12/21/18	Laguna Beach County Water District	November 2018 So Cal Watersmart rebate program	30.00
12/26/18	El Toro Water District	November 2018 So Cal Watersmart rebate program	290.00
12/10/18	City of Orange	Addition to the Choice School program FY 17-18	398.97
12/26/18	City of Fountain Valley	Addition to the Choice School program FY 18-19	349.35
12/26/18	City of San Juan Capistrano	Addition to the Choice School program FY 18-19	226.05

TOTAL MISCELLANEOUS REVENUES \$ 153,179.02

TOTAL REVENUES \$ 17,380,264.51

  
Robert J. Hunter, General Manager

  
Hilary Chumipitazi, Treasurer



**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of January 2019**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
<b>Core Expenditures:</b>		
	<b>Richard C. Ackerman</b>	
1213	December 2018 Consulting on legal and regulatory matters	1,825.00
	*** Total ***	1,825.00
	<b>Alta FoodCraft</b>	
51824059	12/3/18 Coffee & tea supplies	181.26
	*** Total ***	181.26
	<b>ARC Document Solutions, LLC</b>	
9996024	50% Construction draft plan copies for phase 1 of MWDOC office remodel	296.87
	*** Total ***	296.87
	<b>California Landscape Contractors Association</b>	
2019	2019 Annual sponsorship	1,835.00
	*** Total ***	1,835.00
	<b>Davis Farr LLP</b>	
4901	September-November 2018 Financial consulting	4,024.50
	*** Total ***	4,024.50
	<b>Deluxe for Business</b>	
2044081734	2018 W-2 forms and envelopes	108.60
	*** Total ***	108.60
	<b>Dudek</b>	
20187768	10/27/18-11/30/18 Planning level reliability for South County Interconnection	23,670.00
	*** Total ***	23,670.00
	<b>G/M Business Interiors</b>	
0247429-IN	Ergonomic quick stand workstation and chair	1,580.90
	*** Total ***	1,580.90
	<b>IDS Group Inc.</b>	
17X114.00-4	December 2018 Interior design services for MWDOC office remodel	895.00
17X114.02-1	December 2018 Updated study, plans and design for MWDOC office remodel	5,650.00
	*** Total ***	6,545.00
	<b>Independent Special Dist of OC</b>	
2019-ISDOC	2019 Annual membership renewal	50.00
122818-PAYPAL	11/30/18-12/28/18 PayPal receipts for 1/31/19 meeting	48.63
	*** Total ***	98.63
	<b>James C. Barker, P.C.</b>	
105-1218	December 2018 Federal legislative advocacy services	8,000.00
	*** Total ***	8,000.00

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of January 2019**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b><i>Karen's Detail Custom Frames</i></b>	
3057	Custom framing for 2 Certificate of Recognitions	204.73
	*** Total ***	204.73
	<b><i>L.A. Design Studio</i></b>	
5043	November-December 2018 MWDOC Website support and enhancement	1,400.00
	*** Total ***	1,400.00
	<b><i>Lawnscape Systems, Inc.</i></b>	
398983	12/15/18 Landscape maintenance for atrium	295.00
	*** Total ***	295.00
	<b><i>Lewis Consulting Group</i></b>	
2018-188	December 2018 Consulting services	3,125.00
	*** Total ***	3,125.00
	<b><i>Keith Lyon</i></b>	
OCT-DEC2018	October-December 2018 Retiree medical premium	402.00
	*** Total ***	402.00
	<b><i>Edward G. Means III</i></b>	
MWDOC-1065	December 2018 Consulting on MET issues and guidance to engineering staff	2,131.00
	*** Total ***	2,131.00
	<b><i>Mega Maids Cleaning Service</i></b>	
10130	12/7/18 Cleaning and sanitation for MWDOC restroom after plumbing backup	125.00
	*** Total ***	125.00
	<b><i>Melissa Mog</i></b>	
289553	Flowers for MWDOC staff member	95.00
	*** Total ***	95.00
	<b><i>Office Solutions</i></b>	
I-01492892	12/13/18 Office supplies	172.36
I-01494091	12/17/18 Office supplies	5.75
I-01496307	12/20/18 Office supplies	234.51
I-01498819	12/27/18 Office supplies	51.73
	*** Total ***	464.35
	<b><i>Orange County Water District</i></b>	
19689	November 2018 50% share of WACO expense	246.25
19714	November 2018 Postage, shared office & maintenance expense	11,329.75
	*** Total ***	11,576.00
	<b><i>Petty Cash</i></b>	
OCT-DEC2018	October-December 2018 Petty Cash reimbursement	445.64
	*** Total ***	445.64



**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of January 2019**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
OCT-DEC2018	<b>Judy Pfister</b>	
	October-December 2018 Retiree medical premium	354.00
	*** Total ***	354.00
MWDOC#007	<b>Joey C. Soto</b>	
	November 2018 Grant research and acquisition assistance	2,999.25
	*** Total ***	2,999.25
0407997-IN	<b>Steven Enterprises, Inc.</b>	
	Bond paper for plotter	114.78
	*** Total ***	114.78
INV1118584	<b>WageWorks, Inc.</b>	
	December 2018 Cafeteria plan administration	185.25
	*** Total ***	185.25
JAN-MAR2019	<b>Pauline D. Wennerstrom</b>	
	January-March 2019 Retiree medical premium	367.50
	*** Total ***	367.50
<b>Total Core Expenditures</b>		<hr/> 72,450.26

**Choice Expenditures:**

2604	<b>Mission RCD</b>	
	November 2018 Field verifications for Water Use Efficiency rebate programs	2,752.94
	*** Total ***	2,752.94
19714	<b>Orange County Water District</b>	
	November 2018 Postage for Water Use Efficiency rebate programs	17.86
	*** Total ***	17.86
94710	<b>Top Hat Productions</b>	
	12/6/18 Lunch for Water Use Efficiency Workgroup meeting	638.80
	*** Total ***	638.80
<b>Total Choice Expenditures</b>		<hr/> 3,409.60

**Other Funds Expenditures:**

2604	<b>Mission RCD</b>	
	November 2018 Field verifications for Water Use Efficiency rebate programs	2,324.45
	*** Total ***	2,324.45

**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of January 2019**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b><i>Office Solutions</i></b>	
I-01492892	12/13/18 Office supplies for WEROC	5.75
	*** Total ***	5.75
	<b><i>County of Orange</i></b>	
SC11346	Programing 2 WEROC radios for Anaheim Public Utilities	100.00
SC11347	Programing 1 WEROC radios for Garden Grove	50.00
	*** Total ***	150.00
	<b><i>Raftelis Financial Consultants, Inc.</i></b>	
11187	November 2018 Five year monitoring for Budget Based Tiered Rate grant	2,080.00
	*** Total ***	2,080.00
	<b><i>Total Other Funds Expenditures</i></b>	<hr/> 4,560.20
	<b><i>Total Expenditures</i></b>	<hr/> <hr/> 80,420.06



**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of December 2018**

<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>Core Disbursements:</b>				
<b>138566</b>	<b>12/6/18</b>	<b>SPECTB</b>	<b>Spectrum Business</b>	
		0375210112018	December 2018 Telephone and internet expense	1,099.14
			***Total ***	1,099.14
<b>138568</b>	<b>12/6/18</b>	<b>VERIZO</b>	<b>Verizon Wireless</b>	
		9819004310	November 2018 4G Mobile broadband unlimited service	114.03
			***Total ***	114.03
<b>138576</b>	<b>12/14/18</b>	<b>IRONMO</b>	<b>Iron Mountain</b>	
		AJKJ176	December 2018 Archived document storage fees	209.70
			***Total ***	209.70
<b>138582</b>	<b>12/14/18</b>	<b>SPECTB</b>	<b>Spectrum Business</b>	
		0343564120118	December 2018 Telephone expense for 3 analog fax lines	108.17
			***Total ***	108.17
<b>ACH003679</b>	<b>12/14/18</b>	<b>BAEZHE</b>	<b>Heather Baez</b>	
		103118	October 2018 Business expense	97.10
			***Total ***	97.10
<b>ACH003680</b>	<b>12/14/18</b>	<b>BERGJO</b>	<b>Joseph Berg</b>	
		113018	November 2018 Business expense	86.77
			***Total ***	86.77
		<b>BUSSLI</b>	<b>Charles Busslinger</b>	
<b>ACH003685</b>	<b>12/14/18</b>	103118	October 2018 Business expense	22.35
<b>ACH003686</b>	<b>12/14/18</b>	113018	November 2018 Business expense	69.09
			***Total ***	91.44
<b>ACH003687</b>	<b>12/14/18</b>	<b>DAVISR</b>	<b>Rachel Davis</b>	
		113018	November 2018 Business expense	49.22
			***Total ***	49.22
<b>ACH003688</b>	<b>12/14/18</b>	<b>DELATO</b>	<b>Harvey De La Torre</b>	
		113018	November 2018 Business expense	608.27
			***Total ***	608.27
<b>ACH003689</b>	<b>12/14/18</b>	<b>DICKEX</b>	<b>Larry Dick</b>	
		113018	November 2018 Business expense	57.24
			***Total ***	57.24
<b>ACH003691</b>	<b>12/14/18</b>	<b>FAHLBE</b>	<b>Beth Fahl</b>	
		113018	November 2018 Business expense	43.75
			***Total ***	43.75

**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of December 2018**

<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>ACH003696</b>	<b>12/14/18</b>	<b>RICOHMA</b>	<b>Ricoh USA, Inc.</b>	
		5055232920	September-November 2018 Reproduction costs	2,101.00
			***Total ***	2,101.00
<b>ACH003704</b>	<b>12/14/18</b>	<b>TAMARI</b>	<b>Satoru Tamaribuchi</b>	
		113018	November 2018 Business expense	170.04
			***Total ***	170.04
<b>ACH003705</b>	<b>12/14/18</b>	<b>THOMAS</b>	<b>Jeffery Thomas</b>	
		113018	November 2018 Business expense	221.62
			***Total ***	221.62
<b>ACH003708</b>	<b>12/14/18</b>	<b>WILSON</b>	<b>Sarah C. Wilson</b>	
		103118	October 2018 Business expense	22.61
			***Total ***	22.61
<b>138617</b>	<b>12/28/18</b>	<b>USBANK</b>	<b>U.S. Bank</b>	
		0403/4140/5443-NOV18	10/23/18-11/23/18 Cal Card charges	16,423.95
			***Total ***	16,423.95
			(See attached sheet for details)	
<b>ACH003709</b>	<b>12/28/18</b>	<b>BAUMHA</b>	<b>Melissa Baum-Haley</b>	
		113018	November 2018 Business expense	450.00
			***Total ***	450.00
<b>ACH003712</b>	<b>12/28/18</b>	<b>CHUMPI</b>	<b>Hilary Chumpitazi</b>	
		121318	December 2018 Business expense	259.04
			***Total ***	259.04
<b>ACH003713</b>	<b>12/28/18</b>	<b>DELATO</b>	<b>Harvey De La Torre</b>	
		121718	December 2018 Business expense	857.17
			***Total ***	857.17
<b>ACH003714</b>	<b>12/28/18</b>	<b>HOSTER</b>	<b>Kevin Hostert</b>	
		121318	November-December 2018 Business expense	133.96
			***Total ***	133.96
<b>ACH003722</b>	<b>12/28/18</b>	<b>ROBERT</b>	<b>Bryce Roberto</b>	
		120418	November-December 2018 Business expense	46.33
			***Total ***	46.33
<b>ACH003723</b>	<b>12/28/18</b>	<b>SCHNEI</b>	<b>Megan Yoo Schneider</b>	
		113018	November 2018 Business expense	1,361.70
			***Total ***	1,361.70



**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of December 2018**

<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>ACH003726</b>	<b>12/28/18</b>	<b>WILSON</b>	<b>Sarah C. Wilson</b>	
		113018	November 2018 Business expense	92.15
			***Total ***	92.15
			<b>Total Core Disbursements</b>	<b>24,704.40</b>
<b>Choice Disbursements:</b>				
<b>138617</b>	<b>12/28/18</b>	<b>USBANK</b>	<b>U.S. Bank</b>	
		4140-NOV18	10/23/18-11/23/18 Cal Card charges	1,110.70
			***Total ***	1,110.70
			(See attached sheet for details)	
			<b>Total Choice Disbursements</b>	<b>1,110.70</b>
<b>Other Funds Disbursements:</b>				
<b>138567</b>	<b>12/6/18</b>	<b>TURFRP</b>	<b>Turf Removal Program</b>	
		TR11-R-SM-26787-26710A	S. Calen (Re-issue)	1,051.00
			***Total ***	1,051.00
<b>138568</b>	<b>12/6/18</b>	<b>VERIZO</b>	<b>Verizon Wireless</b>	
		9819004310	November 2018 4G Mobile broadband unlimited service	76.02
			***Total ***	76.02
<b>138571</b>	<b>12/14/18</b>	<b>ATTCALN</b>	<b>AT&amp;T</b>	
		000012248030	November 2018 WEROC N. & S. EOC telephone expense	205.44
		000012248031	November 2018 WEROC N. EOC telephone expense	106.03
			***Total ***	311.47
<b>138578</b>	<b>12/14/18</b>	<b>MFHETD</b>	<b>Multi Family HET Direct</b>	
		112718SMR	Moritz Associates, LP (Aliso Viejo)	100,275.00
			***Total ***	100,275.00
<b>138585</b>	<b>12/14/18</b>	<b>TURFRP</b>	<b>Turf Removal Program</b>	
		TR12-R-IRWD-28079-28003A	J. Glover (Re-issue)	710.00
			***Total ***	710.00
<b>ACH003680</b>	<b>12/14/18</b>	<b>BERGJO</b>	<b>Joseph Berg</b>	
		113018	November 2018 Business expense	4.50
			***Total ***	4.50
		<b>HUBBAR</b>	<b>Kelly Hubbard</b>	
<b>ACH003692</b>	<b>12/14/18</b>	103118	October 2018 Business expense	17.78
<b>ACH003693</b>	<b>12/14/18</b>	111618	November 2018 Business expense-AWWA workshop (Reimbursement received from AWWA)	78.86
<b>ACH003694</b>	<b>12/14/18</b>	113018	November 2018 Business expense	29.79
			***Total ***	126.43

**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of December 2018**

<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>DRIPPR</b>				
			<b>Spray to Drip Program</b>	
138587	12/19/18	S2D1-R-O-26792-13200	L. Dao	172.00
138588	12/19/18	S2D2-R-IRWD-27056-13268	Y. Lai	151.25
138589	12/19/18	S2D2-R-SM-28081-14272	S. Moncrief	90.00
			***Total ***	413.25
<b>TURFRP</b>				
			<b>Turf Removal Program</b>	
138590	12/19/18	TR11-R-MNT-25436-25338	M. Cilimdzc	918.00
138591	12/19/18	TR11-R-SC-26920-26846	D. Nielsen	1,621.28
138592	12/19/18	TR12-R-MNT-26930-26856	J. Wallace	1,904.00
138593	12/19/18	TR12-R-ETWD-27025-26949	E. Duckworth	748.00
138594	12/19/18	TR12-R-SM-27044-26968	I. Daniel	756.00
138595	12/19/18	TR12-R-MNT-27049-26971	J. Saladow	3,368.00
138596	12/19/18	TR12-R-MNT-28086-28009	E. Pimienta	658.00
138597	12/19/18	TR12-R-MNT-28087-28010	H. Ishikawa	1,456.00
138598	12/19/18	TR12-R-MNT-26562-28053	P. DiInnocenzo	522.00
138599	12/19/18	TR12-R-MNT-29152-29075	D. Emde	3,008.00
138600	12/19/18	TR12-R-MNT-29157-29080	B. Turk	2,584.00
138601	12/19/18	TR12-R-MNT-29162-29086	J. Goodman	542.00
138602	12/19/18	TR12-R-MNT-29166-29090	S. Vadchhedia	1,758.00
138603	12/19/18	TR12-R-MNT-29194-29116	J. Braganza	1,424.00
138604	12/19/18	TR12-R-MNT-29206-29126	V. Ferlauto	1,008.00
138605	12/19/18	TR12-R-MNT-29211-29130	R. Nguyen	1,928.00
138606	12/19/18	TR12-R-MNT-29212-29133	J. Como	944.00
138607	12/19/18	TR12-R-MNT-29215-29137	A. Skrove	1,614.00
138608	12/19/18	TR12-R-MNT-34251-34174	A. Gogoua	1,932.00
138609	12/19/18	TR12-R-MNT-35262-35187	A. Hale	916.00
138610	12/19/18	TR12-R-MNT-35283-35212	E. Hansen	654.00
			***Total ***	30,263.28
138615	12/28/18	SANTI1 OCT2018	<b>Santiago Aqueduct Commission</b> October 2018 SAC Pipeline Operation surcharge	3,057.72
			***Total ***	3,057.72
138617	12/28/18	USBANK 4140-NOV18	<b>U.S. Bank</b> 10/23/18-11/23/18 Cal Card charges	2,100.81
			***Total ***	2,100.81
			(See attached sheet for details)	
ACH003715	12/28/18	HUBBAR 120518	<b>Kelly Hubbard</b> 11/26/18-12/5/18 Business expense-Butte County fire disaster response	895.74
			***Total ***	895.74

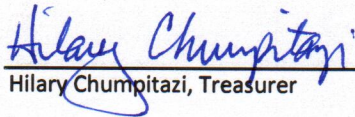


**Municipal Water District of Orange County  
Disbursement Ratification Report  
For the month of December 2018**

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>ACH003724</b>	<b>12/28/18</b>	<b>SANTAM</b>	<b>Santa Margarita Water District</b>	
		OCT2018	October 2018 SCP Pipeline Operation surcharge	27,572.62
			***Total***	27,572.62
<b>EFT-181228</b>	<b>12/28/18</b>	<b>METWAT</b>	<b>Metropolitan Water District</b>	
		9504	October 2018 Water deliveries	16,104,385.34
			***Total***	16,104,385.34
<b>138618</b>	<b>12/28/18</b>	<b>ATTUVEOC</b>	<b>AT&amp;T</b>	
		8599-DEC2018	December 2018 WEROC N. EOC U-verse internet service	60.00
			***Total***	60.00
<b>Total Other Funds Disbursements</b>				<b>16,271,303.18</b>
<b>Total Disbursements</b>				<b>16,297,118.28</b>



Robert J. Hunter, General Manager



Hilary Chumpitazi, Treasurer

**Cal Card Charges**  
**Statement Date: November 23, 2018**  
**Payment Date: December 28, 2018**

<b>Date</b>	<b>Description</b>	<b>Amount</b>
<b><u>Public Affairs</u></b>		
10/23/2018	Lunch for Mesa Water District meeting	\$ 50.88
10/23/2018	California Association of Public Information Officials Shake It Up workshop in Los Angeles, CA on Nov. 8, 2018 - Registration for T. Muldoon	50.00
10/30/2018	Refreshments for Public Affairs workshop	21.96
10/30/2018	Lunch for Public Affairs workshop speaker	29.33
11/2/2018	Disaster preparedness survival kit for Public Affairs workshop speaker	64.95
11/8/2018	Award from MARCOM for MWDOC website	214.00
11/10/2018	Appetizers for MET Inspection trip	56.83
11/11/2018	MET Inspection trip from Nov. 9-11, 2018 - Parking for B. Roberto	60.00
11/15/2018	Annual subscription for password security license for 5 users	145.00
11/20/2018	Public Relations Society of America annual membership for T. Muldoon	190.00
11/23/2018	Paper and envelopes for Elected Officials letter	74.33
<b>Total</b>		<b><u>\$ 957.28</u></b>



**Cal Card Charges**  
**Statement Date: November 23, 2018**  
**Payment Date: December 28, 2018**

Date	Description	Amount
<b><u>K. Seckel Card</u></b>		
10/22/2018	UPS delivery charges for M. Clark on Oct. 18, 2018	\$ 20.32
10/23/2018	Lunch for MET Directors' meeting	186.73
10/23/2018	80 Regal movie tickets for employee purchase	730.00
10/24/2018	Lunch for California Landscape Contractors Association meeting	770.75
10/24/2018	2 Toner cartridges	272.58
10/24/2018	80 Cinemark movie tickets for employee purchase	690.00
10/24/2018	9/24/18-10/23/18 Web hosting service for MWDOC website	15.65
10/24/2018	Lunch for MET Managers' meeting	100.13
10/25/2018	Christmas tree for MWDOC office	146.95
10/25/2018	American Water Works Association California-Nevada Section Annual Fall conference in Rancho Mirage, CA from Oct. 23-24, 2018 - Accommodations balance for J. Berg	5.66
10/25/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-14, 2018 - Registration for H. De La Torre and M. Baum-Haley	950.00
10/25/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Accommodations deposit for M. Baum-Haley	168.94 <sup>1</sup>
10/25/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Accommodations deposit for H. De La Torre	146.26 <sup>2</sup>
10/26/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Airfare for H. De La Torre	286.96
10/29/2018	UPS delivery charges for Eastern Municipal Water District on Oct. 19, 2018	12.78
10/30/2018	11/9/18-11/8/19 Sacramento Bee online subscription	99.99
10/30/2018	Breakfast for Cyber Security meeting	391.60
10/30/2018	Lunch for Cyber Security meeting	823.00
10/31/2018	FedEx delivery charges for IDS Group on Oct. 29, 2018	18.35
10/31/2018	Lunch for MWDOC MET Directors' meeting	181.00
10/31/2018	Office supplies from Costco	434.99
11/1/2018	11/1/18-11/30/18 E-mail service for California Sprinkler Adjustment Notification System	9.95
11/2/2018	Irrigation Show Landscape Drip Irrigation Design and Management class in Long Beach, CA on Dec. 5, 2018 - Registration for R. Davis	250.00
11/2/2018	California H2O Women conference in Santa Barbara, CA from Nov. 1-2, 2018 Accommodations for M. Baum-Haley	485.12
11/2/2018	California H2O Women conference in Santa Barbara, CA from Nov. 1-2, 2018 Accommodations for H. Baez	373.32
11/5/2018	Water Year 2019: Feast or Famine? workshop in Irvine, CA on Dec. 5, 2018 Registration for C. Lingad	79.81
11/5/2018	UPS delivery charges for Board packets on Nov. 2, 2018	7.45
11/5/2018	Legislative Activities in Washington, DC from Nov. 14-16, 2018 - Airfare for D. Micalizzi	491.44
11/5/2018	Legislative Activities in Sacramento, CA on Nov. 14, 2018 - Airfare for H. Baez	519.96
11/7/2018	Food for WEROC Emergency Services Coordinators meeting	29.08
11/7/2018	Legislative Activities in Washington, DC from Nov. 14-16, 2018 - Airfare change for D. Micalizzi	273.00



**Cal Card Charges**  
**Statement Date: November 23, 2018**  
**Payment Date: December 28, 2018**

Date	Description	Amount
11/7/2018	Legislative Activities in Washington, DC from Nov. 14-16, 2018 - Airfare change for D. Micalizzi	547.39
11/8/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Accommodations for H. De La Torre	146.26
11/8/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Accommodations for M. Baum-Haley	146.26
11/8/2018	Federal Emergency Management Agency & American Water Works Association Disaster Typing Standards workshop in Washington, DC on Nov. 15, 2018 - Accommodations for K. Hubbard	424.17 <span style="border: 1px solid black; padding: 0 2px;">3</span>
11/8/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Airfare for M. Baum-Haley	128.18
11/9/2018	11/9/18-12/9/18 LinkedIn Learning subscription	29.99
11/10/2018	Food for staff development meeting	29.99
11/12/2018	UPS delivery charges for Board packets on Nov. 2, 2018	56.34
11/15/2018	Lunch for Managers' meeting	824.29
11/15/2018	Annual subscription for Adobe PDF conversion software	69.99
11/15/2018	Annual license for Surveygizmo software	330.00
11/15/2018	Legislative Activities in Sacramento, CA on Dec. 12, 2018 - Airfare for H. Baez	519.96
11/16/2018	California Society of Municipal Finance Officers OC Chapter meeting in Aliso Viejo, CA on Dec. 4, 2018 - Registrations for H. Chumpitazi, L. Gunawan and M. Snow	90.00
11/17/2018	Annual software subscription and support for ACT! software	1,995.00
11/19/2018	UPS delivery charges for Board packets on Oct. 5, 2018	12.04
11/19/2018	Lunch for meeting with consultant from Black and Veatch	36.71
11/19/2018	Legislative Activities in Washington, DC from Nov. 27-30, 2018 - Airfare date change for D. Micalizzi	343.12
11/21/2018	Federal Emergency Management Agency & American Water Works Association Disaster Typing Standards workshop in Washington, DC on Nov. 15, 2018 - Airfare for K. Hubbard	432.96 <span style="border: 1px solid black; padding: 0 2px;">4</span>
<b>Total</b>		<b><u>\$ 15,134.42</u></b>

- 1 Hotel reservation deposit was charged twice, refunded on 12/4/18
- 2 Hotel reservation deposit was charged twice, refunded on 12/4/18
- 3 Expense reimbursement received from AWWA
- 4 Expense reimbursement received from AWWA



**Cal Card Charges**  
**Statement Date: November 23, 2018**  
**Payment Date: December 28, 2018**

Date	Description	Amount
<b><u>R. Hunter Card</u></b>		
10/23/18-11/23/18	Meals for R. Hunter's meetings	73.27
10/25/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-14, 2018 - Registration for Director Thomas	500.00
10/25/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-14, 2018 - Accommodations deposit for Director Thomas	146.26 <sup>1</sup>
10/30/2018	Orange County Water Association Annual Holiday Party in Tustin, CA on Dec. 7, 2018 - Registration for Director Barbre	90.00
11/8/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-15, 2018 - Accommodations deposit for Director Barbre	146.26
11/8/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-15, 2018 - Accommodations deposit for Director Thomas	146.26
11/14/2018	Westin room rental deposit for off-site Special Board meeting on Jan. 5, 2019	500.00
11/15/2018	ACWA Fall conference in San Diego, CA from Nov. 27-30, 2018 - Partial registration refund for Director Yoo-Schneider	(379.00)
11/16/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA from Dec. 5-7, 2018 - Accommodations booking fee for Director Yoo-Schneider	12.99
11/16/2018	Water Year 2019: Feast or Famine? workshop in Irvine, CA on Dec. 5, 2018 - Registration for Director Tamaribuchi	79.81
11/16/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA from Dec. 5-7, 2018 - Airfare for Director Tamaribuchi	519.96
11/19/2018	Legislative Activities in Washington, DC from Nov. 27-30, 2018 - Airfare date change for Director Barbre	1,177.99 <sup>2</sup>
11/21/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA on Dec. 7, 2018 - Airfare for R. Hunter	529.96 <sup>3</sup>
<b>Total</b>		<b><u>\$ 3,543.76</u></b>

- <sup>1</sup> Hotel reservation deposit was charged twice, refunded on 12/4/18
- <sup>2</sup> Director Barbre to reimburse MWDOC \$600.00
- <sup>3</sup> Flight canceled, refunded on 12/3/18

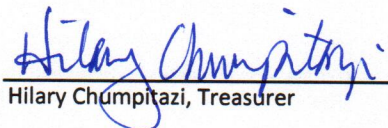


**Municipal Water District of Orange County**  
**GM Approved Disbursement Report <sup>(1)</sup>**  
**For the month of December 2018**

<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>Core Disbursements:</b>				
138586	12/14/18	USPOST 2019-BOX20895	U.S. Postal Service 2019 P.O. Box annual fee	1,210.00
			***Total ***	1,210.00
			<b>Total Core Disbursements</b>	<b>1,210.00</b>
<b>Choice Disbursements:</b>				
			<b>Total Choice Disbursements</b>	<b>-</b>
<b>Other Funds Disbursements:</b>				
138565	12/6/18	BUENAP CK393974REFUND	City of Buena Park Refund for overpayment of invoice 9645 for September 2018 Water Deliveries	36,000.00
			***Total ***	36,000.00
138613	12/28/18	WESTMS 15900	Lane M. Matsuno August 2018 Meter Accuracy Testing for Trabuco Canyon Water District	2,705.00
			***Total ***	2,705.00
			<b>Total Other Funds Disbursements</b>	<b>38,705.00</b>
			<b>Total Disbursements</b>	<b>39,915.00</b>



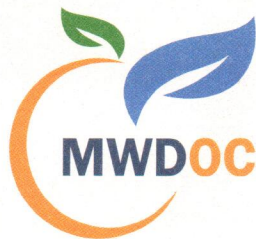
Robert J. Hunter, General Manager



Hilary Chumpitazi, Treasurer

(1) For disbursements that did not make the cut-off of previous month's Disbursement Approval report. Disbursements are approved by GM for payment and need A & F Committee ratification.





**Municipal Water District of Orange County**  
**Consolidated Summary of Cash and Investment**  
 November 30, 2018

Street Address:  
 18700 Ward Street  
 Fountain Valley, California 92708

Mailing Address:  
 P.O. Box 20895  
 Fountain Valley, CA 92728-0895

(714) 963-3058  
 Fax: (714) 964-9389  
[www.mwdoc.com](http://www.mwdoc.com)

Brett R. Barbre  
*President*

Joan C. Finnegan  
*Vice President*

Larry D. Dick  
*Director*

Wayne S. Osborne  
*Director*

Megan Yoo Schneider  
*Director*

Sat Tamaribuchi  
*Director*

Jeffery M. Thomas  
*Director*

Robert J. Hunter  
*General Manager*

**MEMBER AGENCIES**

City of Brea  
 City of Buena Park  
 East Orange County Water District  
 El Toro Water District  
 Emerald Bay Service District  
 City of Fountain Valley  
 City of Garden Grove  
 Golden State Water Co.  
 City of Huntington Beach  
 Irvine Ranch Water District  
 Laguna Beach County Water District  
 City of La Habra  
 City of La Palma  
 Mesa Water District  
 Moulton Niguel Water District  
 City of Newport Beach  
 City of Orange  
 Orange County Water District  
 City of San Clemente  
 City of San Juan Capistrano  
 Santa Margarita Water District  
 City of Seal Beach  
 Serrano Water District  
 South Coast Water District  
 Trabuco Canyon Water District  
 City of Tustin  
 City of Westminster  
 Yorba Linda Water District

District investments and cash balances are held in various funds designated for certain purposes as follows:


Fund	Book Value	% of Portfolio
<b>Designated Reserves</b>		
General Operations	\$3,341,910	19.83%
Grant & Project Cash Flow	1,500,000	8.90%
Election Expense	608,000	3.61%
Building Repair	385,408	2.29%
OPEB	297,147	1.76%
<b>Total Designated Reserves</b>	<b>6,132,465</b>	<b>36.39%</b>
<b>General Fund</b>	<b>8,914,362</b>	<b>52.87%</b>
<b>Water Fund</b>	<b>1,816,088</b>	<b>10.77%</b>
<b>Conservation Fund</b>	<b>(267,020)</b>	<b>(1.58%)</b>
<b>Desalination Feasibility Study Fund</b>	<b>(145,268)</b>	<b>(0.86%)</b>
<b>WEROC Fund</b>	<b>377,154</b>	<b>2.24%</b>
<b>Trustee Activities</b>	<b>28,911</b>	<b>0.17%</b>
<b>Total</b>	<b>\$16,856,692</b>	<b>100.00%</b>


The funds are invested as follows:

Term of Investment	% of Portfolio	Book Value	Market Value
Cash	0.59%	\$99,954	\$99,954
<b>Short-term investment</b>			
• LAIF	57.50%	\$9,691,894	\$9,691,894
• OCIP	23.50%	3,962,150	3,962,150
<b>Long-term investment</b>			
• Corporate Bond	6.84%	1,152,694	1,117,757
• Certificates of Deposit	11.57%	1,950,000	1,924,157
<b>Total</b>	<b>100.00%</b>	<b>\$16,856,692</b>	<b>\$16,795,912</b>

The average number of days to maturity/call as of November 30, 2018 equaled 158 and the average yield to maturity is 2.172%. During the month, the District's average daily balance was \$27,758,736.27. Funds were invested in Federal Agency Issues, Certificates of Deposit, Negotiable CD's, Miscellaneous Securities, the Local Agency Investment Funds (LAIF) and the Orange County Investment Pool (OCIP) during the month of November 2018.

The (\$60,780) difference between the book value and the market value on November 30, 2018 represents the exchange difference if all investments had been liquidated on that date. Since it is the District's practice to "buy and hold" investments until maturity, the market values are a point of reference, not an indication of actual loss or gain. There are no current plans or cash flow requirements identified in the near future that would require the sale of these securities prior to maturity.

  
 Robert J. Hunter  
*General Manager*

  
 Hilary Chumpitazi  
*Treasurer*





# MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

## Portfolio Management - Portfolio Summary

November 30, 2018

11/30/2018	Par Value	Market Value	Book Value	% of Portfolio	Days to Mat/Call	YTM @ Cost
Negotiable Certificate Of Deposit	1,950,000.00	1,924,157.50	1,950,000.00	11.64	890	2.504
Corporate Bond	1,150,000.00	1,117,757.00	1,152,693.89	6.86	786	2.290
Local Agency Investment Funds	9,691,893.83	9,691,893.83	9,691,893.83	57.85	1	2.199
Orange County Investment Pool	3,962,149.83	3,962,149.83	3,962,149.83	23.65	1	1.906
<b>Total Investments</b>	<b>16,754,043.66</b>	<b>16,695,958.16</b>	<b>16,756,737.55</b>	<b>100.00</b>	<b>158</b>	<b>2.172</b>

<b>Cash</b>						
Cash	99,954.03	99,954.03	99,954.03		1	0.00
<b>Total Cash and Investments</b>	<b>16,853,997.69</b>	<b>16,795,912.19</b>	<b>16,856,691.58</b>		<b>158</b>	<b>2.172</b>

Total Earnings	Month Ending November	Fiscal Year to Date
Current Year	47,675.21	243,476.15
Average Daily Balance	27,758,736.27	
Effective Rate of Return	2.172%	

We certify that this report reflects the cash and investments of the Municipal Water District of Orange County and is in conformity with the Government Code requirements and the District Investment Policy and Guidelines in effect at the time of investment. The Investment Program herein shown provides sufficient cash flow liquidity to meet the next six month's estimated expenditure. The source for the market values are from Union Bank. Per Resolution 2059 there are no compliance exceptions to report.

  
 Robert J. Hunter, General Manager

Date

1-3-19

  
 Hilary Chumtazi, Treasurer

Date

01/03/2018

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Short-Term Portfolio Details - Cash and Investments**  
**November 30, 2018**

Investments	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
<b>Local Agency Investment Funds</b>									
LAIF LGIP	LAIF	6/30/2010	9,691,893.83	9,691,893.83	9,691,893.83	2.199	2.199	1	N/A
<b>Sub Total</b>			<b>9,691,893.83</b>	<b>9,691,893.83</b>	<b>9,691,893.83</b>	<b>2.199</b>	<b>2.199</b>	<b>1</b>	
<b>Orange County Investment Pool</b>									
County of Orange LGIP	OCIP	6/29/2005	3,962,149.83	3,962,149.83	3,962,149.83	1.906	1.906	1	N/A
<b>Sub Total</b>			<b>3,962,149.83</b>	<b>3,962,149.83</b>	<b>3,962,149.83</b>	<b>1.906</b>	<b>1.906</b>	<b>1</b>	
<b>Total Investments</b>			<b>13,654,043.66</b>	<b>13,654,043.66</b>	<b>13,654,043.66</b>	<b>2.114</b>	<b>2.114</b>		
<b>Cash</b>									
Petty Cash Cash	CASH	7/1/2010	500.00	500.00	500.00	0.000	0.000	1	N/A
US Bank Cash	CASHUSBANK	7/25/2018	99,454.03	99,454.03	99,454.03	0.000	0.000	1	N/A
<b>Total Cash</b>			<b>99,954.03</b>	<b>99,954.03</b>	<b>99,954.03</b>	<b>0.000</b>	<b>0.000</b>	<b>1</b>	
<b>Total Cash and Investments</b>			<b>13,753,997.69</b>	<b>13,753,997.69</b>	<b>13,753,997.69</b>	<b>2.114</b>	<b>2.114</b>	<b>1</b>	
<b>Total Earnings</b>									
Current Year		<b>Month Ending November</b>	<b>41,593.95</b>	<b>Fiscal Year To Date</b>	<b>213,077.68</b>				

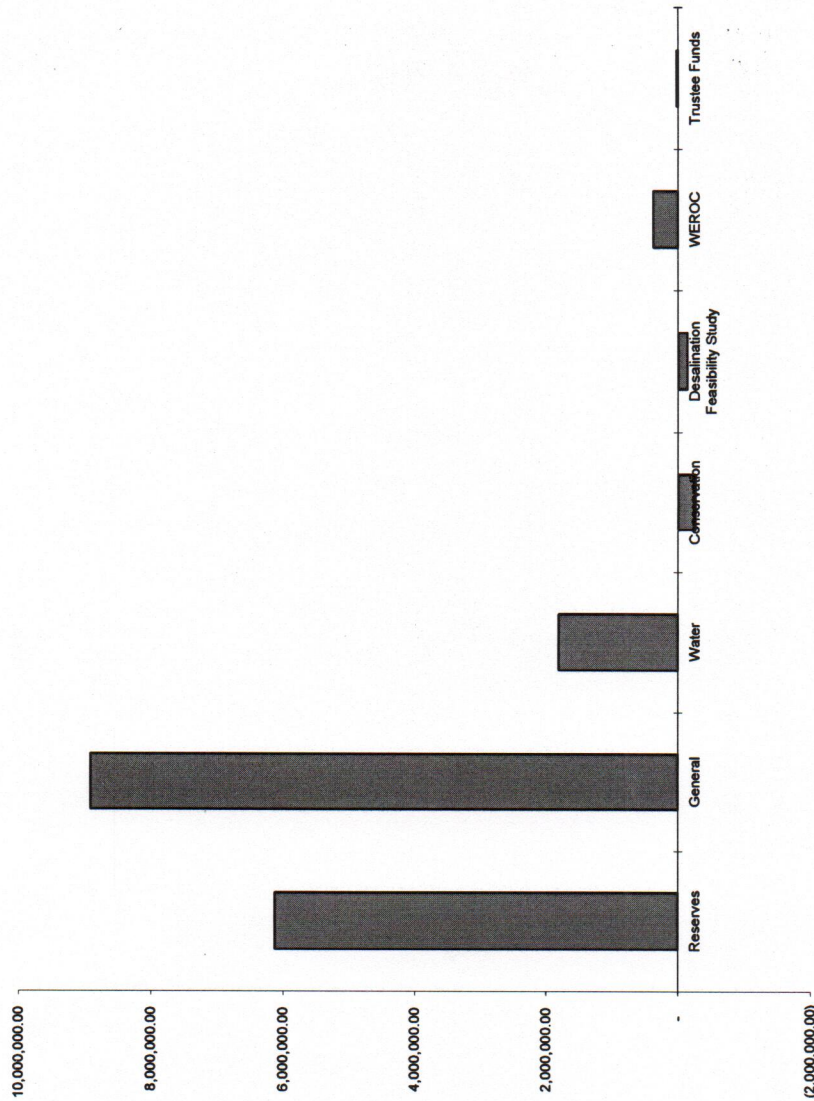


**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Long-Term Portfolio Details - Investments**  
**November 30, 2018**

Issuer	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
<b>Negotiable Certificate Of Deposit</b>									
Barclays Bank	06740KKY2	9/27/2017	250,000.00	239,615.00	250,000.00	2.250	2.250	1,397	9/27/2022
Capital One Bank	14042E6C9	9/2/2015	250,000.00	249,132.50	250,000.00	1.950	1.950	277	9/3/2019
Comenity Capital	20033AUX2	7/25/2017	200,000.00	193,930.00	200,000.00	2.000	2.000	959	7/16/2021
Discover Bank	254673RV0	7/25/2018	250,000.00	247,530.00	250,000.00	3.300	3.300	1,698	7/25/2023
Goldman Sachs Bank	38148PT98	8/8/2018	250,000.00	247,995.00	250,000.00	3.350	3.350	1,712	8/8/2023
HSBC Bank	40434AK65	1/21/2016	250,000.00	250,000.00	250,000.00	2.250	2.534	52	1/21/2021
Morgan Stanley Bank	61747MJ36	2/1/2018	250,000.00	246,667.50	250,000.00	2.500	2.500	794	2/1/2021
Synchrony Bank	87164XBY1	7/25/2014	250,000.00	249,287.50	250,000.00	2.050	2.050	242	7/30/2019
<b>Sub Total</b>			<b>1,950,000.00</b>	<b>1,924,157.50</b>	<b>1,950,000.00</b>	<b>2.468</b>	<b>2.504</b>	<b>890</b>	
<b>Corporate Bond</b>									
JP Morgan Chase	46625HKA7	11/2/2015	500,000.00	493,970.00	500,533.59	2.250	2.152	388	1/23/2020
National Rural Utili Coop	63743FE51	7/27/2017	200,000.00	186,806.00	200,000.00	2.500	2.500	1,323	7/15/2022
Wells Fargo	94974BGR5	1/13/2016	250,000.00	244,675.00	250,664.82	2.550	2.409	738	12/7/2020
Westpac Banking Corp	961214DQ3	7/25/2017	200,000.00	192,306.00	201,495.48	2.500	2.278	1,306	6/28/2022
<b>Sub Total</b>			<b>1,150,000.00</b>	<b>1,117,757.00</b>	<b>1,152,693.89</b>	<b>2.402</b>	<b>2.290</b>	<b>786</b>	
<b>Total Investments</b>			<b>3,100,000.00</b>	<b>3,041,914.50</b>	<b>3,102,693.89</b>	<b>2.444</b>	<b>2.425</b>	<b>851</b>	
<b>Total Earnings</b>									
Current Year		<b>Month Ending November</b>	<b>6,081.26</b>	<b>Fiscal Year To Date</b>	<b>30,398.47</b>				

**Municipal Water District of Orange County  
Cash and Investments at November 30, 2018**

ALLOCATION	AMOUNT	%
<b>MWDOC</b>		
Designated Reserves		
General	\$ 3,341,910	19.83%
Grant & Project Cash Flow	1,500,000	8.90%
Election Expense	608,000	3.61%
Building Repair	385,408	2.29%
OPEB	297,147	1.76%
Total Designated Reserves	6,132,465	36.39%
General	8,914,362	52.87%
Water	1,816,088	10.77%
Conservation	(267,020)	-1.58%
Desalination Feasibility Study	(145,268)	-0.86%
WERO	377,154	2.24%
<b>TOTAL MWDOC</b>	<b>\$ 16,827,781</b>	<b>99.83%</b>
<b>TRUSTEE ACTIVITIES</b>		
AMP Sales Admin	\$ 28,911	0.17%
<b>TOTAL TRUSTEE ACTIVITIES</b>	<b>\$ 28,911</b>	<b>0.17%</b>
<b>TOTAL CASH &amp; INVESTMENTS</b>	<b>\$ 16,856,692</b>	<b>100.00%</b>



**MUNICIPAL WATER DIST OF ORANGE COUNTY**  
**PARS Post-Employment Benefits Trust****Account Report for the Period**  
**11/1/2018 to 11/30/2018**Rob Hunter  
General Manager  
Municipal Water Dist of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708**Account Summary**

Source	Beginning Balance as of 11/1/2018	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 11/30/2018
OPEB	\$2,041,841.55	\$0.00	\$23,826.42	\$382.84	\$0.00	\$0.00	\$2,065,285.13
PENSION	\$200,668.23	\$0.00	\$2,341.61	\$37.63	\$0.00	\$0.00	\$202,972.21
<b>Totals</b>	<b>\$2,242,509.78</b>	<b>\$0.00</b>	<b>\$26,168.03</b>	<b>\$420.47</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$2,268,257.34</b>

**Investment Selection****Source**OPEB **Moderate HighMark PLUS**  
PENSION **Moderate HighMark PLUS****Investment Objective****Source**

OPEB The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments.

PENSION The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments.

**Investment Return**

Source	1-Month	3-Months	1-Year	Annualized Return			Plan's Inception Date
				3-Years	5-Years	10-Years	
OPEB	1.17%	-3.14%	0.80%	5.81%	4.97%	-	10/26/2011
PENSION	1.17%	-3.14%	-	-	-	-	7/31/2018

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change.

Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return.

Account balances are inclusive of Trust Administration, Trustee and Investment Management fees



# Item No. 3e

## Municipal Water District of Orange County WATER USE EFFICIENCY PROJECTS Cash Flow as of 12/31/18

	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	TOTALS
<b>Cash - Beginning Balance</b>	\$ 280,031.97	\$ 273,554.92	\$ 407,387.74	\$ 170,892.71	\$ 70,974.64	\$ (267,020.46)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	
<b>REVENUES:</b>													
BUREC	4,605.00	111.00		102,395.93									\$ 107,111.93
City of Brea													-
City of Buena Park		222.00											222.00
City of Fountain Valley	222.00		1,376.29	663.05	111.00								2,372.34
City of Fullerton													-
City of Garden Grove													-
City of Huntington Beach	598.99			40.00									638.99
City of La Habra	222.00												222.00
City of San Clemente	3,244.99	9,442.99		1,683.99	3,312.00	1,245.00							18,928.97
City of San Juan Capistrano													-
City of Santa Ana													-
City of Tustin													-
City of Newport Beach		3,343.80		1,980.57		2,314.05							7,638.42
City of Orange	444.00		913.75	1,134.10	173.85	428.00							3,093.70
City of Westminster	333.00	539.00	555.00		666.00								2,093.00
County of Orange													-
Department of Water Resources													32,990.80
East Orange County Water District													-
El Toro Water District		774.00		2,544.00	4,063.10	290.00							7,671.10
Irvine Ranch Water District	8,271.11	47,878.73		11,080.04	98,495.70	108,980.16							274,705.74
Laguna Beach County Water District		15.00				30.00							45.00
Mesa Water District	66.82	197.98	170.00	140.00		356.00							930.80
Metropolitan Water District		191,093.43				27,066.04							218,159.47
Moulton Niguel Water District	38,341.68	7,726.23	10,281.98	10,872.48	21,400.00	32,011.70							120,634.07
Orange County Water District													-
Santa Margarita Water District													-
Trabuco Canyon Water District		605.76		18.98	100.00								724.74
Yorba Linda Water District		284.07											284.07
<b>Miscellaneous Revenues</b>													-
Miscellaneous													-
Interest Revenue	2,228.14			1,587.30									3,815.44
<b>Total Revenues</b>	\$ 91,568.53	\$ 262,233.99	\$ 13,297.02	\$ 134,140.44	\$ 128,321.65	\$ 172,720.95	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 802,282.58
<b>EXPENDITURES:</b>													
Budget Based Tiered Rates, Rattels			1,800.00	11,960.00	730.00	5,150.00							22,910.00
Droplet	2,220.00	1,050.00											-
IRWD													-
Golden State Water Company													-
City of Huntington Beach													-
Laguna Beach CWD													-
Metropolitan Water District	28,091.13		25,193.39	87,250.95	24,411.51								164,946.98
Mission RCD		20,060.11	18,627.78	13,404.64	2,770.71								54,863.24
Multi Family HET Direct			4,800.00		75,975.00	100,275.00							181,050.00
Pollard Water		44,516.38			3,045.00								47,561.38
Recycled Water On Site Retrofit program			11,099.50	1,384.50									12,484.00
South Coast Water District					18,800.00								18,800.00
Spray to Drip program	690.45	4,310.08	5,308.76	1,129.60	1,320.58	413.25							13,172.72
SMWD	34,905.00												34,905.00
Turf Removal	32,139.00	58,464.60	177,399.11	117,228.82	337,478.95	30,263.28							752,973.76
Water Savings Incentive Program													-
<b>Miscellaneous Expenses</b>													-
Interest Expense													-
Salary & Benefit			5,563.51	1,700.00	1,785.00								9,048.51
<b>Total Expenditures</b>	\$ 98,045.58	\$ 128,401.17	\$ 249,792.05	\$ 234,058.51	\$ 466,316.75	\$ 136,101.53	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,312,715.59
<b>Cash - Ending Balance</b>	\$ 273,554.92	\$ 407,387.74	\$ 170,892.71	\$ 70,974.64	\$ (267,020.46)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	\$ (230,401.04)	

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**COMBINED FINANCIAL STATEMENTS**  
**AND**  
**BUDGET COMPARATIVE**  
**JULY 1, 2018 THRU NOVEMBER 30, 2018**



**Municipal Water District of Orange County  
Combined Balance Sheet  
As of November 30, 2018**

<b><u>ASSETS</u></b>	<b>Amount</b>
Cash in Bank	99,954.03
Investments	16,756,737.55
Accounts Receivable	31,873,508.56
Accounts Receivable - Other	223,441.16
Accrued Interest Receivable	116,543.85
Prepays/Deposits	354,797.03
Leasehold Improvements	3,735,829.68
Furniture, Fixtures & Equipment	563,307.34
Less: Accum Depreciation	<u>(2,961,395.23)</u>
<b>TOTAL ASSETS</b>	<b><u><u>\$50,762,723.97</u></u></b>
 <b><u>LIABILITIES AND FUND BALANCES</u></b>	
<b>Liabilities</b>	
Accounts Payable	32,321,151.90
Accounts Payable - Other	390.85
Accrued Salaries and Benefits Payable	415,584.35
Other Liabilities	261,117.70
Unearned Revenue	<u>954,311.68</u>
Total Liabilities	<b><u>33,952,556.48</u></b>
 <b>Fund Balances</b>	
Restricted Fund Balances	
Water Fund - T2C	<u>991,903.78</u>
Total Restricted Fund Balances	<b><u>991,903.78</u></b>
Unrestricted Fund Balances	
Designated Reserves	
General Operations	3,341,910.36
Grant & Project Cash Flow	1,500,000.00
Election Expense	608,000.00
Building Repair	385,407.45
OPEB	<u>297,147.00</u>
Total Designated Reserves	<b><u>6,132,464.81</u></b>
GENERAL FUND	3,597,158.80
WEROC Capital	25,138.00
WEROC	<u>273,656.70</u>
Total Unrestricted Fund Balances	<b><u>10,028,418.31</u></b>
Excess Revenue over Expenditures	
Operating Fund	6,110,281.68
Other Funds	<u>(320,436.28)</u>
Total Fund Balance	<b><u>16,810,167.49</u></b>
<b>TOTAL LIABILITIES AND FUND BALANCES</b>	<b><u><u>\$50,762,723.97</u></u></b>

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July thru November 2018**

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<b><u>REVENUES</u></b>						
Retail Connection Charge	0.00	7,697,005.75	7,697,006.00	100.00%	0.00	0.25
Ground Water Customer Charge	<u>0.00</u>	<u>499,012.00</u>	<u>499,012.00</u>	<u>100.00%</u>	<u>0.00</u>	<u>0.00</u>
Water rate revenues	0.00	8,196,017.75	8,196,018.00	100.00%	0.00	0.25
Interest Revenue	<u>45,679.01</u>	<u>233,139.95</u>	<u>390,000.00</u>	<u>59.78%</u>	<u>0.00</u>	<u>156,860.05</u>
Subtotal	<u>45,679.01</u>	<u>8,429,157.70</u>	<u>8,586,018.00</u>	<u>98.17%</u>	<u>0.00</u>	<u>156,860.30</u>
Choice Programs	575.40	1,084,394.86	1,174,750.00	92.31%	0.00	90,355.14
Miscellaneous Income	722.24	3,210.07	3,000.00	107.00%	0.00	(210.07)
School Contracts	5,260.80	30,475.65	102,031.00	29.87%	0.00	71,555.35
Gain on Sale of Investments	0.00	3.61	0.00		0.00	(3.61)
Transfer-In From Reserve	<u>0.00</u>	<u>0.00</u>	<u>5,276.00</u>	<u>0.00%</u>	<u>0.00</u>	<u>5,276.00</u>
Subtotal	<u>6,558.44</u>	<u>1,118,084.19</u>	<u>1,285,057.00</u>	<u>87.01%</u>	<u>0.00</u>	<u>166,972.81</u>
<b>TOTAL REVENUES</b>	<u>52,237.45</u>	<u>9,547,241.89</u>	<u>9,871,075.00</u>	<u>96.72%</u>	<u>0.00</u>	<u>323,833.11</u>

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July thru November 2018**

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<b><u>EXPENSES</u></b>						
Salaries & Wages	295,164.34	1,460,589.50	3,522,982.00	41.46%	0.00	2,062,392.50
Salaries & Wages - Grant Recovery	0.00	(3,837.94)	(6,300.00)	60.92%	0.00	(2,462.06)
Salaries & Wages - Recovery	(1,499.40)	(3,641.40)	0.00	0.00%	0.00	3,641.40
Director's Compensation	14,552.51	78,405.36	255,360.00	30.70%	0.00	176,954.64
MWD Representation	8,909.70	50,785.29	145,920.00	34.80%	0.00	95,134.71
Employee Benefits	84,827.61	431,484.78	1,108,564.00	38.92%	0.00	677,079.22
OPEB Annual Contribution	0.00	207,000.00	207,000.00	100.00%	0.00	0.00
Employee Benefits - Grant Recovery	0.00	(875.57)	0.00	0.00%	0.00	875.57
Employee Benefits - Recovery	(285.60)	(693.60)	0.00	0.00%	0.00	693.60
Director's Benefits	7,449.33	36,837.40	94,767.00	38.87%	0.00	57,929.60
Health Insurance for Retirees	4,036.70	23,554.94	70,519.00	33.40%	0.00	46,964.06
Training Expense	79.99	1,940.78	25,000.00	7.76%	(29.99)	23,089.21
Tuition Reimbursement	0.00	0.00	5,000.00	0.00%	0.00	5,000.00
Temporary Help Expense	0.00	0.00	5,000.00	0.00%	0.00	5,000.00
Personnel Expenses	413,235.18	2,281,549.54	5,433,812.00	41.99%	(29.99)	3,152,292.45
Engineering Expense	24,842.50	178,028.70	330,000.00	53.95%	146,399.70	5,571.60
Legal Expense	10,186.98	71,792.57	255,000.00	28.15%	183,207.43	0.00
Audit Expense	380.00	19,380.00	29,000.00	66.83%	0.00	9,620.00
Professional Services	71,182.65	351,527.82	1,430,758.00	24.57%	559,250.43	519,979.75
Professional Fees	106,592.13	620,729.09	2,044,758.00	30.36%	888,857.56	535,171.35
Conference-Staff	1,290.00	9,887.00	42,880.00	23.06%	(1,290.00)	34,283.00
Conference-Directors	290.81	5,555.81	24,930.00	22.29%	0.00	19,374.19
Travel & Accom.-Staff	5,381.81	14,270.42	99,600.00	14.33%	(4,266.63)	89,596.21
Travel & Accom.-Directors	3,134.07	8,905.13	51,750.00	17.21%	0.00	42,844.87
Travel & Conference	10,096.69	38,618.36	219,160.00	17.62%	(5,556.63)	186,098.27
Membership/Sponsorship	28,652.81	115,193.17	141,662.00	81.32%	(79.81)	26,548.64
CDR Support	0.00	23,522.14	47,044.00	50.00%	23,522.12	(0.26)
Dues & Memberships	28,652.81	138,715.31	188,706.00	73.51%	23,442.31	26,548.38
Business Expense	595.61	1,438.40	5,600.00	25.69%	(136.84)	4,298.44
Maintenance Office	20,318.47	42,302.82	132,796.00	31.86%	86,992.34	3,500.84
Building Repair & Maintenance	1,299.75	4,392.96	20,000.00	21.96%	15,607.04	0.00
Storage Rental & Equipment Lease	209.70	1,046.40	3,460.00	30.24%	1,413.60	1,000.00
Office Supplies	1,503.01	11,047.32	36,000.00	30.69%	1,901.16	23,051.52
Postage/Mail Delivery	941.80	3,008.77	9,000.00	33.43%	2,843.99	3,147.24
Subscriptions & Books	99.99	375.65	1,500.00	25.04%	(99.99)	1,224.34
Reproduction Expense	2,099.50	5,284.45	33,073.00	15.98%	1,302.21	26,486.34
Maintenance-Computers	0.00	2,442.19	8,000.00	30.53%	1,332.76	4,225.05
Software Purchase	1,995.00	23,574.70	45,861.00	51.40%	(1,125.80)	23,412.10
Software Support	1,483.26	22,874.31	51,934.00	44.04%	1,584.35	27,475.34
Computers and Equipment	0.00	9,041.24	11,850.00	76.30%	0.00	2,808.76
Automotive Expense	1,706.94	8,123.54	17,262.00	47.06%	0.00	9,138.46
Toll Road Charges	147.68	397.88	1,000.00	39.79%	0.00	602.12
Insurance Expense	8,787.18	46,016.37	138,500.00	33.22%	0.00	92,483.63
Utilities - Telephone	2,015.33	9,181.16	20,178.00	45.50%	901.38	10,095.46
Bank Fees	(237.51)	4,079.87	21,225.00	19.22%	0.00	17,145.13
Miscellaneous Expense	7,010.81	35,109.67	119,205.00	29.45%	(2,539.70)	86,635.03
MWDOC's Contrb. to WEROC	15,948.33	79,741.69	216,868.00	36.77%	0.00	137,126.31
Depreciation Expense	2,822.34	14,111.68	0.00	0.00%	0.00	(14,111.68)
Other Expenses	68,747.19	323,591.07	893,312.00	36.22%	109,976.50	459,744.43
Election Expense	0.00	0.00	304,000.00	0.00%	0.00	304,000.00
Building Expense	5,549.00	20,242.41	531,827.00	3.81%	32,073.00	479,511.59
Capital Acquisition	0.00	13,514.43	255,500.00	5.29%	0.00	241,985.57
<b>TOTAL EXPENSES</b>	<b>632,873.00</b>	<b>3,436,960.21</b>	<b>9,871,075.00</b>	<b>34.82%</b>	<b>1,048,762.75</b>	<b>5,385,352.04</b>
<b>NET INCOME (LOSS)</b>	<b>(580,635.55)</b>	<b>6,110,281.68</b>	<b>0.00</b>			

**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**Water Fund**  
**From July thru November 2018**

	<b>Month to Date</b>	<b>Year to Date</b>	<b>Annual Budget</b>	<b>% Used</b>	<b>Budget Remaining</b>
<b><u>WATER REVENUES</u></b>					
Water Sales	14,503,208.00	87,336,669.90	188,976,940.00	46.22%	101,640,270.10
Readiness to Serve Charge	903,260.48	4,516,302.40	10,902,178.00	41.43%	6,385,875.60
Capacity Charge CCF	321,247.50	1,606,237.50	3,854,976.00	41.67%	2,248,738.50
SCP/SAC Pipeline Surcharge	30,744.65	162,186.24	365,000.00	44.43%	202,813.76
Interest	<u>1,680.47</u>	<u>8,001.25</u>	<u>13,000.00</u>	<u>61.55%</u>	<u>4,998.75</u>
<b>TOTAL WATER REVENUES</b>	<u>15,760,141.10</u>	<u>93,629,397.29</u>	<u>204,112,094.00</u>	<u>45.87%</u>	<u>110,482,696.71</u>
<b><u>WATER PURCHASES</u></b>					
Water Sales	14,503,208.00	87,336,669.90	188,976,940.00	46.22%	101,640,270.10
Readiness to Serve Charge	903,260.48	4,516,302.40	10,902,178.00	41.43%	6,385,875.60
Capacity Charge CCF	321,247.50	1,606,237.50	3,854,976.00	41.67%	2,248,738.50
SCP/SAC Pipeline Surcharge	<u>30,744.65</u>	<u>162,186.24</u>	<u>365,000.00</u>	<u>44.43%</u>	<u>202,813.76</u>
<b>TOTAL WATER PURCHASES</b>	<u>15,758,460.63</u>	<u>93,621,396.04</u>	<u>204,099,094.00</u>	<u>45.87%</u>	<u>110,477,697.96</u>
<b>EXCESS OF REVENUE OVER EXPENDITURES</b>	<u><u>1,680.47</u></u>	<u><u>8,001.25</u></u>	<u><u>13,000.00</u></u>		

**Municipal Water District of Orange County**  
**WUE Revenues and Expenditures (Actuals vs Budget)**  
**From July thru November 2018**

	Year to Date Actual	Annual Budget	% Used
<b>Spray To Drip Conversion</b>			
Revenues	13,518.34	128,540.00	10.52%
Expenses	<u>14,870.06</u>	<u>128,540.00</u>	11.57%
Excess of Revenues over Expenditures	(1,351.72)	0.00	
<b>Member Agency Administered Passthru</b>			
Revenues	199,850.00	100,000.00	199.85%
Expenses	<u>199,850.00</u>	<u>100,000.00</u>	199.85%
Excess of Revenues over Expenditures	0.00	0.00	
<b>ULFT Rebate Program</b>			
Revenues	8,555.54	43,500.00	19.67%
Expenses	<u>8,555.54</u>	<u>43,500.00</u>	19.67%
Excess of Revenues over Expenditures	0.00	0.00	
<b>HECW Rebate Program</b>			
Revenues	103,467.54	425,000.00	24.35%
Expenses	<u>103,501.75</u>	<u>425,000.00</u>	24.35%
Excess of Revenues over Expenditures	(34.21)	0.00	
<b>CII Rebate Program</b>			
Revenues	109,230.00	462,500.00	23.62%
Expenses	<u>109,230.00</u>	<u>462,500.00</u>	23.62%
Excess of Revenues over Expenditures	0.00	0.00	
<b>Turf Removal Program</b>			
Revenues	303,311.33	1,345,000.00	22.55%
Expenses	<u>738,521.01</u>	<u>1,345,000.00</u>	54.91%
Excess of Revenues over Expenditures	(435,209.68)	0.00	
<b>Comprehensive Landscape (CLWUE)</b>			
Revenues	57,522.43	366,840.00	15.68%
Expenses	<u>77,905.18</u>	<u>366,840.00</u>	21.24%
Excess of Revenues over Expenditures	(20,382.75)	0.00	
<b>Large Landscape Survey Program</b>			
Revenues	899.76	64,000.00	1.41%
Expenses	<u>8,824.69</u>	<u>64,000.00</u>	13.79%
Excess of Revenues over Expenditures	(7,924.93)	0.00	
<b>WSIP - Industrial Program</b>			
Revenues	0.00	36,755.00	0.00%
Expenses	<u>0.00</u>	<u>36,755.00</u>	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
<b>WUE Projects</b>			
Revenues	796,354.94	2,972,135.00	26.79%
Expenses	<u>1,261,258.23</u>	<u>2,972,135.00</u>	42.44%
Excess of Revenues over Expenditures	(464,903.29)	0.00	
<b>WEROC</b>			
Revenues	271,121.69	489,160.00	55.43%
Expenses	<u>147,478.65</u>	<u>489,160.00</u>	30.15%
Excess of Revenues over Expenditures	123,643.04	0.00	



**CONSENT CALENDAR ITEM**  
January 16, 2019

**TO:** Board of Directors

**FROM:** Brett R. Barbre, President

**SUBJECT:** **STANDING COMMITTEE AND AD HOC COMMITTEE APPOINTMENTS FOR 2019; SCHEDULE OF COMMITTEE MEETING DATES FOR 2019**

**PRESIDENT'S RECOMMENDATION**

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It is recommended that the Board of Directors: (1) ratify the list of Standing Committee and Ad Hoc Committee Appointments as presented by the President of the Board; and (2) ratify Committee meeting dates/times for 2019.

**COMMITTEE RECOMMENDATION**

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Committee concurred with the President's recommendation.

**SUMMARY**

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In accordance with the MWDOC Administrative Code, the Board of Directors shall consider the appointment of members of its Standing Committees by the end of February of each year. It also provides the Board shall review and establish Special Committees as appropriate. Members shall be appointed to Standing and Special Committees by the President of the Board and ratified by the Board of Directors. The current Standing Committees of the Board of Directors are:

Administration & Finance Committee  
Planning & Operations Committee  
Public Affairs & Legislation Committee  
Executive Committee  
MWDOC/OCWD Joint Planning Committee

Attached is President Barbre's slate of nominations to MWDOC Standing and Ad Hoc Committees, along with proposed meeting dates for the upcoming year.

<b>Budgeted (Y/N): NA</b>	Budgeted amount: NA	Core ____	Choice ____
<b>Action item amount: NA</b>		Line item:	
<b>Fiscal Impact (explain if unbudgeted):</b>			

**2019**  
**STANDING COMMITTEE APPOINTMENTS**  
Municipal Water District of Orange County

<b>STANDING COMMITTEE</b>	<b>MEMBERS</b>	<b>COMMITTEE DATE</b> (Attached is List of Exact Dates for 2016)
<b>Executive Committee</b> (President, Vice President and Immediate Past President)	B. Barbre, Chair J. Finnegan W. Osborne	Thursday following Regular Board meeting 8:30 a.m.
<b>Administration &amp; Finance Committee</b>	J. Thomas, Chair J. Finnegan W. Osborne	2 <sup>nd</sup> Wednesday 8:30 a.m.
<b>Planning &amp; Operations Committee</b>	M. Yoo Schneider, Chair L. Dick S. Tamaribuchi	1 <sup>st</sup> Monday 8:30 a.m.
<b>Public Affairs &amp; Legislation Committee</b>	L. Dick, Chair J. Thomas W. Osborne	3 <sup>rd</sup> Monday 8:30 a.m.
<b>MWDOC/OCWD Joint Planning Committee</b>	B. Barbre, Chair L. Dick W. Osborne	4 <sup>th</sup> Wednesday 8:30 a.m. (quarterly)
<b>AD HOC COMMITTEES</b>	<b>Members</b>	<b>Staff Lead</b>
<b>Ad Hoc Committee on Water Policy Forum</b>	B. Barbre L. Dick J. Thomas	D. Micalizzi
<b>Ad Hoc Committee on Non-Basin Member Agency Relations</b>	J. Thomas M. Yoo Schneider S. Tamaribuchi	R. Hunter
<b>Ad Hoc Committee on Basin Member Agency Relations</b>	B. Barbre L. Dick W. Osborne	R. Hunter
<b>Ad Hoc Committee Re Water Summit</b>	J. Thomas M. Yoo Schneider B. Barbre	D. Micalizzi
<b>Ad Hoc Committee on MWDOC/OCWD Building Issues</b>	J. Finnegan S. Tamaribuchi	C. Harris
<b>Ad Hoc Committee on Desalination</b>	B. Barbre L. Dick J. Thomas	R. Hunter K. Seckel
<b>Ad Hoc Committee re Strand Ranch Project</b>	B. Barbre S. Tamaribuchi J. Thomas	

**STANDING COMMITTEE DATES FOR 2019  
(Through January 2020)**

**Planning & Operations Committee**

*This Committee generally meets the first Monday of each month at 8:30 a.m. An \* indicates those months requiring a change in the meeting date and/or time (due to holiday or conflict)*

Monday	February 4, 2019	8:30 a.m.
Monday	March 4, 2019	8:30 a.m.
Monday	April 1, 2019	8:30 a.m.
Monday	May 6, 2019	8:30 a.m.
Monday	June 3, 2019	8:30 a.m.
Monday	July 1, 2019	8:30 a.m.
Monday	August 5, 2019	8:30 a.m.
*Tuesday	September 3, 2019	8:30 a.m. (Meets on Tuesday due to holiday)
Monday	October 14, 2019	8:30 a.m. (2 <sup>nd</sup> Monday due to conflict with MET)
*Tuesday	November 12, 2019	8:30 a.m. (Change due to MET mtgs and holiday)
Monday	December 2, 2019	8:30 a.m.
Monday	January 6, 2020	8:30 a.m.

**Administration & Finance Committee**

*This Committee generally meets the second Wednesday of each month at 8:30 a.m. An \* indicates those months requiring a change in the meeting date (due to holiday or conflict)*

Wednesday	January 9, 2019	8:30 a.m.
Wednesday	February 13, 2019	8:30 a.m.
Wednesday	March 13, 2019	8:30 a.m.
Wednesday	April 10, 2019	8:30 a.m.
Wednesday	May 8, 2019	8:30 a.m.
Wednesday	June 12, 2019	8:30 a.m.
Wednesday	July 10, 2019	8:30 a.m.
Wednesday	August 14, 2019	8:30 a.m.
Wednesday	September 11, 2019	8:30 a.m.
Wednesday	October 9, 2019	8:30 a.m.
Wednesday	November 13, 2019	8:30 a.m.
Wednesday	December 11, 2019	8:30 a.m.
Wednesday	January 9, 2020	8:30 a.m.

**Public Affairs & Legislation Committee**

*This Committee generally meets the third Monday of each month at 8:30 a.m. An \* indicates those months requiring a change in the meeting date (due to holiday or conflict)*

Monday	January 21, 2019	8:30 a.m.
*Tuesday	February 19, 2019	8:30 a.m. (Tuesday due to holiday)
Monday	March 18, 2019	8:30 a.m.
Monday	April 15, 2019	8:30 a.m.
Monday	May 20, 2019	8:30 a.m.

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



Monday	June 17, 2019	8:30 a.m.
Monday	July 15, 2019	8:30 a.m.
*Monday	August 12, 2019	8:30 a.m. (Second Monday due to conflict with MET)
Monday	September 16, 2019	8:30 a.m.
Monday	October 21, 2019	8:30 a.m.
Monday	November 18, 2019	8:30 a.m.
Monday	December 16, 2019	8:30 a.m.
Monday	January 20, 2020	8:30 a.m.

### **Executive Committee**

*This Committee generally meets the Thursday following the Regular Board Meeting at 8:30 a.m.; the Regular Board meeting is held the third Wednesday of each month at 8:30 a.m. An \* indicates those months requiring a change in the meeting date (due to holiday or conflict)*

Thursday	January 17, 2019	8:30 a.m.
Thursday	February 21, 2019	8:30 a.m.
Thursday	March 21, 2019	8:30 a.m.
Thursday	April 18, 2019	8:30 a.m.
Thursday	May 16, 2019	8:30 a.m.
Thursday	June 20, 2019	8:30 a.m.
Thursday	July 18, 2019	8:30 a.m.
Thursday	August 22, 2018	8:30 a.m.
Thursday	September 19, 2019	8:30 a.m.
Thursday	October 17, 2019	8:30 a.m.
Thursday	November 21, 2019	8:30 a.m.
Thursday	December 19, 2019	8:30 a.m.
Thursday	January 16, 2020	8:30 a.m.

### **MWDOC/OCWD Joint Planning Committee Meetings**

*This Committee generally meets the fourth Wednesday of each month at 8:30 a.m. An \* indicates those months requiring a change in the meeting date (due to holiday or conflict)*

Wednesday	January 23, 2019	8:30 a.m.
Wednesday	April 24, 2019	8:30 a.m.
Wednesday	July 24, 2019	8:30 a.m.
Wednesday	October 23, 2019	8:30 a.m.

### **MWDOC Elected Officials Forums**

*These meetings are held twice a year (April/November); historically on the first Thursday of the month*

Wednesday	April 4, 2019	6:00 p.m.
Thursday	November 7, 2019	6:00 p.m.

### **Workshop Board Meeting Dates**

*These meetings are held the first Wednesday of each month; if the first Wednesday falls on a holiday, the Board shall determine the date*

Wednesday	January 2, 2019	8:30 a.m.
Wednesday,	February 6, 2019	8:30 a.m.

Wednesday	March 6, 2019	8:30 a.m.
Wednesday	April 3, 2019	8:30 a.m.
Wednesday	May 1, 2019	8:30 a.m.
Wednesday	June 5, 2019	8:30 a.m.
Wednesday	July 3, 2019	8:30 a.m.
Wednesday	August 7, 2019	8:30 a.m.
Wednesday	September 4, 2019	8:30 a.m.
Wednesday	October 2, 2019	8:30 a.m.
Wednesday	November 6, 2019	8:30 a.m.
Wednesday	December 4, 2019	8:30 a.m.

### **Regular Board Meeting Dates**

*These meetings are held the third Wednesday of each month; if the third Wednesday falls on a holiday, the Board shall determine the date*

Wednesday	January 16, 2019	8:30 a.m.
Wednesday,	February 20, 2019	8:30 a.m.
Wednesday	March 20, 2019	8:30 a.m.
Wednesday	April 17, 2019	8:30 a.m.
Wednesday	May 15, 2019	8:30 a.m.
Wednesday	June 19, 2019	8:30 a.m.
Wednesday	July 17, 2019	8:30 a.m.
Wednesday	August 21, 2019	8:30 a.m.
Wednesday	September 18, 2019	8:30 a.m.
Wednesday	October 16, 2019	8:30 a.m.
Wednesday	November 20, 2019	8:30 a.m.
Wednesday	December 18, 2019	8:30 a.m.
Wednesday	January 15, 2020	8:30 a.m.



**CONSENT CALENDAR ITEM**

January 16, 2019

**TO:** Board of Directors

**FROM:** **Administration & Finance Committee**  
(Directors Thomas, Dick, Finnegan)

Robert J. Hunter, General Manager

**SUBJECT: PRUDENT COMPANION POLICY**

**STAFF RECOMMENDATION**

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It is recommended that the Board of Directors: Review, discuss, and consider the existing Prudent Companion Policy and decide whether any changes should be made including whether to incorporate the policy into the MWDOC Administrative Code.

**COMMITTEE RECOMMENDATION**

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The Committee recommended the Board approve Option 5 (Eliminate the Prudent Companion Policy). The General Manager was directed to prepare a written statement as to how this new practice will be implemented so as to plan and coordinate travel and meetings between Directors, and the General Manager and staff, and report the outcomes of said meetings.

**REPORT**

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At the August 16, 2018 Executive Committee meeting, President Barbre requested that the Board consider adopting and adding to the Administrative Code the following Prudent Companion Policy:

**Prudent Companion Policy**

§2301.5 is added to the MWDOC Administrative Code to read:

*“For any travel out of state, or any legislative trips to Sacramento or Washington, D.C. paid for by MWDOC, Board and Staff are required to travel with a “prudent companion”, which may be either a Board Member or Staff member. For legislative trips, the contract lobbyist in Sacramento or Washington, D.C. shall suffice as the “prudent companion” for purposes of compliance with this section.”*

Budgeted (Y/N): N	Budgeted amount: TBD	Core <u>X</u>	Choice <u>  </u>
Action item amount: TBD		Line item:	
Fiscal Impact (explain if unbudgeted): TBD			

The language was considered at the September 12, 2018 Administration & Finance (A&F) Committee Meeting with the Committee referring the item to the September 19, 2018 Board Meeting for further discussion. At that Board Meeting, President Barbre suggested that the item return to A&F for discussion. The motion to refer back to committee passed 7-0. The item was agendaized for the October 10, 2018 A&F Committee Meeting but was held for one month by Chair Thomas as Director Dick would be absent. The item was agendaized as an action item for the November 14, 2018 A&F Committee but was then held for a month by Chair Thomas as President Barbre would be absent. The item was agendaized for the December 12, 2018 A&F Committee Meeting but was held for one month as General Manager Hunter was absent. The item is now agendaized as an action item for the January 9, 2019 A&F Committee Meeting.

### **Current Practice**

The Prudent Companion Policy is currently applied to travel to Washington, DC when MWDOC or Metropolitan business will be discussed with elected officials or staff. It is not applied for attendance at conferences in DC if no elected officials/staff discussions occur. It is not applied if Metropolitan is paying for the travel and Metropolitan business is the subject of discussion. The current practice requires that a Director be accompanied by either another MWDOC Director or Staff Member. A lobbyist is not considered a Prudent Companion. It has generally not been applied to any travel destination other than Washington, DC. While unwritten, this has been the practice for over ten years.

Two justifications have been given for the Prudent Companion Policy:

1. Washington, DC interactions are different in that they are heavily dependent on forming and maintaining relationships. Officials and staff tend to be of long tenure and an agency relationship developed by repeated visits over a protracted period of time is deemed critical to success. The relationship needs to be with MWDOC Directors and Staff rather than hired lobbyists. Two MWDOC individuals are necessary to maintain continuity when one eventually ends their relationship with MWDOC. In comparison, term limits have reduced the tenure of Sacramento elected officials and salary limitations have done the same to staff. This has increased the role and value of lobbyists in Sacramento.
2. Because different people can hear different things and reach different conclusions from the same meeting, the MWDOC Board concluded that there was value in having two MWDOC individuals in each DC meeting to corroborate each person's understanding.

### **Policy Changes under Director Barbre's Proposed Language**

- A. A decade old unwritten policy would become part of the Administrative Code
- B. The policy would be significantly expanded
  - a. Instead of applying to only Washington, DC, the new policy would apply to any out of state travel and any legislative travel to Washington, DC or Sacramento, CA
  - b. Instead of applying only to discussions with elected officials or staff, the new policy would apply to all out of state travel (including conferences) and legislative trips to DC and Sacramento
  - c. The policy would be expanded from covering Directors to covering Directors and Staff

- C. The basis for policy implementation would be shifted from “doing MWDOC business” to “paid for by MWDOC” and thereby significantly changing the purpose
- D. The new policy would reverse the prohibition on using contract lobbyists as prudent companions

In short, the proposed language reverses the intent and application of the current practice and greatly expands the policy and associated costs

### **Board Options**

There are a wide range of options that are open to the Committee and Board of Directors to consider and adopt:

#### **Option 1 – No Action**

The Directors can continue the existing policy as it has been implemented for over a decade.

#### **Option 2 – Formalize the Existing Policy**

The Directors can adopt the Existing Prudent Companion Policy into MWDOC’s Administrative Code. Possible Code language is:

*“For any legislative trips to Washington, D.C. during which MWDOC business will be discussed or transacted with elected officials, staff or other representatives, Board Directors are required to travel with a “prudent companion”, which may be either a MWDOC Board Member or Staff member. A contract lobbyist shall not suffice as the “prudent companion” for purposes of compliance with this section.”*

#### **Option 3- Adopt the Policy Proposed by Director Barbre**

The Directors can adopt the policy language proposed by Director Barbre into MWDOC’s Administrative Code as presented above.

#### **Option 4 – Adopt a Modified Prudent Companion Policy**

As Director Barbre’s proposed policy is a significant modification of the existing unwritten policy but components of the existing policy may be deemed inadequate or undesirable, the Board could formally adopt a policy into the Administrative Code that is different from both the existing and the alternate policies.

#### **Option 5 – Eliminate the Prudent Companion Policy**

The Directors can abolish the existing policy and not implement any replacement.



**ACTION ITEM**  
January 16, 2018

**TO:** Board of Directors

**FROM:** Brett R. Barbre, President

**SUBJECT:** ASSOCIATION AND COMMISSION APPOINTMENTS FOR 2019

**PRESIDENT'S RECOMMENDATION**

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It is recommended that the Board of Directors:

1. Ratify the appointment of Representatives and Alternates to Associations as presented by the President of the Board; and
2. Adopt proposed Resolution approving the appointment of one Representative and one Alternate to the Santiago Aqueduct Commission (SAC), for submission to SAC.

**COMMITTEE RECOMMENDATION**

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The Committee concurred with President Barbre's recommendations, however suggested that the representative on the ACWA Federal Affairs Committee change to MWDOC MET Director Linda Ackerman, with Director Barbre as alternate, and added ACWA's Business Development Committee to the list (of which MWDOC MET Director Larry McKenney is Chair).

**DETAILED REPORT**

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In accordance with Board policy, the appointment of MWDOC Board Representatives to outside associations are to be considered by the end of February of each year. The policy provides that appointments shall be ratified by the Board of Directors, as presented by the President of the Board.

Attached are President Barbre's recommendations for Association and Commission appointments for 2019.

<b>Budgeted (Y/N):</b> N/A	Budgeted amount:	Core ____	Choice ____
<b>Action item amount:</b>	Line item:		
<b>Fiscal Impact (explain if unbudgeted):</b>			

<b>2019</b> <b>AGENCY REPRESENTATIVES' APPOINTMENTS</b> <b>Municipal Water District of Orange County</b>		
<b>Association/Commission</b>	<b>Members</b>	<b>Normal Meeting Times</b>
<b>Santiago Aqueduct Commission</b>	Rep.: J. Thomas Alt: K. Seckel	March, June, September, December; 3 <sup>rd</sup> Thurs. at 8:30 a.m.
<b>Water Advisory Committee of Orange County (WACO) Planning Committee</b>  <i>Staff Support: H. Baez</i>	Rep: J. Finnegan L. Dick	3 <sup>rd</sup> Tuesday 7:30 am
<b>Independent Special Districts of OC (ISDOC)</b>  <i>Staff Support: H. Baez</i>	Rep: J. Finnegan L. Dick	1 <sup>st</sup> Tues 7:30 am
<b>NWRA Municipal Caucus</b>  <i>Staff Support: H. Baez</i>	Rep: L. Ackerman  Alt: B. Barbre	
<b>Southern California Water Committee</b>  <i>Staff Support: H. Baez/R. Hunter</i>	Reps: M. Yoo Schneider S. Tamaribuchi L. Dick	
<b>Orange County Business Council</b> <a href="http://www.ocbc.org">www.ocbc.org</a> Legislative  <i>Staff Support: H. Baez</i>  Infrastructure  <i>Staff Support: H. Baez/R. Hunter</i>	Reps: B. Barbre L. Dick   Reps: L. Dick S. Tamaribuchi	1/4/19 9:30 am 2/1/19 9:30 am 3/1/19 9:30 am (the balance of meeting dates for 2019 have not been set)   1/8/18 7:30 am (the balance of meeting dates have not been set)
<b>California Special Districts Association</b>  <i>Staff Support: H. Baez</i>	Rep: J. Finnegan  Alt: L. Dick	

<b>Colorado River Water Users Association</b> <i>Staff Support: H. DeLaTorre</i>	MWDOC Board of Directors	Annually in Dec.
<b>Center for Demographic Research Oversight Committee</b> <i>Staff Support: K. Seckel</i>	Rep: J. Finnegan Alt: B. Barbre	
<b>ACWA Joint Powers Insurance Authority</b> <i>Staff Support: C. Harris</i>	Rep: J. Finnegan Alt: L. Dick	
<b>ACWA Federal Affairs Committee</b> <i>Staff Support: H. Baez</i>	Rep: L. Ackerman Alt: B. Barbre	
<b>ACWA Local Government Committee</b> <i>Staff Support: H. Baez</i>	Reps: L. McKenney Alt: S. Tamaribuchi	
<b>ACWA Business Development Committee</b> <i>Staff Support: H. Baez</i>	Rep: L. McKenney	
<b>ACWA Region 10</b> <i>Staff Support: H. Baez</i>	All Directors Eligible to Attend	
<b>Orange County Council of Governments</b> <i>Staff Support: H. Baez</i>	Rep: J. Finnegan Alt: M. Yoo Schneider	4 <sup>th</sup> Thurs. at 10:30 am (dates have not been finalized)
<b>Orange County Operational Area Executive Board</b> <i>Representative Appointed by ISDOC</i> <i>Staff Support: K. Hubbard</i>	Rep: K. Hubbard	Quarterly, 2:45 pm (normally Wed)
<b>CALDesal</b> <i>Staff Support: K. Seckel</i>	Rep: L. Dick W. Osborne M. Yoo Schneider	



<b>South Orange County Economic Coalition</b>  <i>Staff Support: H. Baez</i>	Rep: J. Thomas  Alt: M.Yoo Schneider	
<b>South Orange County Watershed Management Area Executive Committee</b>  <i>Staff Support: K. Seckel, C. Busslinger</i>	Rep: M. Yoo Schneider  Alt: J. Thomas	
<b>Association of California Cities; Orange County</b> <i>Staff Support: H. Baez</i>	Rep: L. Dick  Alt: B. Barbre	

RESOLUTION NO. \_\_\_\_  
**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

**RE: DESIGNATION OF MEMBER AND**  
**ALTERNATES TO SANTIAGO AQUEDUCT COMMISSION**

**2019**

WHEREAS, the Santiago Aqueduct Commission (SAC) was formed to manage and operate the Santiago Aqueduct system; and

WHEREAS, the SAC consists of six (6) members, one member each of the governing bodies from El Toro Water District, Irvine Ranch Water District, Trabuco Canyon Water District, Santa Margarita Water District, Moulton Niguel Water District and Municipal Water District of Orange County (MWDOC); and

WHEREAS, it is understood that MWDOC represents itself and East Orange County Water District, County of Orange and the Irvine Company; and

WHEREAS, under the provisions of the Santiago Aqueduct Commission Joint Powers Agreement, MWDOC has the right to designate one member to the SAC and a first and second alternate to serve in the absence of the regular member.

NOW, THEREFORE, BE IT RESOLVED that MWDOC hereby designates Jeffery M. Thomas as the member, and Karl Seckel as the alternate to the Santiago Aqueduct Commission, to assume their positions upon taking the oath of office.

Said Resolution was adopted this \_\_\_\_ day of \_\_\_\_\_, 2019 by the following roll call vote.

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

I HEREBY CERTIFY the foregoing is a full, true and correct copy of Resolution No. \_\_\_\_ adopted by the Board of Directors of Municipal Water District of Orange County at its meeting held on \_\_\_\_\_.

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Maribeth Goldsby, Secretary  
Municipal Water District of Orange County



**ACTION ITEM**  
January 16, 2019

**TO:** Board of Directors

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

Robert Hunter, General Manager  
Staff Contact: J. Berg, Director of Water Use Efficiency

**SUBJECT:** **Continuation of Water Loss Control Technical Assistance Program**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to:

1. Extend the professional services contract with Water Systems Optimization, Inc. for two additional years in order to:
  - a. Provide Choice-funded one-on-one Technical Assistance to member agencies for water loss control program development as described below, and
  - b. Support the Orange County Water Loss Control Work Group and the development of recommendations for water loss standards setting as a Core-funded effort at an annual cost not to exceed \$55,000.
2. Authorize the General Manager to extend Choice-based Technical Assistance agreements with agencies for two additional years.

**COMMITTEE RECOMMENDATION**

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Committee will discuss this item on January 14, 2019 and make a recommendation to the Board.

**SUMMARY**

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In October 2015, the Board of Directors authorized implementation of a Water Loss Control Technical Assistance Program that included the establishment of a Core-funded Water Loss Control Work Group and Choice-funded one-on-one Technical Assistance from a consultant (Water Systems Optimization, Inc.) specializing in water loss control. The initial three-year

<b>Budgeted (Y/N): Yes</b>	Budgeted amount: \$50,000	Core <u>X</u>	Choice <u>  </u>
<b>Action item amount: \$55,000</b>		Line item: 35-7040	
<b>Fiscal Impact (explain if unbudgeted):</b> Budgeted funds total \$50,000 for Water Loss Control; an additional \$5,000 in budgeted funds will be reallocated from Landscape Education for a total authorization of \$55,000.			

authorization has concluded, and many agencies are well on their way to establishing cost effective water loss recovery programs. Several agencies would like to continue accessing technical assistance from Water Systems Optimization, Inc. (WSO) to continue to improve their understanding of cost effective water loss recovery opportunities.

## **DETAILED REPORT**

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Over the past three years, water agencies throughout Orange County have made exceptional progress in researching, evaluating, and implementing water loss control strategies to insure compliance with water loss control mandates contained in Senate Bill 555. These efforts set Orange County agencies apart from most other agencies in the state and positions them well to better understand water loss recovery opportunities and comply with evolving water loss mandates.

Staff is proposing to continue the Water Loss Control Technical Assistance Program (WLCTAP) for an additional two years. This will result in a five-year program utilizing the consultants originally approved by the Board in 2015. The WLCTAP includes one-on-one Technical Assistance and Water Loss Control Work Group support as follows:

### Technical Assistance

One-on-one Technical Assistance allows agencies to work directly with Water Systems Optimization, Inc. or meter accuracy testing companies on a variety of water loss control related topics. Over the past three years, twenty-two agencies have accessed Choice-based services totaling \$1,069,475. These agencies are identified in Table I, and the breakdown of the services is provided in Table II. Note that Irvine Ranch, Moulton Niguel, and Santa Margarita water districts are accessing technical assistance directly from WSO, and Golden State Water Company is accessing technical assistance through another consultant specializing in water loss control.

Many agencies would like to continue accessing technical assistance to continue to improve their understanding of cost effective water loss recovery opportunities. As a result, staff is proposing to extend the WSO, McCall's Meters, Inc., and Westerly Meter Service Company contracts for an additional two years to allow agencies to access technical assistance for a variety of services. These services continue to evolve as agencies continue to advance their water loss control understanding. These services are Choice-funded by agencies electing to access the services. MWDOC will continue to facilitate the following services from the contractors to participating agencies including:

- Volumetric production meter accuracy testing
- Billing data chain assessment
- Wholesale system mass balance/water audit
- Component Analysis of real and apparent Losses
- Meter population management
- District Metered Area Assessment
- Water loss control program design and assessment
- Reporting and next step recommendations
- Data management plan
- Customer meter accuracy testing

**Table I**  
**Agencies Accessing One-on-One Technical Assistance**

<ul style="list-style-type: none"> <li>• City of Anaheim</li> <li>• City of Brea</li> <li>• City of Buena Park</li> <li>• East Orange County Water District</li> <li>• El Toro Water District</li> <li>• City of Fountain Valley</li> <li>• City of Fullerton</li> <li>• City of Huntington Beach</li> <li>• City of La Habra</li> <li>• City of La Palma</li> <li>• Laguna Beach County Water District</li> </ul>	<ul style="list-style-type: none"> <li>• Mesa Water</li> <li>• City of Newport Beach</li> <li>• City of Orange</li> <li>• City of San Clemente</li> <li>• City of San Juan Capistrano</li> <li>• City of Santa Ana</li> <li>• City of Seal Beach</li> <li>• Serrano Water District</li> <li>• South Coast Water District</li> <li>• Trabuco Canyon Water District</li> <li>• Yorba Linda Water District</li> </ul>
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**Table II**  
**Type of Technical Assistance and Number of Agencies Accessing**

<b>Type of Technical Assistance</b>	<b>Number of Agencies Accessing</b>
<ul style="list-style-type: none"> <li>• Compile Validated Water Balances</li> </ul>	22 agencies
<ul style="list-style-type: none"> <li>• Conduct Component Analysis of Real and Apparent Losses</li> </ul>	15 agencies
<ul style="list-style-type: none"> <li>• Perform and Analyze Sales Meter Accuracy Testing</li> </ul>	10 agencies
<ul style="list-style-type: none"> <li>• Perform Distribution System Leak Detection</li> </ul>	5 agencies

Brief descriptions and fees for each of these services are provided in Exhibit A. Not knowing how many agencies will participate and what services they will access makes it difficult to estimate the total value of services that will be provided over the next two years.

Using an average of the first three years as a proxy, \$715,000 is a reasonable estimate for the next two years of Technical Assistance.

#### Water Loss Control Work Group

Staff is also proposing to extend the WSO contract for an additional two years to support the Orange County Water Loss Control Work Group as a Core-funded effort at an annual cost not to exceed \$55,000. The Work Group is a well-established forum for agencies to expand their water loss control knowledge by learning from WSO and each other through case studies and data collaboration, updates on evolving state mandates, and a united voice to inform evolving state mandates. Though this effort, WSO has been instrumental in helping staff and member agencies to understand, articulate our local experience, and formulate recommendations for consideration by the State Water Resources Control Board (State Board) staff responsible for recommending a volumetric water loss standard for consideration by the State Board by July 2020. Over the past three years, MWDOC has invested \$120,000 for WSO support of the Work Group and policy development.

Note that none of the proposed services to be provided by WSO will be duplicated in the Water Loss Control Shared Services Business Plan approved by the Board in December for implementation in Fiscal Year 2019-20. Rather, the Technical Assistance provided by WSO will be complementary to those services.

Staff recommends the Board of Directors authorize the General Manager to:

1. Extend the professional services contract with Water Systems Optimization, Inc. for two additional years in order to:
  - a. Provide Choice-funded one-on-one Technical Assistance to member agencies for water loss control program development as described below, and
  - b. Support the Orange County Water Loss Control Work Group and the development of recommendations for water loss standards setting as a Core-funded effort at an annual cost not to exceed \$55,000.
2. Authorize the General Manager to extend Choice-based Technical Assistance agreements with agencies for two additional years.

## Year IV & V- Water Loss Control Technical Assistance Tasks

TASKS 1	PROJECT ADMINISTRATION
<b>Project administration:</b> <i>Partner with WSO and the larger MWDOC group (Required)</i> <ul style="list-style-type: none"> <li>• Communication</li> <li>• Systems of data collection and management</li> <li>• Travel expenses</li> <li>• Invoicing</li> </ul>	
<b>\$1,672</b>	<i>Project administration</i>

TASK 2	WATER AUDIT TECHNICAL ASSISTANCE
<b>Task 2a: Water audit compilation:</b> <i>Estimate apparent and real water loss</i> <i>Assess data availability and quality</i> <ul style="list-style-type: none"> <li>• Water audit data collection and review</li> <li>• Raw billing data validation (study of completeness and consistency, pro-rating to reduce lag-time effects)</li> <li>• Water audit compilation</li> <li>• Water audit documentation in preparation for level 1 validation</li> </ul>	
<b>Task 2b: Water audit level 1 validation:</b> <i>Prepare an annual level 1 validated water audit submission to DWR</i> <i>Confirm the integrity of your water audit and accompanying submission narrative</i> <ul style="list-style-type: none"> <li>• Level 1 water audit validation</li> <li>• Composition of water audit validation documentation for submission to DWR for SB555 compliance</li> </ul>	
<b>Task 2c: Source/Production meter volumetric accuracy testing:</b> <i>Design and conduct a volumetric source meter accuracy test</i> <i>Establish a field-validated water-supplied baseline for the water audit</i> <i>Document test procedures for future meter accuracy investigation</i> <ul style="list-style-type: none"> <li>• Site visit and test design</li> <li>• Volumetric accuracy test with comparative meter or reservoir reference volume</li> <li>• Data chain assessment ("loop audit" or SCADA calibration), if relevant</li> <li>• Test results analysis</li> <li>• Test procedure documentation</li> </ul>	
<b>Task 2d: Billing data chain assessment:</b> <ul style="list-style-type: none"> <li>• Mapping of meter read collection and billing process</li> <li>• Comparison of raw data across billing data management platforms (read collection system, billing data system, and reporting system)</li> <li>• Identification of data transmission errors - misreads, zero reads, dropped reads, duplicated reads, etc</li> </ul>	



**Task 2e: Field pressure survey** - *budget depends on scope of effort and size of system (agencies should consult WSO to establish a budget).* Potential goals include:

- Average system pressure determination
  - Logging site selection
  - Pressure logger deployment
  - Pressure data analysis and visualization
  - Average system pressure calculation
  - Recommendations for potential targeted pressure reductions
- Pressure transient investigation
  - Logging site selection
  - High-frequency pressure logger deployment
  - Pressure data analysis and visualization
  - Transient analysis and explanation
  - Recommendations for transient mitigation
- DMA (district metered area) potential assessment
  - Identification of pressure zone boundaries and critical infrastructure
  - Study of zonal hydraulic isolation (communication of pressure changes across zone boundaries)
  - Establishment of zonal pressure average and pressure range (with elevation, diurnal patterns)
  - Recommendations for further study toward DMA installation and management

**Task 2f: Wholesale system mass balance/water audit:**

*Same as retail audit, no additional reporting budget necessary*

- Identification of wholesale system boundaries and mass balance data sources
- Compilation of a wholesale system mass balance in unique spreadsheet and in AWWA water audit software
- Documentation of the wholesale system water audit analysis and sources of uncertainty
- Inventory of wholesale system master meters, including meter installation conditions, make and type, and maintenance history

<b>\$3,500</b>	<i>Task 2a: Water audit compilation</i>
<b>\$2,500</b>	<i>Task 2b: Water audit level 1 validation</i>
<b>\$4,000</b> <i>per meter</i>	<i>Task 2c: Volumetric production meter accuracy test, per meter.</i> ( _____ meters to be tested X \$4,000/meter = \$ _____ )
<b>\$9,500</b>	<i>Task 2d: Billing data chain assessment</i>
<b>Variable</b>	<i>Task 2e: Field pressure survey (Requires custom cost estimate per agency depending on scope and size of system)</i>
<b>\$3,560</b>	<i>Task 2f: Wholesale system mass balance/water audit</i>

TASK 3 COMPONENT ANALYSIS OF REAL AND APPARENT LOSSES	
<p><b>Task 3a: Component analysis of apparent losses:</b>  <i>Assess customer meter inaccuracy</i>  <i>Value apparent losses</i>  <i>Design an apparent loss management strategy</i></p> <ul style="list-style-type: none"> <li>• Random and representative small customer meter sample design, if relevant</li> <li>• Prioritization of large customer meters for testing</li> <li>• Small and large customer meter testing, as appropriate</li> <li>• Test results analysis</li> <li>• Calculation and valuation of apparent losses due to customer meter inaccuracy</li> <li>• Recommendations for further study and customer meter management</li> </ul> <p><b>Task 3b: Component analysis of real losses:</b>  <i>Establish the distribution system's unique leakage profile</i>  <i>Determine cost-effective leakage management strategies for the short-, medium-, and long-term</i></p> <ul style="list-style-type: none"> <li>• Collection of leakage repair documentation</li> <li>• Evaluation of repair process documentation</li> <li>• Determination of unique leakage profile (background, unreported, and reported leakage)</li> <li>• Analysis of cost-effective intervention against leakage</li> <li>• Leak management program design</li> </ul>	
<b>\$7,600</b>	<i>Task 3a: Component analysis of <b>apparent losses</b> (meter testing budget in Task 6 also <b>required</b> if testing cannot be conducted in-house)</i>
<b>\$10,000</b>	<i>Task 3b: Component analysis of <b>real losses</b></i>

TASK 4 COMPREHENSIVE LEAK DETECTION	
<p><b>Task 4a: Leak detection:</b>  <i>Uncover and repair hidden leaks</i>  <i>Realize and document leakage savings</i></p> <ul style="list-style-type: none"> <li>• Leak detection survey planning and execution</li> <li>• Estimation of water savings realized through proactive leak detection and repair</li> </ul>	
<b>\$400 / mile</b>	<i>For miles 1-50</i>
<b>\$350 / mile</b>	<i>For miles 51-100</i>
<b>\$300 / mile</b>	<i>For miles 101 and after</i>

TASK 5 REPORTING	
<p><b>Task 5a: Reporting</b>  <i>Record water loss investigation and findings for future reference and stakeholder communication</i>  <i>Document next steps for water loss management</i></p> <ul style="list-style-type: none"> <li>• Report documenting all Year III activities</li> <li>• Recommendations for next steps to cost-effectively improve data quality, water loss understanding, and water loss performance</li> <li>• Results contextualized with regional and state datasets</li> </ul>	
<b>\$4,200</b>	<i>Task 5a: Reporting per task</i>

TASK 6	CUSTOMER METER ACCURACY TESTING		
<p><b>Task 6a: Customer Meter Accuracy Testing</b></p> <p>Agencies can choose between two customer meter accuracy testing service providers: McCall's Meters, Inc. or Westerly Meter Service Company. These meter accuracy testing firms were selected through a Request for Proposal Process conducted by MWDOC. This RFP process utilized a review panel, including member agency staff, who recommended both meter accuracy service providers be available for agencies to choose from. The review panel concluded both companies are capable of providing the desired services, had similar proposed costs and, together, could complete the work in a timelier manner. Exhibit C below summarizes the fees for each meter accuracy testing service provider. Note the fees are slightly different between providers. As a result, each service provider has its own Exhibit C. Agencies will need to:</p> <ol style="list-style-type: none"> <li>1. Select the meter accuracy testing company they choose to use,</li> <li>2. Identify the number and sizes of meters to be tested (green data entry cells), and</li> <li>3. Estimate the number of meetings (McCall's) or hours and mileage (Westerly) for meetings with the selected company.</li> </ol> <p>This worksheet should be used to calculate the total cost for meter accuracy testing services for your agency. The cost estimate calculated in Exhibit C should be entered into Exhibit A under Task 6: Meter Accuracy Testing. WSO is available to assist agencies in quantifying the number and sizes of meters to be tested as part of Task 3: Component Analysis of Apparent Losses.</p> <p>Small meter (5/8 – 2 inch) testing will require agencies to pull the meters from the field and deliver them to the selected meter testing company. Meter testing company locations are provided below. Large meters (3 inch and larger) will be tested in-situ.</p> <table border="0" data-bbox="120 1167 1149 1314"> <tr> <td> <p>McCall's Meters, Inc. 1498 Mesa View Street Hemet, CA. 92543 (951) 654-3799</p> </td><td> <p>Westerly Meter Company 403 East Carlin Street Compton, CA. 90222 (310) 637-9000</p> </td></tr> </table>		<p>McCall's Meters, Inc. 1498 Mesa View Street Hemet, CA. 92543 (951) 654-3799</p>	<p>Westerly Meter Company 403 East Carlin Street Compton, CA. 90222 (310) 637-9000</p>
<p>McCall's Meters, Inc. 1498 Mesa View Street Hemet, CA. 92543 (951) 654-3799</p>	<p>Westerly Meter Company 403 East Carlin Street Compton, CA. 90222 (310) 637-9000</p>		
Varies by agency	Task 6a: Use Exhibit C worksheet below to calculate the cost for your agency.		

## EXHIBIT C - McCall's Meters, Inc.

# Meter Accuracy Testing Fee Worksheet

Participating Agency: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone & E-mail: \_\_\_\_\_

	<b>McCall's Meters, Inc.</b>		
	<b>Rate</b>	<b>Quantity</b>	<b>Total</b>
<b>Small Meter Testing</b>			
5/8 - 1 inch Meters	\$ 35.00		\$ -
1 1/2 - 2 inch Non-Turbine Meters	\$ 50.00		\$ -
1 1/2 - 2 inch Turbine Meters	\$ 55.00		\$ -
3 in. Turbine Meters	\$ 70.00		\$ -
<b>Large Meter Testing (1)</b>			
3 inch and Larger Meters	\$ 250.00		\$ -
<b>Rates for attending meetings (2)</b>	\$ 100.00		\$ -
Total:			\$ -
(1) McCall's Requires a minimum of 4 meter large tests per day; If less than 4 tests, a portal to portal fee of \$125 will be charged.			
(2) McCall's will charge a flat rate of \$100 per day for attending meetings.			

## EXHIBIT C - Westerly Meter Service Company

# Meter Accuracy Testing Fee Worksheet

**Participating Agency:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_

**Phone & E-mail:** \_\_\_\_\_

	<b>Westerly Meter Service Company</b>		
	<b>Rate</b>	<b>Quantity</b>	<b>Total</b>
<b>Small Meter Testing</b>			
5/8 - 1 in.	\$ 30.00		\$ -
1 1/2 to 2 inch Non-Turbine Meters	\$ 65.00		\$ -
1 1/2 to 2 inch Turbine Meters	\$ 65.00		\$ -
<b>Large Meter Testing</b>			
3 to 10 inch	\$ 175.00		\$ -
<b>Rates for attending meetings (1)</b>	\$ 125.00		\$ -
<b>Mileage</b>	\$ 0.54		\$ -
<b>Total:</b>			\$ -

(1) Westerly will charge \$125 per hour plus mileage.



**ACTION ITEM**  
January 16, 2019

**TO:** Board of Directors

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

**FROM:** Robert Hunter, General Manager  
Staff Contact: Karl Seckel/Charles Busslinger

**SUBJECT:** OCWD Proposed Groundwater Storage Agreement Study with MNWD

**STAFF RECOMMENDATION**

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Staff recommends the Planning & Operations Committee discuss the OCWD Water Issues Committee (WIC) Agenda Item for January 9 (also for OCWD Board Action on January 16) regarding a Proposed Groundwater Storage Agreement with MNWD.

**COMMITTEE RECOMMENDATION**

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Committee will discuss this item on January 14, 2019 and make a recommendation to the Board.

**SUMMARY**

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Staff regularly reviews the agenda items of OCWD. The January 9 OCWD Water Issues Committee (WIC) agenda includes an OCWD Board recommendation for January 16 to proceed with a groundwater storage agreement with MNWD. Staff reviewed the item, flagged concerns, and since there were not any MWDOC meetings prior to the OCWD WIC meeting, drafted a letter for signature by MWDOC President Barbre, see attached.

Staff recommends the Committee discuss the MWDOC letter and proposed actions by OCWD.

<b>Budgeted (Y/N):</b>	<b>Budgeted amount:</b>	<b>Core</b> ✓	<b>Choice</b> __
<b>Action item amount:</b>	<b>Line item:</b>		
<b>Fiscal Impact (explain if unbudgeted):</b>			





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18700 Ward Street  
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Brett R. Barbre  
President

Joan C. Finnegan  
Vice President

Larry D. Dick  
Director

Wayne S. Osborne  
Director

Megan Yoo Schneider, P.E.  
Director

Sat Tamaribuchi  
Director

Jeffery M. Thomas  
Director

Robert J. Hunter  
General Manager

#### MEMBER AGENCIES

City of Brea  
City of Buena Park  
East Orange County Water District  
El Toro Water District  
Emerald Bay Service District  
City of Fountain Valley  
City of Garden Grove  
Golden State Water Co.  
City of Huntington Beach  
Irvine Ranch Water District  
Laguna Beach County Water District  
City of La Habra  
City of La Palma  
Mesa Water District  
Moulton Niguel Water District  
City of Newport Beach  
City of Orange  
Orange County Water District  
City of San Clemente  
City of San Juan Capistrano  
Santa Margarita Water District  
City of Seal Beach  
Serrano Water District  
South Coast Water District  
Trabuco Canyon Water District  
City of Tustin  
City of Westminster  
Yorba Linda Water District

January 8, 2019

The Honorable Cathy Green  
Chair, OCWD Water Issues Committee  
18700 Ward Street  
Fountain Valley, CA 92708

## CONSIDERATION OF GROUNDWATER STORAGE AGREEMENT WITH MOULTON NIGUEL WATER DISTRICT

Dear Chair Green:

*Cathy*

Your January 9, 2019 Water Issues Committee packet includes an Agenda item entitled CONSIDERATION OF AGREEMENT WITH MOULTON NIGUEL WATER DISTRICT. The item calls for execution of an agreement between OCWD and MNWD and issuance of two requests for proposals to study existing and potential conveyance options for delivery of water from OCWD to MNWD and to study other storage agreements to ascertain a benchmark and market analysis of the costs other water agencies have paid for storage programs. The Municipal Water District of Orange County (MWDOC) offers the following comments:

- Thank you for your interest and offer to work with the South Orange County (SOC) agencies to help them meet their emergency and drought protection needs. We believe this interest is good for all of Orange County. We further note that MWDOC has been working with the SOC agencies on these issues for some time and we believe it appropriate for MWDOC and OCWD to work together on these types of issues. In fact, a related success story is the 2006 Emergency Services Agreement. It was very controversial at the time to consider actions that involved moving groundwater from the OCWD to SOC. To help alleviate concerns, a Working Committee composed of three Basin producers, three SOC agency representatives, and representatives from MWDOC and OCWD convened to discuss, develop and present a recommendation to all involved entities. This 2006 collaborative working relationship worked well to outline and address the various concerns from all parties. The collaborative process used in 2006 helped bring agencies to the table to air differences and provide protections for the basin that allowed the Emergency Services Agreement to move forward.
- The discussions at the October 24, 2018 Joint Planning Committee between MWDOC and OCWD included concerns from staff of both agencies who indicated they were not being fully included in discussions the other agency was having with their member agencies. Both agencies were in agreement that broader and more inclusive communications would be beneficial. We believe this should be applied to the groundwater storage discussions noted in your WIC agenda item. In addition, MWDOC should be invited to participate in any meetings OCWD holds with MNWD, especially since they are one of our member agencies and are outside of the OCWD boundaries.



- In the process of publishing the 2018 OC Water Reliability Study, MWDOC developed quite a bit of information and we are in the midst of additional work that would be beneficial to include in the groundwater storage discussions. MWDOC's prior and current work involves:
  - We have hired Black & Veatch, Hazen and Sawyer, and Means Consulting to work on integration and water quality issues related to combining waters of different qualities in moving water around the county. We believe this information will help us to understand the potential implications of moving water in different directions in different pipelines with various combinations of MET water and other sources of water prior to the start-up of such projects.
  - We believe a hydraulic model of the regional water system in Orange County is necessary to help with the above evaluations. MWDOC has started the process of developing such a model and reviewing water quality modules that can be incorporated. We believe one of the major issues to be evaluated is the swings in demand between summer and winter and the resulting blend changes for various sources of water. The residence time in the pipelines before reaching the retail agencies and the chloramine decay are key considerations.
  - Work on expansion of the 2006 and 2009 Emergency Services Agreements which allows groundwater to be exchanged with MET water and sent to SOC during emergency situations. The current work involves updating studies on the ability to move water to SOC by way of several conveyance options. We will be ready to brief OCWD and the SOC agencies in February 2019 on these efforts.
  - Estimating the conceptual costs involved in a pump-in to the East Orange County Feeder No. 2 (EOCF#2) to move groundwater from OCWD to SOC during emergency situations. The 2016 and 2018 OC Water Reliability Studies included draft terms for review and comment. We believe the information would be valuable in the upcoming discussions with SOC.
  - Work on 'extraordinary supplies' to provide drought protection for SOC. An initial analysis was included in the Reliability Study, but we are proceeding with additional work at this time and should have information available in 3 to 6 months.
  - Lastly, the 2018 OC Water Reliability Study recommended that MWDOC and OCWD work together to fully evaluate the opportunities the MET Carson IPR project provides to OCWD, and that the SARCCUP Project extraordinary supplies be evaluated, and if not entirely needed by OCWD, the utilization of the supplies by others in OC should be evaluated.

The issues being raised by this WIC agenda item are important and significant issues, and work should proceed. Our belief is that the efforts will be improved through wider participation led by MWDOC and OCWD. Our hope is that you will find it possible to include MWDOC into this process and to expand other invitations so that all perspectives can be properly reflected.

Thank you for your consideration of this matter.

Sincerely,



Brett R. Barbre, President  
Municipal Water District of Orange County

cc MWDOC and OCWD Board members  
MWDOC Member Agencies  
Cities of Santa Ana, Anaheim and Fullerton  
OCWD Groundwater producers

## AGENDA ITEM SUBMITTAL

**Meeting Date:** January 9, 2019

**To:** Water Issues Committee.  
Board of Directors

**From:** Mike Markus

**Staff Contact:** J. Kennedy

**Budgeted:** N/A

**Budgeted Amount:** N/A

**Cost Estimate:** N/A

**Funding Source:** N/A

**Program/Line Item No.:** N/A

**General Counsel Approval:** N/A

**Engineers/Feasibility Report:** N/A

**CEQA Compliance:** N/A

**Subject: CONSIDERATION OF AGREEMENT WITH MOULTON NIGUEL WATER DISTRICT**

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### SUMMARY

In August 2017 the Board broadened the District's Water Resources Policy to allow the consideration of water storage and exchange programs with South Orange County (SOC) water agencies. In October 2018 the Board President created an ad-hoc committee of Orange County Water District (OCWD or District) and Moulton Niguel Water District (MNWD) board members to discuss the issues of developing a MNWD pilot storage account in the groundwater basin. The committee met in October and November. The attached Agreement was drafted and calls for hiring consultants to formally study the issues related to developing a potential MNWD pilot storage account in the OCWD groundwater basin. MNWD has agreed to fund this work.

### Attachments:

- A. Agreement
- B. Request for Proposals
  - a. Review of Existing Storage Programs
  - b. Evaluate Conveyance Options to Distribute Water to MNWD
- C. Presentation Material
- D. Recent Letters
  - a. December 4, 2017 IRWD Letter
  - b. December 11, 2017 City of Anaheim Letter
  - c. January 31, 2018 Letter from Nineteen Groundwater Producers
  - d. February 20, 2018 Letter from Eight South Orange County Water Agencies
  - e. April 6, 2018 Moulton Niguel Water District letter

### RECOMMENDATION

Agendize for January 16 Board meeting: Authorize: (1) execution of the attached Agreement with the Moulton Niguel Water District and (2) issuance of the two attached requests for proposals

## DISCUSSION/ANALYSIS

### History

In 2006 the District approved an Emergency Services Agreement with the Municipal Water District of Orange County, the Irvine Ranch Water District (IRWD), and multiple South Orange County (SOC) water agencies. The agreement calls for IRWD to provide up to 50 cubic feet per second (cfs) for up to 30 days (a total of approximately 3,000 acre-feet of water) to SOC water agencies during emergency events. IRWD's annual groundwater production must still comply with the annual Basin Production Percentage (BPP) and Basin Equity Assessment (BEA) calculations. The amount of water IRWD can provide is slowly diminishing as water demands within IRWD increase. The agreement will expire in 15 years.

In August 2017 the Board broadened the District's Water Resources Policy to allow the consideration of water storage and exchange programs with SOC water agencies. The concept of such a program is to allow one or more SOC water agencies to store relatively small amounts of water in the groundwater basin which would have little impact if any on the District's operations. OCWD would receive compensation from the program which could be used to help offset future expected Replenishment Assessment increases.

In February 2018 the Water Issues Committee considered entering into a Memorandum of Understanding (MOU) with MNWD to study a potential pilot water storage and exchange agreement. The Board eventually delayed any consideration of the MOU and requested staff to: (1) assess the District's storage needs based upon current and expected future conditions; and (2) address the January 31, 2018 Groundwater Producers letter which requested the District to consider four issues. That letter is attached and is summarized below:

1. Evaluate the current and future operating parameters of the Basin;
2. Identify potential measures to optimize the storage of water in the Basin for the benefit of the Producers;
3. Consider if / how storage accounts could be implemented for Producer agencies; then
4. Consider if / how potential storage accounts could be implemented for non-Producer agencies to the primary benefit of the Producer agencies.

In August 2018 staff completed its assessment of the District's storage needs and presented those findings to the Board. Staff concluded the District was in relatively good condition and recommended the Accumulated Overdraft target range could be lowered from 100,000 to 150,000 acre-feet to 150,000 to 200,000 acre-feet. This recommendation was primarily based upon two factors:

1. The Groundwater Replenishment System was recently expanded to 100 mgd and there are active plans to expand the plant up to 130 mgd by 2023. This creates more reliable base supplies for the service territory.
2. Total expected ultimate 2040 water demands of the 19 Groundwater Producers have significantly decreased from 525,000 acre-feet per year to 447,000 acre-feet per year.

With this information, and based upon future modeling by staff, the District does not need to store as much water as previously believed which means the accumulated overdraft target range could be lowered.

The groundwater basin's accumulated overdraft is currently 277,000 acre-feet as of June 30, 2018. Staff will recommend annual budgets over the next three to four years that should decrease the accumulated overdraft to approximately 150,000 acre-feet which will increase available water storage supplies.

With this information, item #1 from the Groundwater Producers January 31, 2018 letter has been completed.

#### Groundwater Producer January 31, 2018 Letter

Item #2 from the January 31, 2018 Producers letter recommends the District "**Identify potential measures to optimize the storage of water in the Basin for the benefit of the Producers**". Staff in general is always working to increase storage supplies in the groundwater basin. However, this effort can be overshadowed by other Producer desires to maximize the Basin Production Percentage and/or to minimize Replenishment Assessment increases. Staff will work with the Producers to determine if any new measures to optimize water storage can be developed for Board consideration.

Item #3 from the Producers January 31, 2018 letter recommends the District "**Consider if / how storage accounts could be implemented for Producer agencies**". Allowing Producers to have individual storage accounts within the OCWD groundwater basin would be a significant deviation from past District policies and practices. This issue was discussed at previous Groundwater Producers meetings during the spring of 2018. The District could generate additional revenues with this option, just as would occur with a storage program with a South Orange County water agency and as occurred with the Metropolitan Water District (MWD) conjunctive use storage program. However, this option requires more careful consideration regarding the need, the interest and basin management policies and practices.

Staff believes entering into an agreement with MNWD and studying how a small pilot storage program with MNWD could possibly be implemented at the same time OCWD is reviewing these remaining issues from the Producers January 31, 2018 letter is reasonable. With the recommended action, staff would reinstate discussion of these issues at Producers meetings in February and March and provide a report back to the Board in April. The MNWD work effort is expected to take approximately six months and would not be concluded until late summer.

#### Summary of proposed MNWD Agreement

The goal of the Agreement is to develop a small short-term pilot program that would be considered by the Boards of OCWD and MNWD which would provide a foundational understanding to help determine the feasibility of developing a long-term MNWD storage/exchange program in the OCWD groundwater basin. The key elements of the proposed MNWD Agreement are provided below:

- a. Develop an RFP (attached) and hire a consultant to study existing and potential new conveyance options for delivery of water from OCWD to MNWD.
- b. Develop a second RFP (attached) and hire a second consultant to review existing water industry storage agreements to provide a bench mark and market analysis of what other water agencies have paid for storage programs.



- c. Comply with the OCWD Act.
- d. MNWD agrees to fund the consultants work.
- e. The timeline for completion of the scope of work is estimated at 6 months from execution of the Agreement.
- f. The existing ad-hoc committee created by OCWD and MNWD will work collaboratively to carry out the scope of the Agreement.
- g. OCWD and MNWD will meet and work with other interested stakeholders to share information and seek input on this issue.
- h. OCWD will administer the two consultant RFP and contracts.
- i. OCWD is committing to consider a small pilot storage program once the studies are completed.

### Existing Emergency Service and Storage Programs

The District has two existing programs which are summarized below that utilize the groundwater basin. Information regarding a third storage program, the Santa Ana River Conservation and Conjunctive Use Program is also summarized below.

#### **1. South County Phase I Emergency Service Program Agreement**

As previously mentioned, the District entered into an agreement in 2006 which allows IRWD to send up to 50 cfs of water for no more than 30 days (maximum of 3,000 af per incident) to South Orange County agencies for emergency events. The agreement is for 25 years and has been used about five times. IRWD is annually subject to the OCWD Basin Production Percentage and Basin Equity Assessment even during years when the agreement is exercised. Water sent to South County is deemed to be imported water. The amount of water IRWD is able to send to South County is slowly decreasing as IRWD experiences growth within its own service area. Any potential new program would be coordinated with this agreement. OCWD received no compensation from this program as: (1) it has no impact to the District's operations; and (2) the District is assisting local water agencies to meet water demands during an emergency.

#### **2. MWD Conjunctive Use Storage Program (CUP)**

The CUP agreement allows for MWD to store up to 66,000 af of water in the groundwater basin. Up to 22,000 af can be annually extracted. Up to 16,500 af can be annually stored. The District received approximately \$32 million in compensation from MWD and will receive approximately \$20 million from the Groundwater Producers over the life of the contract. The agreement will expire in 2028. Staff will not recommend creating any new sizeable storage program(s) until this agreement terminates.

### **3. Santa Ana River Conservation and Conjunctive Use Program (SARCCUP)**

The Santa Ana Conservation and Conjunctive Use Program is a new cooperative project with the San Bernardino Valley Municipal Water District (Valley District), Eastern Municipal Water District (EMWD), Inland Empire Utilities Agency (IEUA), and Western Municipal Water District (WMWD). SARCCUP is partially funded by a \$55 million Proposition 84 grant and provides multiple regional benefits to the Santa Ana River Watershed and is made up of three elements:

- A large-scale, conjunctive use project (i.e., water bank) that utilizes storage space in the watershed's groundwater basins allowing the banking of wet year supplies for use in dry years, facilitating the augmentation of drought and emergency water supplies;
- Habitat restoration for the Santa Ana Sucker, a threatened fish species and arundo removal, an invasive plant species that consumes large amounts of water; and
- Water use efficiency (WUE) measures to lower water demands in the watershed. The WUE element includes extending the Proposition 84 2014 Drought Round WUE program for technical support for conservation programs and public outreach.

OCWD will be participating in SARCCUP by having up to 36,000 to 45,000 af of water stored in the basin for use during dry years, such as when MWD allocates limited imported water supplies (allocations).

Water removed from the SARCCUP during MWD allocation periods could be considered "extraordinary" which means the water would be added to the local water supplies that are available and the amount of MWD water that was allocated to an agency.

#### **PRIOR RELEVANT BOARD ACTIONS:**

10/3/18: OCWD MNWD ad-hoc committee created

8/15/18, M18-104: Directed staff to update the 2007 *Report on Orange County Groundwater Basin Storage and Operational Strategy* to reflect the recommended basin operating changes and to limit any potential future storage agreements to within the 36,000 acre-foot Santa Ana River Conservation and Conjunctive Use Program until the Metropolitan Water District Conjunctive Use Storage Program expires in 2028.

8/2/17, R17-8-107: Broadened the District's Water Resources Policy to allow the consideration of water storage and exchange programs with SOC water agencies.

3/21/07, M07-44: Receive and file staff report titled, "Evaluation of Orange County Groundwater Basin Storage and Operational Strategy;" adopt the three-layer storage change methodology along with the associated new full-basin condition that will serve as a benchmark for calculating the basin accumulated overdraft; and adopt the proposed basin operating

strategy including a basin operating range spanning the new full condition to an accumulated overdraft of 500,000 af, and an optimal range from a target level of 100,000 to 150,000 af of accumulated overdraft, with the understanding that specific operational scenarios will be further developed and evaluated cooperatively by the District and Producers.



## **INTERAGENCY AGREEMENT**

This Interagency Agreement (“**Agreement**”), is entered into between the Orange County Water District (“**OCWD**”) and the Moulton Niguel Water District (“**MNWD**”), collectively herein referred to as the **PARTIES**.

### **I. PURPOSE**

The purpose of this Agreement is to work collaboratively to evaluate the potential joint benefits of developing a storage/exchange program between the PARTIES by:

- a. Exploring existing and potential new conveyance methods for delivery of stored water in the OCWD groundwater basin to MNWD, and;
- b. Evaluating potential revenue and economic benefits to OCWD to offset projected future Replenishment Assessment increases without creating a negative operational impact.

The goal of this Agreement is to develop a short-term pilot program that would be considered by the PARTIES which would provide a foundational understanding to help determine the feasibility of developing a long-term MNWD storage/exchange program in the OCWD groundwater basin.

### **II. GUIDING PRINCIPLES**

The following guiding principles will be adhered to by the PARTIES in completing any work to develop a pilot program:

- a. Comply with the OCWD Act, and;
- b. OCWD will receive a net benefit from any storage or exchange program, and;
- c. OCWD’s ability to store water and operate the groundwater basin will not be harmed, and;
- d. MNWD understands that direct conveyance of stored water from the groundwater basin does not exist at this time, but will evaluate options for conveyance as part of this work, and;
- e. OCWD and its members will not subsidize any work that will solely benefit MNWD as part of the analysis or implementation of any program.

### **III. SCOPE OF WORK**

The scope of work to be performed as a part of the Agreement shall include:

- a. Evaluate potential pumping and conveyance options to deliver water from the OCWD groundwater basin and/or proposed Huntington Beach Poseidon Resources Ocean Desalination Plant to MNWD utilizing existing or new facilities.
- b. Review and analyze various groundwater banking and exchange programs throughout the state that may serve as models for development of a pilot program between the PARTIES.
- c. The PARTIES will collectively develop two Request for Proposals for the work described in paragraphs III.a and III.b above. The PARTIES will review the proposals and develop a joint recommendation for consideration of award of professional service contracts.
- d. MNWD agrees to provide funding to perform the scope of work identified as a part of the Agreement.

#### **IV. DELIVERABLES & SCHEDULE**

- a. The deliverables anticipated as a part of the Agreement includes two separate reports for each scope item:
  - i. Infrastructure review of pumping and conveyance alternatives
  - ii. Groundwater banking and exchange program review
- b. The timeline for completion of the scope of work is estimated at 6 months from execution of the Agreement.

#### **V. OVERVIEW**

- a. The existing ad-hoc committee created by the PARTIES will work collaboratively to carry out the scope of this Agreement.
- b. The ad-hoc committee will meet to review progress and any draft work product that may be available.
- c. The PARTIES will meet and work with other interested stakeholders to share information and seek input on this issue.

#### **VI. OTHER**

- a. The PARTIES understand the scope of work identified in this Agreement is the extent of the agreed upon analysis and acknowledge that any future pilot storage program will require mutual consent of the PARTIES.
- b. This agreement may be terminated by either PARTY with thirty (30) days written notice. Upon termination, the PARTIES will be responsible for any outstanding financial commitments for any contracts entered into at the time of termination.

IN WITNESS WHEREOF, the PARTIES hereby execute this Interagency Agreement.

**ORANGE COUNTY WATER DISTRICT**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Vincente Sarmiento, President  
for Orange County Water District

**MOULTON NIGUEL WATER DISTRICT**

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Donald R. Froelich, President  
for Moulton Niguel Water District

## DRAFT REQUEST FOR PROPOSALS

### REVIEW OF EXISTING WATER STORAGE PROGRAMS



**ORANGE COUNTY WATER DISTRICT and  
MOULTON NIGUEL WATER DISTRICT**

**PROPOSALS DUE:  
February 22, 2019  
2:00 P.M.**



## **INTRODUCTION**

The Orange County Water District (OCWD; the District) and the Moulton Niguel Water District (MNWD) are seeking proposals from qualified consultants to provide a review, summary and analysis of existing water storage programs in Southern California (Study).

In general, the Study consists of providing a market analysis and/or bench mark of what other water agencies are paying to store water. This information will be used by OCWD and MNWD to assist in the potential development of a pilot storage program whereby MNWD will compensate OCWD to store water in the OCWD groundwater basin.

The selected consultant should have an individual with significant experience, water industry contacts and knowledge in the area of water resources management to provide expert advice to assist both agencies in potentially developing a water storage program.

This Request for Proposals (RFP) describes the Study, the required scope of services, Study milestones, consultant selection process, and the minimum amount of information that must be included in the proposal. Failure to submit information in accordance with these requirements and procedures may be cause for disqualification.

## **STUDY BACKGROUND**

MNWD lies outside of the OCWD groundwater basin in south orange county as shown on the following figure. MNWD is seeking to develop a small storage program to assist in improving the water reliability of its service territory. OCWD manages the Orange County groundwater basin which has a useable volume of approximately 500,000 acre-feet. The OCWD Act Section 2.1 allows for storage programs with agencies outside of the OCWD boundaries. OCWD would provide a relatively small amount of storage space to MNWD and potentially other South Orange County water agencies in exchange for appropriate compensation.

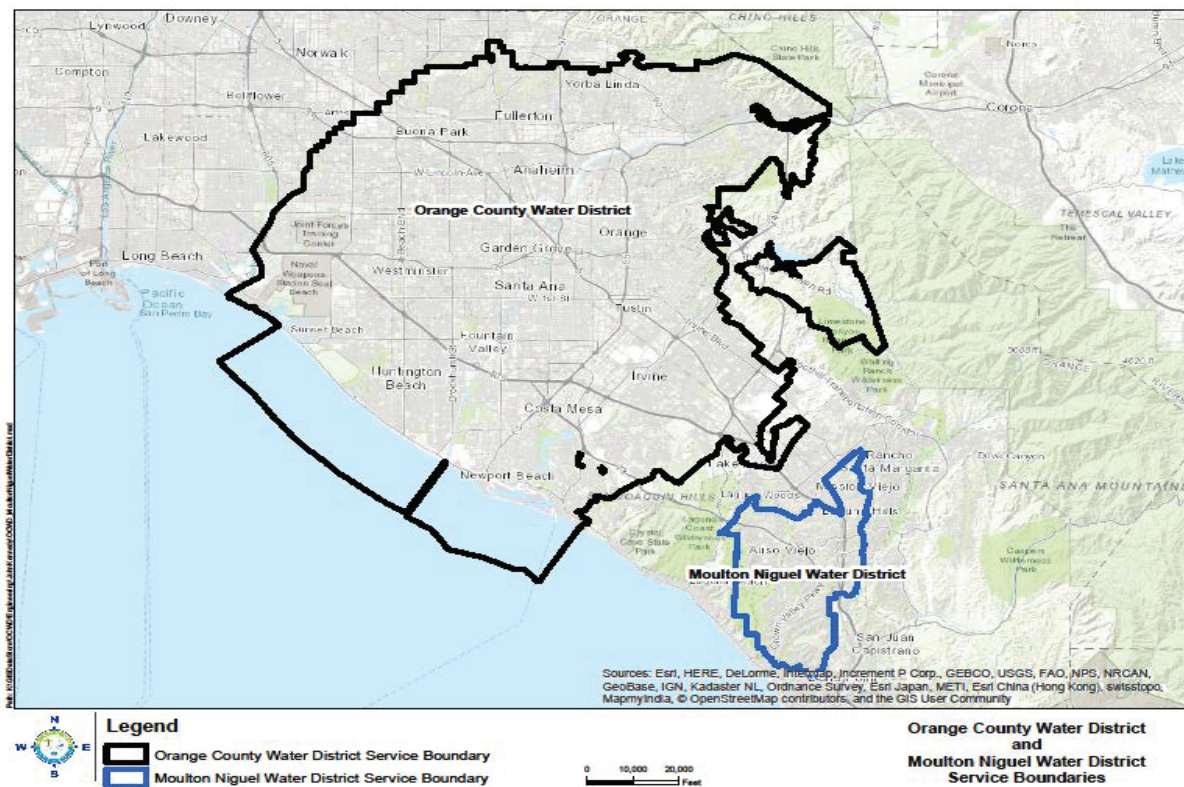
OCWD and MNWD first wish to develop and consider a small short-term 5,000 acre-feet pilot storage program which if implemented, would be used to determine if a long-term storage arrangement can be consummated.

## **STUDY DESCRIPTION**

Many storage programs have been developed in Southern California and the western United States over the past 30 years. The selected consultant will evaluate all storage programs listed below. Consultants should also propose other storage programs they believe are comparable to the likely exchange arrangement being contemplated by OCWD and MNWD.

- Metropolitan Water District (MWD) Arvin Edison
- MWD Semi Tropic
- Santa Margarita Water District Upper Chiquita Reservoir
- Antelope Valley East Kern Water Agency
- OCWD MWD Conjunctive Use Storage Program.

- Irvine Ranch Water District Strand Ranch and Stockdale
- Pixley Water District



These storage programs are generally developed to provide water during dry hydrologic periods and/or for emergency purposes. It will be important to differentiate the purpose of the storage program to allow for accurate comparisons. The consultant should also determine if there is any significant difference between storage programs for retail water agency versus wholesale agency. Additionally, other material terms of these storage programs such as “put” or “take” restrictions along with any hydrology and/or water quality constraints should be noted.

OCWD and MNWD water district's wish to develop a fee that MNWD will pay to store water in the OCWD groundwater basin that is fair and reasonable to both agencies. The fee can be in the form of money or water left behind (a storage exchange program) to OCWD or both. At this time the compensation to the District is likely to be in the form of water purchased by MNWD but left behind in the OCWD groundwater basin.

The possible 5,000 acre-feet of water to be stored by OCWD for MNWD in the initial pilot program being contemplated could be MWD untreated imported water that is purchased and recharged by OCWD at its field headquarters in the city of Anaheim. This water currently cost \$695/acre-foot and will increase in cost to \$731/acre-foot on January 1, 2019. Alternatively, to avoid any impact to its groundwater recharge operations, OCWD may implement an in-lieu type arrangement with one or more Groundwater Producer(s) to not pump up to the Basin Production Percentage (BPP) by a total of 5,000 acre-feet to indirectly store water in the groundwater basin. OCWD

would pay the Basin Equity Assessment which averages \$539/acre-foot as compensation to a Producer not pumping up to the BPP to store water in this manner.

## **SCOPE OF WORK**

The Consultant shall perform the Scope of Work as described below:

- Review existing water industry storage programs and interview the appropriate staff of the agencies involved.
- Perform a literature review. Obtain and coordinate the Study with other similar reports that have been prepared and/or are being prepared by other agencies.
- Develop a summary table whereby the key elements of each storage program can be summarized for comparison with other programs.
- Develop a generic, generally accepted and appropriate financial methodology to calculate the unit cost (\$/af) of each storage program to allow it to be compared with other programs. This methodology should take into account exchange programs whereby agencies storing water leave behind a percentage of water as compensation for storing water.
- When comparing storage programs, determine if and how programs for water retailers should be differentiated from programs for water whole sellers.
- When comparing storage programs, determine if and how programs that provide emergency water system supplies should be differentiated from programs providing water during dry hydrologic cycles (dry year yield).
- Summarize the purpose of each storage program. For example, is water being stored for emergency purposes? Is water being stored for drought periods?
- Document the parameters for storing and calling upon water.
- Provide an outline of the technical paper, an approximate 50% draft and a final draft of the Study paper for review and comment by OCWD and MNWD.
- Determine what existing storage programs provide a representative and comparable match to the storage program being contemplated by OCWD and MNWD.
- Provide a final technical paper and a presentation summarizing the results of the study.
- Coordinate this work with other surveys and reports that have been completed by other water agencies to avoid any duplication of effort.
- Plan on three meetings with OCWD and MNWD staff. Plan on providing separate presentations to the MNWD and OCWD Boards

## **SCHEDULE**

The proposed project schedule is as follows:

Task	Date
Study RFP Issued	January 18, 2019
Optional meeting with OCWD & MNWD	February 11, 2019 - 2:00 p.m. @ OCWD
Proposals Due, 2:00 P.M.	February 22, 2019
Interviews, if necessary	March 4 – 6, 2019
Award Study Contract	March 20, 2019
Study Kick-off Meeting	April 8, 2019 – 2:00 p.m. @ OCWD
Consultant Provides Study Outline	April 26, 2019
Consultant Provides draft Study	June 28, 2019
Consultant Provides final draft Study	August 2, 2019
Consultant Provides final Study	August 30, 2019

## ELEMENTS OF PROPOSAL

Please include the following in your proposal:

1. Cover letter.
2. Study approach, expanding or revising the scope of work provided herein if necessary. Any deviations from the scope herein shall be clearly designated in the proposal, including associated man-hours.
3. Project team description (with resumes at the back of the proposal), emphasizing experience and capabilities of designated project manager, and support staff related to the outlined scope of work. Indicate the percentage of time each member will contribute to the project. The Study consultant shall also include the home office and location of each project team member.
4. A matrix table of the estimated man-hours for the Study broken down by individual staff and any sub-Consultants.
5. Description of the Study team's past record of performance on similar study's for which your firm has provided services. Also include client references that may be contacted by OCWD.
6. Project schedule with milestones and completion deadlines, modifying the proposed schedule herein, based on your project approach and experience.
7. A statement that the Consultant has read and can execute the District's standard professional services contract and can comply with the insurance requirements.
8. Fee proposal submitted in a separate sealed envelope. The fee proposal shall show estimated hours and cost for each task and subtask, including meeting obligations. The fee proposal shall be based on services provided on an hourly-rate basis, with a total not-to-exceed fee. Provide a rate schedule for proposed services. On a separate sheet, please provide a fee proposal for the study.

The proposal is limited to 7 pages, exclusive of cover letter, resumes, and preprinted materials. Interested firms shall deliver four paper copies of the proposal, one

electronic PDF file, and one sealed fee proposal on or before February 22, 2019 at 2:00 pm. Proposals shall be mailed or delivered to:

Orange County Water District  
Attention: John Kennedy  
18700 Ward Street  
Fountain Valley, CA 92708

## **SELECTION PROCESS**

Selection of the Consultant will be based upon the proposal contents, prior experience of the firm, and specific experience and capabilities of the designated project manager and support staff. The firm, and in particular the project manager, must be fully capable in all areas outlined under the scope of work above. The nature of this study includes working with and obtaining information from numerous water agencies. The selected firm and project manager will have good working relations with many agencies in the water community.

Based upon this information, OCWD staff will recommend a firm to OCWD's Board of Directors for award of contract. The selected firm must be able to begin work immediately upon award of contract and must be able to maintain the required level of effort to meet the proposed schedule.

The evaluation criteria listed in the OCWD Proposal Evaluation Form (Exhibit A) will be used to evaluate each Consultant. Depending on the response to the RFP, oral interviews may or may not be a part of the selection process.

## **PRE-SUBMITTAL ACTIVITIES**

### Questions Concerning Request for Proposals

All questions regarding the RFP should be presented in writing to:

Orange County Water District  
Attn: John Kennedy  
18700 Ward Street, Fountain Valley, CA 92708  
Phone: (714) 378-3304  
[JKennedy@ocwd.com](mailto:JKennedy@ocwd.com)

### Pre-Proposal Meeting

The February 11, 2019 meeting at 2:00 p.m. will be held at the OCWD headquarters in Fountain Valley. This meeting is optional.

## **SPECIAL CONDITIONS**

### Revision to the Request for Proposals

The District reserves the right to revise the RFP prior to the date the Proposals are due. The District reserves the right to extend the date by which the Proposals are due.



### Reservations

This RFP does not commit the District to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP or to procure or contract for work.

### Public Records

All Proposals submitted in response to this RFP become the property of OCWD and are public records and as such may be subject to public review.

### Right to Cancel

The District reserves the right to cancel, for any or no reason, in part or in its entirety, this RFP including but not limited to: selection schedule, submittal date, and submittal requirements. If the District cancels or revises the RFP, the District will notify all the known Proposers in writing.

### Additional Information

The District reserves the right to request additional information and/or clarifications from any or all Proposers.

### Public Information

Release of Public Information selection announcements, contract awards, and all data provided by the District shall be protected from public disclosure. Proposers desiring to release information to the public must receive prior written approval from the District.

### Professional Services Agreement

The selected Consultant will be required to sign the attached Professional Services Agreement (Exhibit B) and to provide the Insurance Certificates and all other required documentation within 10 calendar days of notice of award.

### Insurance Requirements

The minimum insurance requirements are: \$2 million (\$4 million aggregate) for Commercial General Liability insurance, \$1 million for Automobile Liability insurance (including Additional Insured endorsement for both General Liability and Automobile Liability insurance), \$1 million for Workers' Compensation insurance (including Waiver of Subrogation endorsement for Workers' Comp), and \$1 million for Professional Liability (Errors and Omissions) insurance.

### Equal Employment Opportunity and Affirmative Action Requirements

The Proposers shall provide a Statement of Equal Employment Opportunity/Affirmative Action. The Consultant and each subcontractor shall not discriminate in the employment of persons on the work because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, sexual preference or sex of such persons except as permitted by Section 12940 of the California government Code. The Consultant is expected to maintain policies similar to those of the District regarding equal employment opportunities and affirmative action as set forth in the OCWD's Administrative Policies.

**EXHIBIT A**

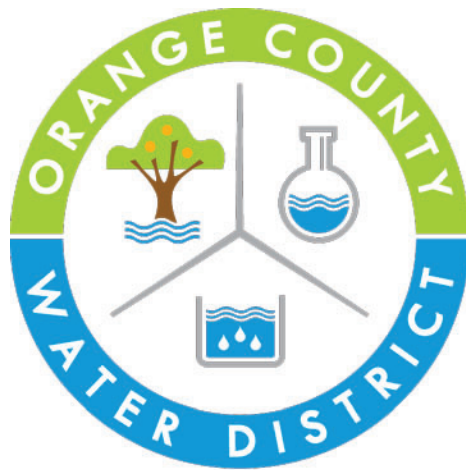
**PROPOSAL EVALUATION FORM**

**EXHIBIT B**

**SAMPLE PROFESIONAL SERVICES AGREEMENT**

## DRAFT REQUEST FOR PROPOSALS

### EVALUATION OF GROUNDWATER CONVEYANCE OPTIONS



SINCE 1933



**moulton niguel** water district

**ORANGE COUNTY WATER DISTRICT and  
MOULTON NIGUEL WATER DISTRICT**

**PROPOSALS DUE:  
February 22, 2019  
2:00 P.M.**



## **INTRODUCTION**

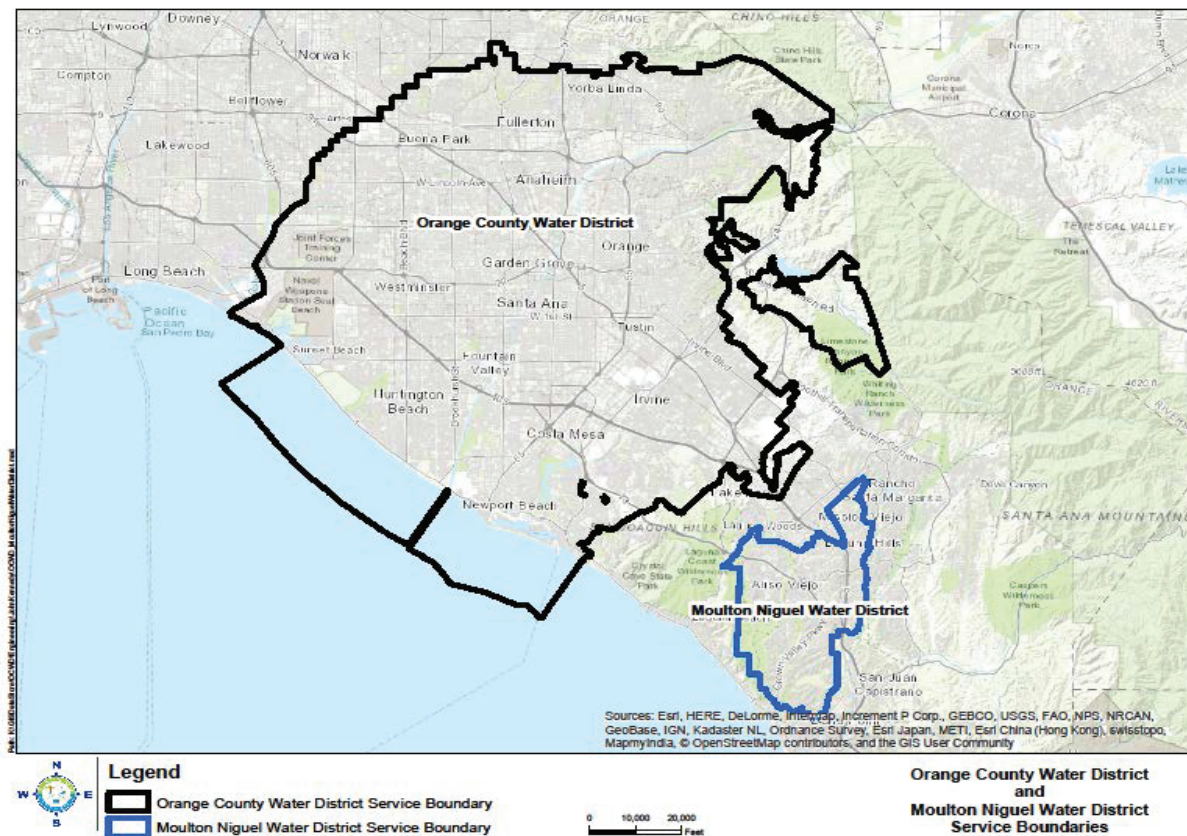
The Orange County Water District (OCWD; the District) and the Moulton Niguel Water District (MNWD) are seeking proposals from qualified consultants to provide a review, summary and analysis of conveyance options from the Orange County Groundwater basin to South Orange County and in particular, MNWD.

In general, the goal of this project is to evaluate the potential infrastructure and property acquisition required to convey water from the Orange County Groundwater Basin to Moulton Niguel Water District's system. This information will be used by OCWD and MNWD to assist in the potential development of a pilot storage program whereby MNWD will compensate OCWD to store water in the OCWD groundwater basin and ultimately convey stored water to MNWD during emergencies or water shortage conditions.

This Request for Proposals (RFP) describes the Study, the required scope of services, Study milestones, consultant selection process, and the minimum amount of information that must be included in the proposal. Failure to submit information in accordance with these requirements and procedures may be cause for disqualification.

## **STUDY BACKGROUND**

MNWD lies outside of the OCWD groundwater basin in south orange county as shown on the following figure.

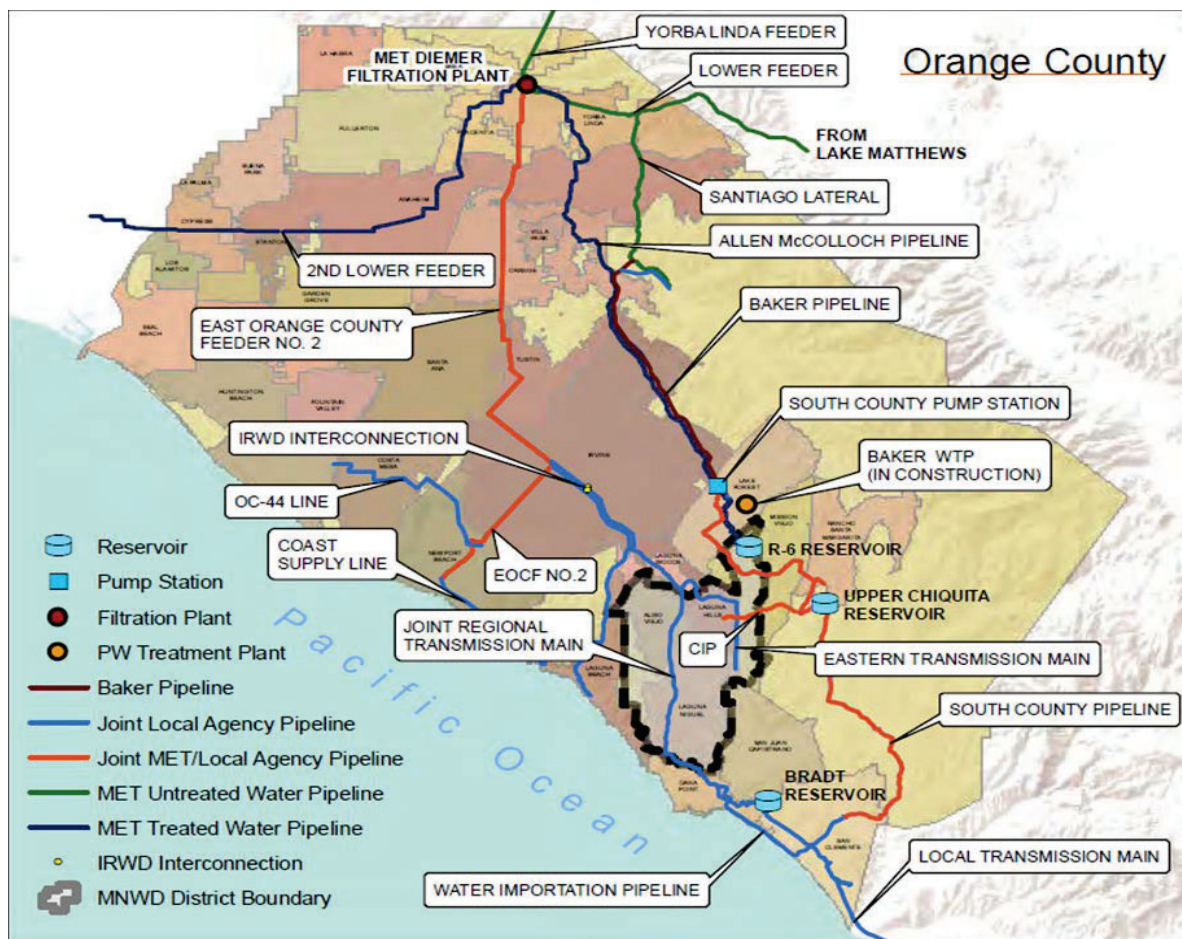


MNWD is seeking to develop a small storage program to assist in improving the water reliability of its service territory. OCWD manages the Orange County groundwater basin which has a useable volume of approximately 500,000 acre-feet. The OCWD Act Section 2.1 allows for storage programs with agencies outside of the OCWD boundaries. OCWD would provide a relatively small amount of storage space to MNWD and potentially other South Orange County water agencies in exchange for appropriate compensation.

OCWD and MNWD first wish to develop and consider a small short-term 5,000 acre-feet pilot storage program which if implemented, would be used to determine if a long-term storage arrangement can be consummated.

## STUDY DESCRIPTION

Moulton Niguel Water District currently has an emergency interconnection through Irvine Ranch Water District which can move up to 50 cfs of water to serve South Orange County. Moulton Niguel Water District owns 58.93 percent of the capacity of the interconnection. Due to growth in Irvine Ranch Water District, expiration of the capacity rights in the interconnection facilities, and uncertainty in the ability to convey water into the future, Moulton Niguel Water District is interested in alternative conveyance options to move water from the groundwater basin to MNWD through a potential exchange program. MNWD currently receives imported water from the East Orange County Feeder #2 and/ or the Allen-McCulloch Pipeline as shown on the following figure.



The study should evaluate potential costs of land acquisition, building new transmission mains and/or pumping plants, utilization of existing available groundwater well capacity or construction of new wells, and connecting transmission mains to the East Orange County Feeder #2 and/or the Allen-McCulloch Pipeline.

## AVAILABLE DATA

Moulton Niguel Water District will provide GIS shapefiles with the regional pipeline infrastructure including Metropolitan Water District pipelines, the Joint Regional Water Supply System, South County Pipeline and Eastern Transmission Main.

Orange County Water District will provide GIS files with the location of existing groundwater pumping wells. Historical production amounts from the wells will also be provide.

## SCOPE OF WORK

The Consultant shall perform the Scope of Work as described below:

- Review and meet with staff of the agencies involved to discuss existing conveyance facilities, well production facilities, and desired capacity and conveyance goals.
- Develop alternative conveyance approaches of groundwater which shall include:
  - Identification of 3-4 alternative locations for developing the desired pumping capacity utilizing either existing available well capacity or developing new well capacity;
  - Evaluation of existing infrastructure to convey stored water from the identified pumping locations to either the East Orange County Feeder #2, Allen-McColloch Pipeline, or the Joint Transmission Main;
  - Identification of any new infrastructure necessary to convey stored water to either the East Orange County Feeder #2, Allen-McColloch Pipeline or the Joint Transmission Main.
- Evaluation of potential property needed to build any additional infrastructure, i.e. well facilities, pumping plants.
- Evaluation of probable construction costs for each of the proposed conveyance alternatives.
- Provide a final technical paper and a presentation summarizing the results of the study.
- Plan on three meetings with OCWD and MNWD staff. Plan on providing separate presentations to the MNWD and OCWD Board of Directors.
- Review similar work the Municipal Water District of Orange County is performing regarding pumping groundwater into the EOCFD#2.
- Coordinate this work with the possible transmission of Poseidon Resources Ocean Desalination water to South Orange County via the EOCFD#2. OCWD will provide relevant information to the consultant.

Future work will need to be completed to evaluate the hydraulic constraints of regional infrastructure as well as water quality impacts. This initial work does not contemplate those work products.

## SCHEDULE

The proposed project schedule is as follows:

Task	Date
Study RFP Issued	January 18, 2019
Optional meeting with OCWD & MNWD	February 4, 2019 - 2:00 p.m. @ OCWD
Proposals Due, 2:00 P.M.	February 22, 2019
Interviews, if necessary	March 4 – 6, 2019



Award Study Contract	March 20, 2019
Study Kick-off Meeting	April 1, 2019 – 2:00 p.m. @ OCWD
Consultant Provides Study Outline	May 10, 2019
Consultant Provides draft Study	July 26, 2019
Consultant Provides final draft Study	September 6, 2019
Consultant Provides final Study	October 4, 2019

## ELEMENTS OF PROPOSAL

Please include the following in your proposal:

1. Cover letter.
2. Study approach, expanding or revising the scope of work provided herein if necessary. Any deviations from the scope herein shall be clearly designated in the proposal, including associated man-hours. Project team description (with resumes at the back of the proposal), emphasizing experience and capabilities of designated project manager, and support staff related to the outlined scope of work. Indicate the percentage of time each member will contribute to the project. The Study consultant shall also include the home office and location of each project team member.
3. A matrix table of the estimated man-hours for the Study broken down by individual staff and any sub-Consultants.
4. Description of the Study team's past record of performance on similar study's for which your firm has provided services. Also include client references that may be contacted by OCWD.
5. Project schedule with milestones and completion deadlines, modifying the proposed schedule herein, based on your project approach and experience.
6. A statement that the Consultant has read and can execute the District's standard professional services contract and can comply with the insurance requirements.
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The evaluation criteria listed in the OCWD Proposal Evaluation Form (Exhibit A) will be used to evaluate each Consultant. Depending on the response to the RFP, oral interviews may or may not be a part of the selection process.

## **PRE-SUBMITTAL ACTIVITIES**

### Questions Concerning Request for Proposals

All questions regarding the RFP should be presented in writing to:

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### Pre-Proposal Meeting

The February 4, 2019 meeting at 2:00 p.m. will be held at the OCWD headquarters in Fountain Valley. This meeting is optional.

## **SPECIAL CONDITIONS**

### Revision to the Request for Proposals

The District reserves the right to revise the RFP prior to the date the Proposals are due. The District reserves the right to extend the date by which the Proposals are due.

### Reservations

This RFP does not commit the District to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP or to procure or contract for work.

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#### Equal Employment Opportunity and Affirmative Action Requirements

The Proposers shall provide a Statement of Equal Employment Opportunity/Affirmative Action. The Consultant and each subcontractor shall not discriminate in the employment of persons on the work because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, sexual preference or sex of such persons except as permitted by Section 12940 of the California government Code. The Consultant is expected to maintain policies similar to those of the District regarding equal employment opportunities and affirmative action as set forth in the OCWD's Administrative Policies.

**EXHIBIT A**

**PROPOSAL EVALUATION FORM**

**EXHIBIT B**

**SAMPLE PROFESIONAL SERVICES AGREEMENT**



# Proposed Agreement with Moulton Niguel Water District

Water Issues Committee  
January 9, 2019



# History

- August 2017 Board - Broadened the District's Water Resources Policy to allow the consideration of water storage and exchange programs with South Orange County (SOC) agencies
- February 2018 Water Issues Committee
  - Reviewed draft MOU with Moulton Niguel Water District (MNWD) to study issue
  - Staff directed to review the storage needs of OCWD and consider a letter from the Groundwater Producers



# History

- August 2018 WIC
  - Reviewed OCWD storage needs provided
  - Recommended lowering the Accumulated Overdraft target range
- October 2018 Board – Established OCWD MNWD ad-hoc Committee
- October/November 2018
  - Two meetings of ad-hoc Committee
  - Developed attached agreement





# MNWD Agreement Terms

- Develop an RFP (attached) and hire a consultant to study existing and potential new conveyance options for delivery of water from OCWD to MNWD.
- Develop a second RFP (attached) and hire a second consultant to review existing water industry storage agreements to provide a bench mark and market analysis of what other water agencies have paid for storage programs.
- OCWD would administer the two consultant RFP and contracts.
- MNWD agrees to fund the consultants work.



# MNWD Agreement Terms

- The timeline for completion of the scope of work is estimated at 6 months from execution of the Agreement.
- The existing ad-hoc committee created by OCWD and MNWD would work collaboratively to carry out the scope of the Agreement.
- OCWD and MNWD would meet and work with other interested stakeholders to share information and seek input on this issue.
- OCWD is committing to consider a small short-term pilot water storage program once the studies are completed.



# Potential Pilot Storage Program

- ~ 5,000 afy
- ~ Five year duration
- Store imported water supplies from the Metropolitan Water District
- Water available for MNWD use during drought periods/emergencies



## Why Consider South Orange County (SOC) Water Agency Storage Accounts?

- OCWD can generate additional income to offset future expected Replenishment Assessment increases
- Relatively small amount of storage space - No impact to OCWD Operations
- Cost effective way for SOC agencies to secure their water supply reliability needs



# Summary of Existing Storage/Emergency Programs

## 1. MWD CUP Storage Program

- 66,000 af
- OCWD received
  - ~ \$32 M from MWD
  - ~ \$20 M from Producers
- Expires in 2028

## 2. SOC Emergency Service Agreement

- 50 cfs for up to 30 days (~3,000 af)
- No compensation
- Expires in 2033

## 3. Santa Ana River Conservation & Conjunctive Use Program

- 36,000 to 45,000 af
- To Be Determined



# Producers Summary

- Discussed issue at several meetings in spring of 2018 and fall of 2019
- January 2018 letter from the Groundwater Producers attached
  1. ~~Evaluate the current and future operating parameters of the basin;~~
  2. Identify potential measures to optimize the storage of water in the basin for the benefit of the Producers;
  3. Consider if / how storage accounts could be implemented for Producer agencies; then
  4. Consider if / how potential storage accounts could be implemented for non-Producer agencies to the primary benefit of the Producer agencies.
- Continue Producer discussions - report back to Board in March or April 2019
- Previous separate letters from IRWD and City of Anaheim





# Recommendation

Agendize for January 16 Board meeting:  
Authorize:

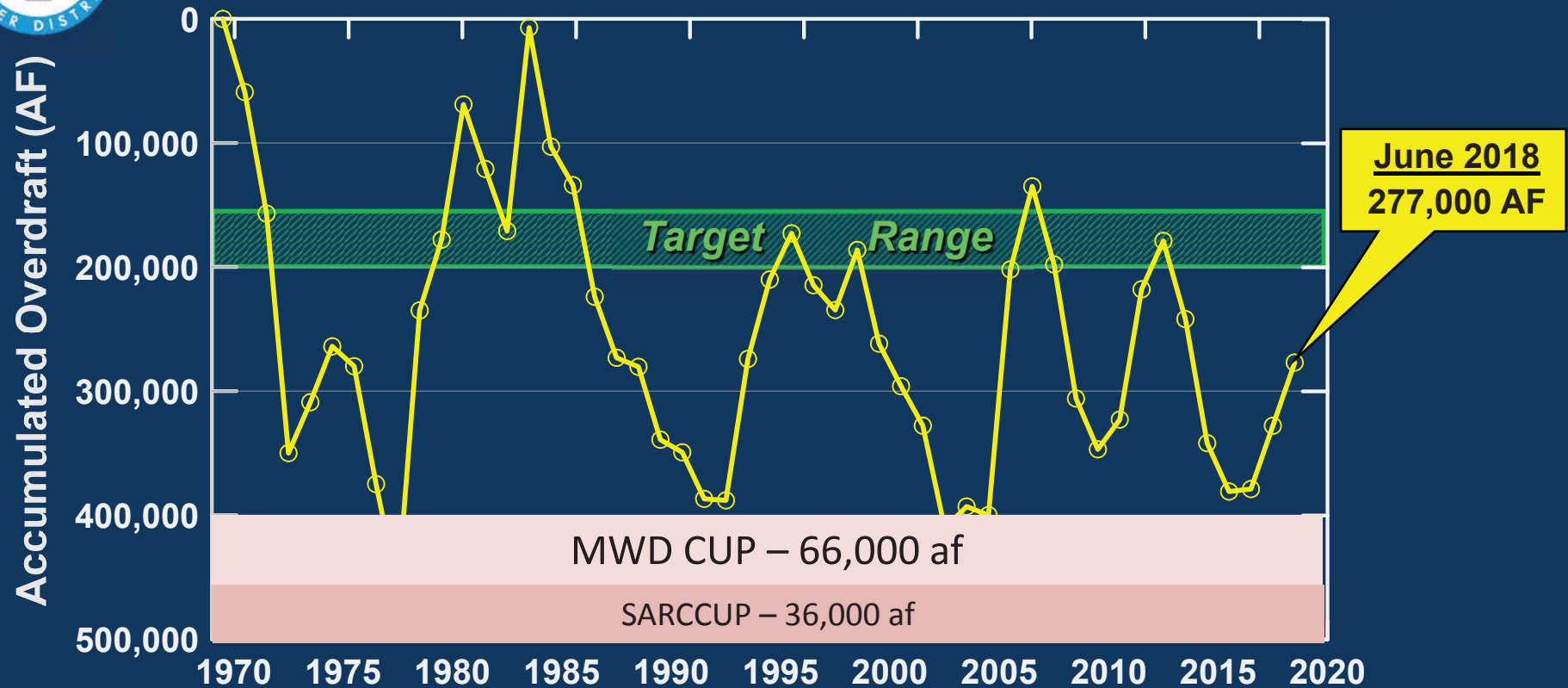
- (1) execution of the attached Agreement with the Moulton Niguel Water District and
- (2) issuance of the two attached requests for proposals



# End of Presentation



## Accumulated Overdraft Since 1969





# General Schedule/Potential Board Actions

Task	Date
Consider Agreement/Issue RFP	January 2019
Hire Consultants to Study Issues	March 2019
Consider Small Pilot Storage Program	~November 2019



# Metropolitan Water District Conjunctive Use Program (CUP)

- 25 year program approved in 2003
- Terminates in 2028
- MWD can store 66,000 af of water
- Store 16,500 afy / Extract 22,000 afy
- MWD able to cycle the program ~ 3 times
- OCWD compensation from MWD - \$32 million
- Total OCWD compensation ~ \$53 million



## Santa Ana River Conservation & Conjunctive Use Program (SARCCUP)

- 180,000 af storage program in the SAR Watershed
- OCWD, EMWD, SBVMWD, WMWD, IEUA
- OCWD portion - 36,000 af
- \$100 million total cost / \$50 million state grant received
- Store excess SBVMWD water supplies
- Provide “Extraordinary Supplies” during a MWD allocation
- Expect formal consideration to approve in spring 2019
- 25? Year program





# South Orange County (SOC) Emergency Services Agreement

- Approved in 2006 - Terminates in 2033
- Provide water supplies to SOC agencies via IRWD water system during emergency events
- Up to 50 cfs for 30 days (3,000 af) – small program
- IRWD still needs to comply with annual BPP/BEA
- IRWD ability to provide SOC water decreasing as demands within their system increase
- Water sent to SOC considered imported water
- No OCWD compensation – SOC agencies reimbursed IRWD for necessary improvements to send water south



# District Act – Section 2.1

- **Groundwater storage; agreement between entity and district; use priorities; limitation of parties; waivers of replenishment and basin quality assessments; allocation consideration written finding**
- (a.) All groundwater storage by entity other than the district shall be conducted pursuant to a groundwater storage agreement between that entity and the district.
- (b.) Use of the groundwater basin within the district for the purpose of replenishing and managing the groundwater supplies of the district shall have priority over the use of the groundwater basin for storage of water.
- (c.) The groundwater storage agreement shall be limited to public and private entities distributing water to consumers for domestic, municipal, industrial, and agricultural use within their boundaries, which are located wholly or partially within the district, except that, where the primary benefits accrue to persons or property within the District, the agreement may include other public and private entities, including, but not limited to, the Metropolitan Water District of Southern California and the Department of Water Resources.
- (d.) The groundwater storage agreements may include provisions that provide for the waiver of replenishment assessments or basin equity assessments, or both, on stored water that is extracted pursuant to the agreement.
- (e.) In allocating the use of the groundwater basin storage space, the district shall consider and protect the quality of the groundwater and the reasonable water supply needs of the district. The district shall impose such limitation on the quality of the water to be stored as shall be necessary to protect the quality of the groundwater in the district.
- (f.) The district shall include written findings supporting its conclusions in its record of consideration of a proposed groundwater storage agreement.



## District Act Section 2.1 – Groundwater Storage Agreements - Paragraph C

- The groundwater storage agreement shall be limited to public and private entities distributing water to consumers for domestic, municipal, industrial, and agricultural use within their boundaries, which are located wholly or partially within the district, except that, where the primary benefits accrue to persons or property within the District, the agreement may include other public and private entities, including, but not limited to, the Metropolitan Water District of Southern California and the Department of Water Resources.

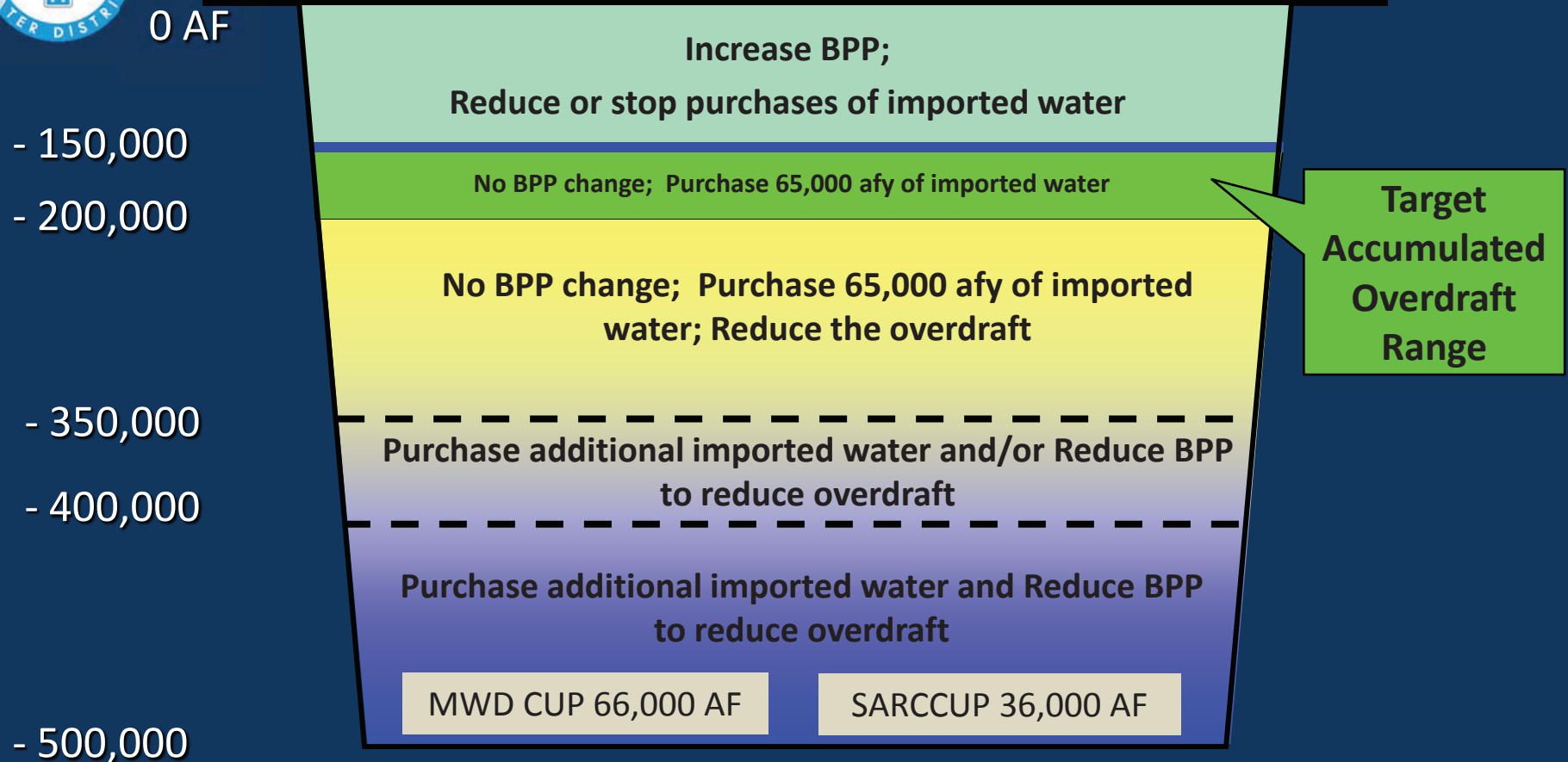


# Extraordinary Supplies

- Imported Water Supplies become scarce
- MWD decides to allocate imported water - Complicated formula
- Allocation is based upon a water agencies need for water
- Accounts for local water supplies – the more local supplies you have reduces your need for imported water
- With the MWD water provided and the available local water supplies, an agency may only have 80 to 90% of water supplies needed to serve its customers
- “Extraordinary” water supplies are additional



# Proposed Basin Management Policies





December 4, 2017

Mr. Michael Markus, P.E.  
General Manager  
Orange County Water District  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Proposed Pilot Water Storage and Exchange Program in Orange County

Mike:

We have received a draft agreement describing a proposed Pilot Water Storage and Exchange Agreement between Orange County Water District (OCWD), Moulton Niguel Water District (MNWD) and Irvine Ranch Water District (IRWD) sent on November 16, 2017. While IRWD has been and remains an advocate for storage accounts and exchange programs within the Orange County Groundwater Basin (the Basin) to improve local water supply reliability, we do not believe that an initial pilot program with one non-groundwater producer agency is an appropriate approach.

IRWD's recommended approach to developing a Pilot Water Storage and Exchange Program within the Basin is as follows:

1. Concepts, policies, terms, and processes for implementing any water storage and exchange programs must first be vetted with the Groundwater Producer Agencies;
2. Before developing a program to benefit water agencies outside of the Basin, a storage and exchange program should first be developed for potential participation by interested Producer Agencies, recognizing that each of these agencies has a vested interest in maximizing the use of storage in the Basin;
3. A water storage and exchange program to benefit South County (non-Basin) agencies can be developed after the needs of the Producer Agencies have been met; and
4. The implementation of any storage and exchange programs must be consistent with the OCWD District Act, the requirements of the California Environmental Quality Act and should not infringe upon the jurisdiction of other Orange County agencies.

When developing terms for a potential water storage and exchange program, an In-lieu Exchange Program, as described in IRWD's August 10, 2016 letter on this topic (attached) should be considered as an option.



Mr. Mike Markus, General Manager  
Orange County Water District  
December 4, 2017  
Page 2

Furthermore, to the extent a water storage and exchange program would require the use of IRWD facilities, the following considerations must be addressed while developing such a program:

1. Existing contractual arrangements, such as the Dyer Road Well Field Agreement and the South County Interconnection Agreement, would take priority over any subsequent arrangements;
2. Use of IRWD's infrastructure should provide for the recovery of a proportional share of IRWD capital, operations, maintenance and replacement costs; and
3. Use of IRWD infrastructure by other agencies is subject to current and future availability, with the needs of IRWD's customers taking top priority.

Finally, with the current legal dispute between IRWD and OCWD still pending resolution, I recommend that IRWD and OCWD staff and legal counsel work to identify issues associated with the legal action that could have a bearing on the development of terms for storage and exchange program(s).

IRWD supports efforts to improve the water supply reliability of all agencies in Orange County. In addition to the meeting described above, I also believe that an Ad Hoc meeting with a few members from the OCWD Board and two members of the IRWD Board to discuss concepts of water supply reliability could be beneficial as well. Feel free to give me a call at (949) 453-5590 if you wish to pursue this matter further at this time.

Sincerely,



Paul A. Cook, P.E.  
General Manager

Attachment



## IRVINE RANCH WATER DISTRICT

15600 Sand Canyon Avenue • P.O. Box 57000 • Irvine, California 92619-7000 • (949) 453-5300 • www.irwd.com

August 10, 2016

Mr. Mike Markus, P.E.  
General Manager  
Orange County Water District  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Methods to Restore Groundwater Levels in the Orange County Basin

Mike:

At the July 2016 Joint Planning Committee meeting of the Board of Directors of Orange County Water District (OCWD) and Municipal Water District of Orange County (MWDOC), IRWD was requested to prepare an overview of how groundwater levels in the Orange County Basin could be restored to traditional (much higher) levels. The purpose of this letter is to share concepts for expanding on the list of approaches to refilling the Basin as follows:

1. Lower the Basin Production Percentage (BPP), in accordance with the OCWD Board-approved Groundwater Management Plan.
2. Purchase the maximum amount of imported water available to benefit the basin *directly* through recharge and *indirectly* through a traditional in-lieu program.
3. Establish a new In-lieu Exchange Program through which groundwater producer agencies can voluntarily store water without financially impacting OCWD.

### Management of the Basin Production Percentage (BPP):

In 2013, the OCWD Board of Directors adopted a policy to establish a stable BPP with the goal of achieving an average BPP of 75%. For the purpose of sustainably managing the Basin for current and future generations, OCWD has established within its Groundwater Management Plan the Storage Management Actions presented in the following table:

Orange County Water District  
Groundwater Basin Storage Management Actions\*

Accumulated Overdraft	Basin Management Actions to Consider
Less than 100,000 acre-feet	Raise the BPP.
100,000 to 300,000 acre-feet	Maintain and/or raise BPP towards 75% goal.
300,000 to 350,000 acre-feet	Seek additional supplies to refill Basin and/or lower the BPP.
Greater than 350,000 acre-feet	Seek additional supplies to refill Basin and lower the BPP.

\* OCWD Board-adopted Policy

The current estimated accumulated overdraft of the Basin is 370,000 acre-feet (AF). By June 30, 2017, OCWD staff predicts that the accumulated overdraft will be reduced to 353,000 AF in part due to purchases of 50,000 AF of water from Metropolitan Water District of Southern California (Metropolitan). These purchases are included in OCWD's Fiscal Year 2016-17 Operating Budget.

#### Taking Action Now:

In accordance with OCWD's Groundwater Management Plan, actions should have already been taken to reduce the BPP and to seek additional supplies of water to fill the basin. We understand that OCWD is currently taking water from Metropolitan at full direct recharge capacity. OCWD could be taking full advantage of additional existing supplies that are currently available from Metropolitan through the implementation of a multi-year in-lieu recharge program. Under such a program, the Producers that volunteer to participate would pay OCWD the Replenishment Assessment (RA) (\$402 per acre-foot) and the avoided cost of pumping (\$97 per acre-foot) while OCWD would pay the cost of the Full Service Treated Tier-1 water and associated costs to Metropolitan (\$1,044 per acre-foot). Since the Producer would have paid to OCWD the RA for the same amount of water had it been produced from the Basin, the payments to the OCWD by each participating producer would not offset OCWD costs of the full-service water from Metropolitan. This would result in a net cost to OCWD of \$947 per acre-foot (\$1,044 – \$97) that would need to be budgeted for and recovered through corresponding increases in the Replenishment Assessment (RA).

To implement an in-lieu recharge program in a way that is cost neutral to OCWD, it is recommended that OCWD consider implementing an In-lieu Exchange Program as described below.

#### Conceptual In-lieu Exchange Program:

The OCWD Act allows for the execution of exchanges in the Basin. A hybrid in-lieu recharge program could be created that incorporates exchange concepts for the purpose of allowing individual producers to improve reliability by storing water in the Basin. Conceptual principles associated with the implementation of such an In-lieu Exchange Program are described in the following:

- The Producers would have the option to voluntarily purchase Full-Service Tier-1 treated water from Metropolitan in-lieu of pumping groundwater.
- The reduction in pumping by the participating Producers would result in additional water in storage in the aquifer that would be received by OCWD in exchange for the Producers' right to recover an equivalent amount of water in the future to offset future pumping above the BPP.
- The participating Producers would pay Metropolitan the cost of the Full-Service Tier-1 treated water and associated costs (\$1,044 per acre-foot).
- The participating Producers would also pre-pay the RA to OCWD for the future recovery of the water at the current OCWD Board adopted rate (\$402 per acre-foot).

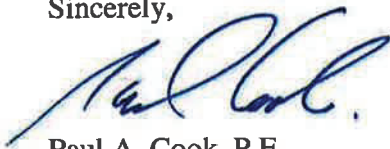
Mr. Mike Markus, P.E., General Manager  
Orange County Water District  
August 10, 2016  
Page 3

- OCWD would provide the participating producers a credit for the future recovery of the water for use in-lieu of paying RA and Basin Equity Assessments on future pumping above the BPP.
- OCWD could extinguish the credits by reimbursing a participating Producer for the Full-Service Tier-1 treated rate that was previously paid by the Producer (\$1,044 per acre-foot).
- Under this program, OCWD would be cost-neutral.

An overview of the how such an In-lieu Exchange Program would work financially is provided in Exhibits "A" and "B". This concept would provide a creative solution to increasing the amount of water stored in the Basin, improving water supply reliability to the producing agencies, while ensuring that OCWD remains cost-neutral.

We hope that the concepts described above will assist you in your discussion with the OCWD Board of Directors Administration / Finance Issues Committee meeting on August 11, 2016 where you will be presenting options to refill the Basin. We look forward to working with you and your staff as well as the interested producer agencies in refining the In-Lieu Exchange Program concepts presented above. Please contact me at (949) 453-5590 or [cook@irwd.com](mailto:cook@irwd.com) so that we can schedule a meeting to discuss these concepts.

Sincerely,

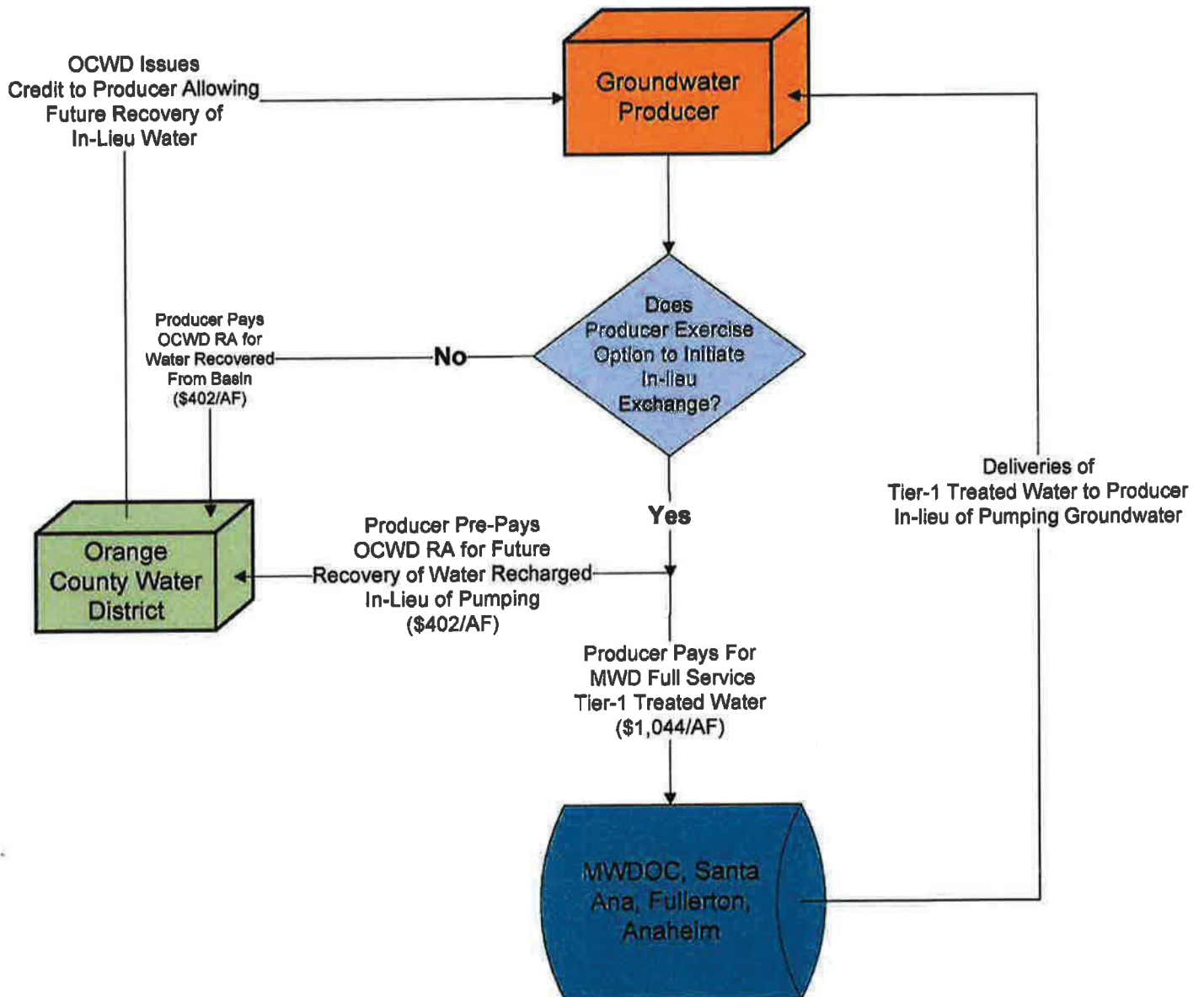
A handwritten signature in blue ink, appearing to read "Paul A. Cook".

Paul A. Cook, P.E.  
General Manager

## EXHIBIT "A"

### Example of Recharge of Water Through In-Lieu Exchange

#### - Costs of Recharge -

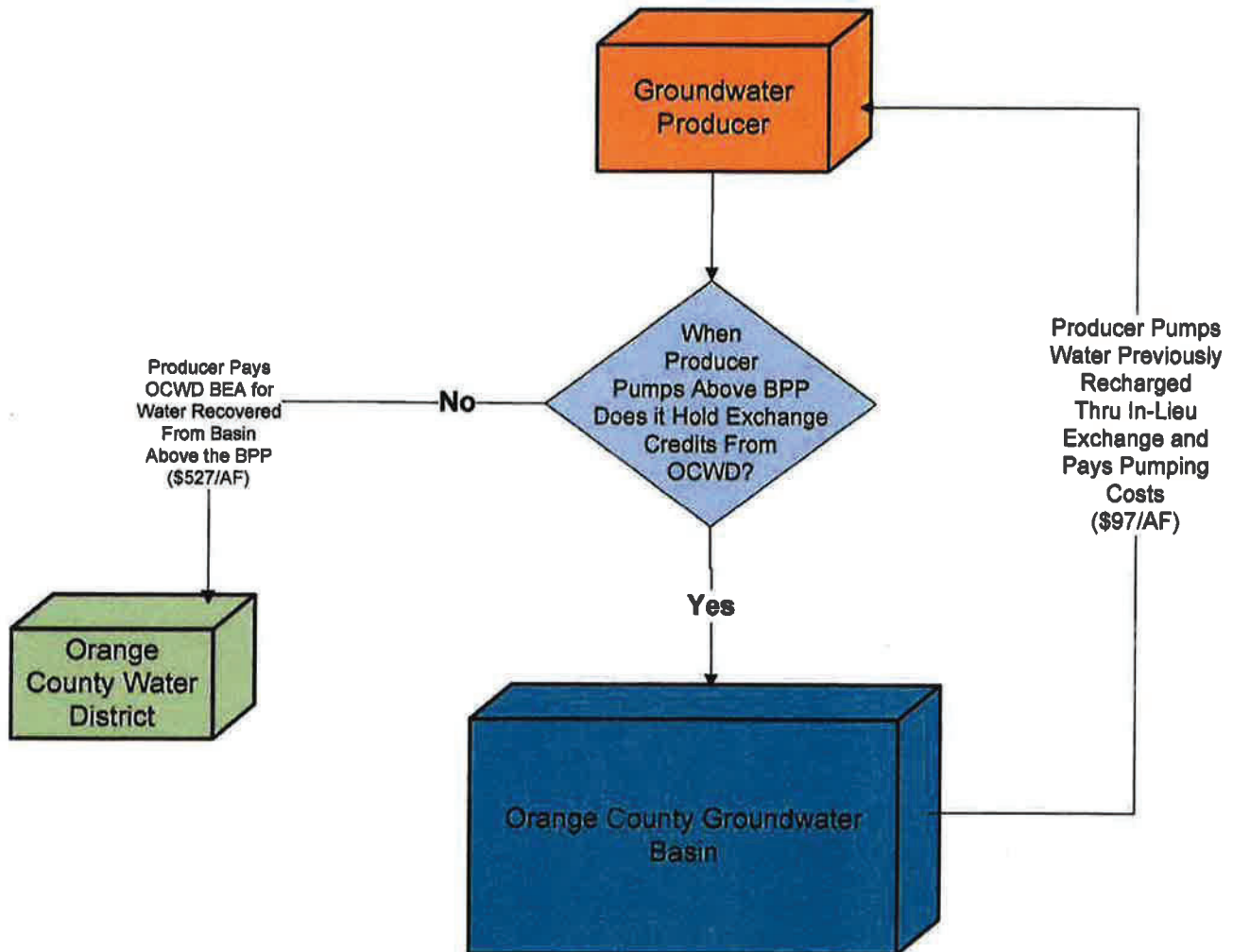




## EXHIBIT "B"

### Example of Recovery of Water Recharged Through In-Lieu Exchange

*- Costs of Recovery -*







City of Anaheim  
**PUBLIC UTILITIES DEPARTMENT**  
Administration

December 11, 2017

Mr. Michael Markus, P.E.  
General Manager  
Orange County Water District (OCWD)  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Proposed South Orange County Pilot Water Storage and Exchange Programs

Mr. Markus,

This letter addresses the upcoming Water Issues Committee agenda item for consideration of proposed South Orange County Pilot Water Storage and Exchange Programs.

I recommend the Committee defer action on this agenda item at this time. While OCWD staff's recommendation may have merit at some point, OCWD should first consider allowing water storage and exchange programs with its member agencies before considering such programs for agencies outside the basin.

I understand several of the Groundwater Producers would be interested in discussing the potential merits of water storage and/or exchange programs with the District. These types of programs would improve local supply reliability and potentially provide OCWD with additional resources for the benefit of the basin and all its member agencies.

While the Producers fully support the OCWD Board's prior establishment of the emergency program for South County, I believe expanding or supplementing it to provide additional storage or exchange provisions would be premature. Instead, I recommend OCWD first engage with the Groundwater Producers to discuss the potential merits of such programs with your member agencies.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Moore".

Michael Moore, P.E.  
Assistant General Manager, Water

# Orange County Groundwater Producers

January 31, 2018

## AGENCIES

City of Anaheim  
City of Buena Park  
East Orange County WD  
City of Fountain Valley  
City of Fullerton  
City of Garden Grove  
Golden State Water Co.  
City of Huntington Beach  
Irvine Ranch WD  
City of La Palma  
Mesa Water District  
City of Newport Beach  
City of Orange  
City of Santa Ana  
City of Seal Beach  
Serrano Water District  
City of Tustin  
City of Westminster  
Yorba Linda Water District

Mr. Michael Markus, P.E.  
General Manager  
Orange County Water District  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Proposed Memorandum of Understanding for a Water Storage and Exchange Program between OCWD and Moulton Niguel Water District

Mike:

On January 25, 2018, your staff sent a reminder notice for the next meeting of the Orange County Groundwater Producer Agencies to discuss the concept of storage accounts in the Orange County Groundwater Basin. This notice included a draft of a potential Memorandum of Understanding (MOU) between OCWD and Moulton Niguel Water District (MNWD). As was clearly articulated at the first meeting of the Producers regarding this topic on January 10, 2018, the Producers strongly believed that executing an MOU with MNWD at this time is not appropriate. In this letter, all 19 Producer Agencies are unanimously requesting that OCWD table this proposed MOU with MNWD from further consideration. We also recommend that OCWD undertake a process for evaluating the potential for storage accounts using the following process:

- 1) Evaluate the current and future operating parameters of the Basin;
- 2) Identify potential measures to optimize the storage of water in the Basin for the benefit of the Producers;
- 3) Consider if / how storage accounts could be implemented for Producer agencies; then
- 4) Consider if / how potential storage accounts could be implemented for non-Producer agencies to the primary benefit of the Producer Agencies.

Concepts for water storage accounts in the Orange County Groundwater Basin have been discussed for many years, including the “MWD CUP” with Metropolitan Water District of Southern California and a potential “SARRCUP” program. Other storage programs could be considered in the future, but only after considering all relevant factors. This analysis, which we believe can be completed by the very knowledgeable OCWD staff, should evaluate the operating parameters of the Basin including seasonal fluctuations, current and future sources of water, demands, recharge capacity, and current and future facilities, just to name a few considerations. The Producers are ready, willing, and able to assist in this effort, providing data and other information as requested.

The Groundwater Producer Agencies of Orange County support efforts to improve the water supply reliability of all agencies in Orange County. We look forward to working in conjunction with OCWD staff to maximize the use of the tremendous water resource asset known as the Orange County Groundwater Basin.

Mr. Mike Markus, General Manager  
Orange County Water District  
January 31, 2018  
Page 2

Staff from the following agencies have each provided concurrence with the statements and recommendations contained in this letter:

**Concurrence Provided at the  
January 31, 2018 Producer Meeting**

City of Anaheim  
East Orange County Water District  
City of Fountain Valley  
City of Fullerton  
Golden State Water Company  
City of Huntington Beach  
Irvine Ranch Water District  
Mesa Water District  
City of Newport Beach  
City of Orange  
City of Santa Ana  
City of Seal Beach  
Serrano Water District  
City of Westminster  
Yorba Linda Water District

**Concurrence provided after the  
January 31, 2018 Producer Meeting**

City of Buena Park  
City of Garden Grove  
City of La Palma  
City of Tustin

cc: OCWD Board of Directors

## **SOUTH ORANGE COUNTY AGENCIES' GROUP**

February 20, 2018

Mr. Michael Markus, P.E.  
General Manager  
Orange County Water District  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Support for Proposed Analysis for Potential Storage Accounts in the Orange County Groundwater Basin

Dear Mr. Markus:

The undersigned agencies are very appreciative of the recent discussion among the Groundwater Producer Agencies about water supply reliability and emergency supplies. As you know, by agreement with Orange County Water District (OCWD), Municipal Water District of Orange County, and Irvine Ranch Water District, many agencies in South Orange County have the ability to exchange water in an emergency through the Dyer Road Wellfield for up to 30 days. Over the years, OCWD and the South County agencies have discussed various alternatives for storage or exchange agreements and emergency supplies utilization of the groundwater basin as a potential alternative delivery of emergency water and the storage or exchange of longer term emergency supplies.

Recently the OCWD Producer Agencies suggested storage programs could be considered in the future, but only after considering several factors and issues. The proposed analysis would evaluate the operating parameters of the Basin including seasonal fluctuations, current and future sources of water, demands, recharge capacity, and current and future facilities using the following process:

- 1) Evaluate the current and future operating parameters of the Basin;
- 2) Identify potential measures to optimize the storage of water in the Basin for the benefit of the Producers;
- 3) Consider if / how storage accounts could be implemented for Producer agencies; then
- 4) Consider if / how potential storage accounts could be implemented for non-Producer agencies to the primary benefit of the Producer Agencies.

We believe this is a prudent approach and would all be willing participants in the discussions on future sources of water and non-producer storage accounts, when the time is appropriate. We appreciate your periodic attendance and participation in discussions at the South County Agencies' Group and welcome the opportunity to have further discussions.

*SOUTH ORANGE COUNTY AGENCIES' GROUP CONSISTS OF MEMBERS AND REPRESENTATIVES FROM*

City of San Clemente • City of San Juan Capistrano • El Toro Water District • Emerald Bay Service District •  
Irvine Ranch Water District • Laguna Beach County Water District • Moulton Niguel Water District •  
Santa Margarita Water District • South Coast Water District • Trabuco Canyon Water District

## **SOUTH ORANGE COUNTY AGENCIES' GROUP**

We support efforts to improve the water supply reliability of all agencies in Orange County. We look forward to working with OCWD staff to maximize the use of the tremendous water resource asset known as the Orange County Groundwater Basin.

Staff from the following agencies have each provided concurrence with the statements and recommendations contained in this letter:

*City of San Juan Capistrano*

*El Toro Water District*

*Emerald Bay Service District •*

*Irvine Ranch Water District*

*Laguna Beach County Water District*

*Santa Margarita Water District*

*South Coast Water District*

*Trabuco Canyon Water District*

cc: OCWD Board of Directors

*SOUTH ORANGE COUNTY AGENCIES' GROUP CONSISTS OF MEMBERS AND REPRESENTATIVES FROM*

*City of San Clemente • City of San Juan Capistrano • El Toro Water District • Emerald Bay Service District •  
Irvine Ranch Water District • Laguna Beach County Water District • Moulton Niguel Water District •  
Santa Margarita Water District • South Coast Water District • Trabuco Canyon Water District*

April 6, 2018

Mr. Michael Markus, P.E.  
General Manager  
Orange County Water District  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Support for Proposed Analysis for a Potential Pilot Exchange Agreement in the  
Orange County Groundwater Basin

Dear Mr. Markus:

Moulton Niguel Water District (MNWD) appreciates the visionary leadership by Orange County Water District's (OCWD) Board of Directors to amend its policy on local water supplies and begin discussions for a potential pilot groundwater exchange program. Over the years, OCWD has been a key partner of South Orange County in jointly signing on to the Emergency Services Agreement in 2006 to provide South Orange County including MNWD with the ability to exchange water in an emergency, at no compensation to OCWD.

As a follow up to the policy amendment, MNWD has been working with your staff to develop a memorandum of understanding to jointly study opportunities in the basin for both OCWD members and non-OCWD members, where MNWD would help fund the cost of these studies to gain information and evaluate the feasibility of future opportunities. Understandably, these matters take time, and we appreciate the willingness of the OCWD Board and its member agencies to engage with MNWD in discussing the potential for opportunities within the groundwater basin that could provide county-wide benefits, including economic benefits to all of the OCWD member agencies.

Recently, several agencies in South Orange County sent a joint letter expressing their similar appreciation for your efforts. The concept of an exchange agreement is not new; however with Metropolitan Water District recently noting that over 1.2 million acre feet have been depleted from groundwater basins over the past decade in Southern California, the time is ripe to work towards optimization of local resources like the Orange County Basin. MNWD acknowledges the historical investment that OCWD and its member agencies have paid in their proactive management of the basin and applauds the past work such as the Groundwater Replenishment System.

BOARD OF  
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DIRECTOR

Scott Colton  
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Larry Lizotte  
DIRECTOR

Brian S. Probolsky  
VICE PRESIDENT





Any program would need to ensure that OCWD members receive an appropriate benefit and that it improves the overall health of the basin.

In recent discussions, a number of key factors were suggested to be evaluated as part of the development of a pilot exchange agreement. MNWD supports the process and following analysis for consideration by OCWD Board and staff, if appropriate:

- 1) Evaluate the current and future operating parameters of the Basin;
- 2) Identify potential measures to optimize the storage of water in the Basin for mutual county-wide benefit;
- 3) Consider if / how exchange agreements could be implemented

We appreciate the ongoing discussions as well as OCWD's willingness to consider further analysis and support the evaluation of future sources of water as well as exchange agreements. MNWD supports your efforts to work collaboratively across the county to increase the water reliability for all Orange County agencies. We look forward to working with your staff and further discussions on the potential opportunities towards county-wide benefit.

Sincerely,



Joone Lopez  
General Manager

cc: OCWD Board of Directors





**ACTION ITEM**  
January 16, 2019

**TO:** Board of Directors

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

**FROM:** Robert Hunter, General Manager  
Staff Contact: Karl Seckel/Charles Busslinger

**SUBJECT:** Receive and File Final Report: 2018 Orange County Water Reliability Study

**STAFF RECOMMENDATION**

---

Staff recommends the Planning & Operations Committee recommends the Board receive and file the FINAL report for the 2018 Orange County Water Reliability Study. Two comments were received over the past month as outlined below. Upon action by the Board, staff will incorporate these and any other non-substantive changes and publish the final report. (Because the changes were deemed minor, the version being considered is the same as was posted in December – copies are available at the District office and are posted on the District website; if individual copies are desired, please let Karl Seckel know). The report link is below:

[https://www.dropbox.com/s/0ksjez3sam5hdvz/2018%20OC%20Study%20Report\\_Final%20Draft%20with%20Appendices\\_12-12-2018.pdf?dl=0](https://www.dropbox.com/s/0ksjez3sam5hdvz/2018%20OC%20Study%20Report_Final%20Draft%20with%20Appendices_12-12-2018.pdf?dl=0)

**COMMITTEE RECOMMENDATION**

---

Committee will discuss this item on January 14, 2019 and make a recommendation to the Board.

**SUMMARY**

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The report was sent to the member agencies in December; the Board took action to receive and file the final DRAFT Report and allow comments until the January 14 P&O Committee. A reminder was sent to the member agencies in early January. Two comments were received; these were:

<b>Budgeted (Y/N):</b>	Budgeted amount:	Core ✓	Choice ____
<b>Action item amount:</b>	Line item:		
<b>Fiscal Impact (explain if unbudgeted):</b>			

1. Include in the report a list of people that worked on the report.
2. EOCWD requested that their Peters Canyon Treatment Plant Project be noted in the study as “not being included in the evaluations”, in a manner that certain OCWD projects were noted as not being included. Staff has requested EOCWD to provide detailed information on their project prior to the end of the January. Staff agreed to use the information to compare the cost and reliability of the emergency supplies provided by the Peters Canyon Treatment Plant being delivered to SOC with other options. The Peters Canyon Treatment Plant source water is untreated MET water from the Santiago Lateral and the Baker Pipeline. The water would be treated, conveyed to and pumped into the East Orange County Feeder No. 2 by EOCWD, and delivered to agencies in SOC. The cost and reliability of the Peters Canyon emergency supplies would be compared to the emergency supplies from the IRWD South County Regional Interconnection and to a direct pump-in of the EOCF#2 (work currently underway between MWDOC, OCWD and IRWD).

Both of these comments can be easily incorporated into the Final Report and the emergency evaluation can be included in the work underway.

## GENERAL MANAGER'S REPORT OF STAFF ACTIVITIES JANUARY 2019

<b>MWDOC Agencies Managers Meeting</b>	<p>The December 2018 meeting was cancelled.</p> <p>Next meeting will be held January 17, 2018.</p>
<b>Meetings</b>	<p>Charles Busslinger attended the December 13, 2018 Santiago Aqueduct Commission meeting to provide a short update on MWDOC's preliminary efforts with MET to optimize the pending shutdowns of the AMP which will be necessary for the PCCP relining project. These shutdowns are still a few years away.</p> <p>Charles Busslinger participated in conference calls with CalDesal on December 21, 2018 and January 4, 2019 regarding the pending Triennial Review of the California Ocean Plan. DWR will be holding a public scoping workshop on January 14, 2019 in Costa Mesa to solicit comments about changes to the Ocean Plan. CalDesal is urging DWR to leave the ocean desalination portion of the Plan 'as is' as no permits have been issued for ocean desalination plants since the Ocean Plan Amendments came into effect and there is no experiential basis for making changes at this time.</p> <p>Charles Busslinger participated in the South OC IRWM Project Review Ad Hoc Committee meeting on January 7, 2019 to discuss project scoring criteria for the Prop 1 IRWM Grant Call for Projects. Small changes to the scoring criteria were made and the deadline for project submission was extended by one week.</p> <p>Karl Seckel and Charles Busslinger met with Dave Rebensdorf from San Clemente to provide an overview of the OC Water Reliability Study.</p>
<h2 style="margin: 0;">MET ITEMS CRITICAL TO ORANGE COUNTY</h2>	
<b>MET's Water Supply Conditions</b>	<p>The Department of Water Resources (DWR) in December set the initial State Water Project (SWP) "Table A" allocation at 10%. This allocation provides Metropolitan with approximately 191,150 AF in SWP deliveries this water year. DWR's approval considered several factors including existing storage in SWP conservation reservoirs, SWP operational regulatory constraints, and the 2019 contractor demands.</p> <p>On the Colorado River system, snowpack is measured across four states in the Upper Colorado River Basin. As of December 26, 2018, snowpack measured at 94% of normal for that date. The ongoing decline in the Colorado River watershed has impacted storage levels in Lake Powell and Lake Mead, which in turn affects the likelihood of surplus or shortage conditions in the future. The Bureau of Reclamation is projecting that there is a 0% chance of a shortage on the Colorado River in 2019, increasing to about 57% in 2020.</p>

MET's Water Supply Conditions - continued	With estimated total demands and losses of 1.63 million acre-feet (MAF), Metropolitan is projecting that demands will equal supply levels in CY 2018. Based on this, estimated total dry-year storage for Metropolitan at the end of CY 2018 will go down to 2.5 MAF.																																																				
MET's Finance and Rate Issues	<p>Water transactions through November were 10.6 TAF (\$16.5 million) lower than budget and 84.8 TAF higher than the 5-year average. The lower than budget is, is a result of reduced treated water transactions. However, water transactions and revenues are 79.3 TAF and \$50.5 million above last year's actuals as a result of increased untreated water transactions.</p> <div><h3>Monthly Water Transactions<sup>(1)</sup></h3><p>(AF in thousands)</p><table><thead><tr><th>Month</th><th>Actual FY18-19</th><th>Budget FY18-19</th><th>Actual FY17-18</th></tr></thead><tbody><tr><td>July</td><td>160</td><td>180</td><td>150</td></tr><tr><td>Aug</td><td>165</td><td>175</td><td>160</td></tr><tr><td>Sept</td><td>150</td><td>170</td><td>140</td></tr><tr><td>Oct</td><td>155</td><td>155</td><td>140</td></tr><tr><td>Nov</td><td>140</td><td>115</td><td>110</td></tr><tr><td>Dec</td><td>110</td><td>95</td><td>210</td></tr><tr><td>Jan</td><td>110</td><td>110</td><td>115</td></tr><tr><td>Feb</td><td>90</td><td>100</td><td>90</td></tr><tr><td>Mar</td><td>115</td><td>115</td><td>85</td></tr><tr><td>Apr</td><td>135</td><td>135</td><td>140</td></tr><tr><td>May</td><td>155</td><td>155</td><td>130</td></tr><tr><td>June</td><td>180</td><td>180</td><td>175</td></tr></tbody></table><p><sup>(1)</sup> Includes Water Sales, Exchanges, and Wheeling</p><p>Finance &amp; Insurance Committee      Item 7a    Slide 3      December 10, 2018</p></div>	Month	Actual FY18-19	Budget FY18-19	Actual FY17-18	July	160	180	150	Aug	165	175	160	Sept	150	170	140	Oct	155	155	140	Nov	140	115	110	Dec	110	95	210	Jan	110	110	115	Feb	90	100	90	Mar	115	115	85	Apr	135	135	140	May	155	155	130	June	180	180	175
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Colorado River Issues	<p><b><u>Drought Contingency Plan Development</u></b></p> <p>Since the October 10, 2018 posting of the four interstate Drought Contingency Plan (DCP) agreements on the Bureau of Reclamation’s website, representatives of water users and all seven Colorado River Basin States have been working to provide information and get feedback on the proposed DCP agreements through public meetings, updates to governing boards and briefings of legislators.</p> <p><a href="https://www.usbr.gov/dcp/">https://www.usbr.gov/dcp/</a>.</p> <p>In addition to the public outreach and input on the interstate DCP agreements, extensive work to develop necessary intrastate implementation agreements have occurred in both the Upper Colorado River and Lower Colorado River Basins (Lower Basin). Metropolitan has reached final agreement terms for implementation of the Lower Basin DCP in California with other Colorado River contractors in California, including Imperial Irrigation District, Palo Verde Irrigation District and Coachella Valley Water District. The intrastate process in Arizona has included</p>																																																				

<b>Colorado River Issues - continued</b>	<p>working through a range of complicated and controversial issues within that state. Representatives of the state of Arizona and Central Arizona Water Conservation District continue to diligently pursue resolution of the issues needed to get to an agreement for intrastate implementation of the Lower Basin DCP, however, the Arizona parties have not yet reached consensus on intrastate agreement terms.</p> <p>Both of Nevada's signatory governing entities gave their staff authority to sign the interstate DCP agreements. The Colorado River Commission of Nevada approved signing the DCP agreements at its November 13, 2018 meeting, followed by the Southern Nevada Water Authority's approval on November 15, 2018. Metropolitan and the other California entities are in the process of getting board approval of the DCP agreements.</p> <p>On December 13, 2018, at the Colorado River Water Users Association meeting, the Bureau of Reclamation Commissioner, Brenda Berman, stated that the basin states have until January 31, 2019 to sign the agreements. If unsigned by then, Arizona and California will have 30 days to submit their draft plans to the Bureau and the Bureau will complete the plans at their discretion.</p> <p><b><u>IID General Manager Resigns</u></b></p> <p>On November 26, IID announced that its longtime general manager, Kevin Kelly, will be resigning from IID, effective December 31 of this year. Mr. Kelly served as general manager for the agency since 2011, and worked to improve IID's relationship with Metropolitan during his tenure.</p>
<b>Bay Delta/State Water Project Issues</b>	<p><b><u>Science Activities</u></b></p> <p>On November 4-8, Metropolitan staff attended and gave a presentation at the North American Society of Environmental Toxicology and Chemistry 39th Annual meeting in Sacramento. The meeting covers the current research on contaminant effects and management of contaminants. Metropolitan's staff collaborated with researchers from UC Davis and state and federal fish agencies to conduct a study investigating factors that affect Delta smelt health and reproductive condition. The conference presentation, titled "Multiple stressor impacts from the San Francisco Estuary on the reproductive health of the threatened Delta smelt, <i>Hypomesus transpacificus</i>," reported that poor nutrition and health status of Delta smelt resulted in poor reproductive status. Study results also indicated that actions that would improve prey and reduce contaminants would significantly benefit Delta smelt.</p> <p>Metropolitan staff, in collaboration with researchers from the U.S. Geological Survey, ICF, RMA and San Francisco State University, is conducting an intensive field sampling for longfin smelt. The objective of the study is to quantify the stratification of longfin smelt due to water clarity. The results of the field study are expected early next year, and may explain the survey bias identified by researchers such as Dr. James Patterson at Oregon State University.</p> <p>Metropolitan staff is working with Tetra Tech to characterize the Delta outflow and salinity intrusion conditions in the early 20th century, in comparison with the conditions prior to when the Central Valley Project and State Water Project were built. This effort relies on the C&amp;H Sugar Company barge travel data and the Delta monthly inflow data published in early DWR bulletins. Re-constructed June through September Delta outflow, when normalized to unimpaired spring runoff conditions,</p>



<b>Bay Delta/State Water Project Issues - continued</b>	<p>was found to be systematically higher than subsequent pre-Shasta Dam (i.e. pre-project) summer outflow. Given known anthropogenic changes that were occurring during the early 20th century, including upstream irrigation development (particularly rice cultivation) and reservoir construction, increased summer water use is a reasonable explanation for this observed difference. However, this explanation was found to be incomplete and this observed difference can be partially attributed to other hydrologic drivers. This work was unable to detect a change in the system's flow-salinity response during this period; therefore, resulting trends in seawater intrusion are attributed primarily to changes in hydrology.</p> <p>Metropolitan staff continued participating in the Collaborative Science and Adaptive Management Program (CSAMP), including participation on the Collaborative Adaptive Management Team (CAMT). In November, CAMT considered options for developing a salmon science plan and a list of recommended salmon actions for CSAMP engagement. CAMT also received an update on the development of a Delta Smelt Science Plan.</p> <p><b><u>Delta Flood Emergency Management Plan</u></b></p> <p>In recent months, DWR has completed all planned rock deliveries to major DWR storage facilities at Stockton and Rio Vista. In addition to these stockpiles, DWR is placing containerized flood fight materials at Brannon Island near the central Delta, and is considering dispersing materials to other Delta locations. DWR has issued grants for local remedial stockpiles in the Delta through counties in coordination with reclamation districts. Communications for flood fighting operations have been facilitated by installation of a communication tower at Twitchell Island. The Delta Flood Emergency Management Plan is undergoing final internal and executive level review at DWR prior to completion.</p>
<b>MET's Ocean Desalination Policy and Potential Participation in the Huntington Beach Ocean (Poseidon) Desalination Projects</b>	<p><b><u>Poseidon Huntington Beach</u></b></p> <p>Poseidon continues working with the Santa Ana Regional Water Quality Control Board (SARWQCB) to renew and update its existing National Pollution Discharge Elimination System permit and comply with new regulations (referred to as the Ocean Plan Amendment) which were approved by the State Water Resources Control Board in May 2015.</p> <p>On October 1, 2018 SARWQCB notified Poseidon that their application for a revised ocean discharge diffuser design, which was required by the Ocean Plan Amendment, was complete. This was the second time the Regional Board notified Poseidon that its application was complete (the previous notification was on August 28, 2017). The Permit Streamlining Act (PSA) requires a responsible agency to approve or disapprove of an application within 180 days. Poseidon maintains that their application is subject to the PSA, while SARWQCB contends that this application is not subject to the PSA.</p> <p>Subsequently on December 6, 2018, SARWQCB notified Poseidon that Regional Board staff concluded that Poseidon has not adequately demonstrated that the use of slant well technology is infeasible at the Huntington Beach site, despite the previous notifications and meetings with Regional Board staff. Poseidon has rebutted the Regional Board's conclusion in a response letter dated December 11, 2018.</p>

	<p>Poseidon expects the SARWQCB to act on its permit in the next four to six months. Assuming approval, Poseidon would then seek a permit from the California Coastal Commission in 2019.</p>
<p><b>Use of East Orange County Feeder No. 2 for Conveyance of Groundwater and/or Poseidon Water</b></p>	<p>MWDOC has been meeting with MET staff to discuss various aspects of using the EOCF#2 to convey other sources of local water. This concept can include ocean desalination projects, and/or other local projects such as the groundwater pump-in to the EOCF#2.</p> <p>On August 31, 2018, MWDOC hosted a Water System Operations and Integration Workshop attended by technical staff from: MET's Water Quality team, MWDOC member agencies, and consultants. The workshop focused on the possible integration of multiple treated water sources into the OC water distribution system; particularly in the lower reaches of EOCF#2. The collaborative discussion identified a number of potential issues for follow-up. Staff and our consultant, Ed Means, are working through the workshop recommendations to develop a plan to address these issues.</p> <p>On October 17, 2018 MWDOC staff met with members of MET's Facilities Planning team to discuss the capabilities of and experiences with MET's water distribution system model (which is principally a hydraulic model). MWDOC staff began a discussion about the possibilities of leveraging the existing MET model data for inclusion into an OC water distribution model. The OC model concept is envisioned to include distribution pipelines in OC such as EOCF#2, AMP, Joint Regional Water Supply System (JWRSS), and South County Pipeline. The OC model concept would also include a water quality module to assist with the development of solutions to the issues identified during the Water Systems Operations and Integration Workshop. MET staff was generally favorable to the idea of sharing information, and are currently evaluating a number of possible alternatives that will be discussed with MET executive management.</p> <div data-bbox="477 1205 1344 1822"> </div>

<b>South Orange County Projects</b>	<p><b><u>SMWD Trampas Canyon Recycled Water Reservoir</u></b></p> <p>This project involves the construction of a 5,000-acre-foot recycled water storage reservoir and the various complementary facilities to support this reservoir. The construction of the Trampas Canyon Recycled Water Seasonal Storage Reservoir consists of three main components:</p> <ol style="list-style-type: none"> <li>1) Trampas Canyon Dam (Dam)</li> <li>2) Conveyance facilities to transport recycled water into and out of the Reservoir (Pipelines)</li> <li>3) Trampas Canyon Pump Station (Pump Station)</li> </ol> <p>The construction of the facilities is being completed in three phases:</p> <ol style="list-style-type: none"> <li>1) Preconstruction/Site Preparation for the Dam and Pump Station Construction</li> <li>2) Dam and Pipelines</li> <li>3) Pump Station</li> </ol> <p><b><u>PROJECT STATUS</u></b></p> <p><b><u>Preconstruction/Site Preparation</u></b></p> <p>The work to relocate various facilities integral to the existing mining operation was completed in December 2017. The relocation of the high-tension power lines that feed an existing major communication facility was completed in April 2018. The final relocation of AT&amp;T facilities were completed in May 2018, which was the final remaining activity for this phase.</p> <p><b><u>Dam and Pipelines</u></b></p> <p>The \$81M Construction Contract was awarded in December 2017 and is approximately 35% complete.</p> <p><b><u>Pump Station</u></b></p> <p>The preliminary design of this facility was resubmitted by AECOM in mid-December for District review and approval. The Design process is likely to continue thru the end of February 2019, and the project will likely be available to start the construction bidding process in March 2019. Completion of the construction is expected to be in February 2020, about two months ahead of the Reservoir and Dam completion.</p> <p><b><u>San Juan Watershed Project</u></b></p> <p>The Draft Environmental Impact Report (DEIR) public review period was closed for comments on February 23, 2018. Ultimately twenty-one comment letters were received with the major topics of concern being characterized as relating to:</p> <ul style="list-style-type: none"> <li>• Steelhead trout migration including the provisions of fish passages</li> <li>• Impacts on San Juan Creek Lagoon</li> <li>• Aesthetics and impacts of the various structures that may be required as part of the project on the surrounding neighborhoods</li> <li>• Sediment transport</li> </ul> <p>Legal review of the draft document has been completed. An approach for addressing the comments was developed amongst the team members with a new schedule also</p>
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<b>South Orange County Projects - continued</b>	<p>being developed. The additional technical studies of the issues listed above are being performed. The results will be incorporated into the Responses to Comments and brought to the Board for consideration of adopting the EIR.</p> <p><b><u>Other Information on South County Projects:</u></b></p> <p>If any agencies would like to have updates included herein on any projects within your service area, please email the updates to Karl Seckel at <a href="mailto:kseckel@mwdoc.com">kseckel@mwdoc.com</a></p>
<b>ENGINEERING &amp; PLANNING</b>	
<b>Orange County Reliability Study</b>	<p>Staff and CDM-Smith provided the final Reliability Study report to the Board for a “receive and file” action on December 19<sup>th</sup>.</p> <p>Spin off work from the Reliability Study to further analyze the Strand Ranch Extraordinary Water Supply program is now in progress.</p>
<b>South Orange County Emergency Service Program</b>	<p>Dudek continues to assist MWDOC and IRWD to determine if the existing IRWD South Orange County Interconnection capacity to provide emergency water to South Orange County can be expanded in capacity or extended beyond its current time horizon of 2030. Modeling and evaluation of a number of options for the IRWD system is required for the study effort. Dudek has forwarded the draft technical memorandum to IRWD and MWDOC and upon incorporation of comments will be looking to share the information with the SOC agencies in January/February 2019.</p>
<b>Strand Ranch Project</b>	<p>MWDOC is using the modeling from the Orange County Reliability Study to evaluate how “extraordinary supplies” from the Strand Ranch Project can be utilized by the MWDOC agencies to provide drought protection over the next 7 to 11 years or longer. The analysis is currently in progress.</p>
<b>MET Evaluation of Regional Storage Portfolio (ERSP)</b>	<p>MET Evaluation of Regional Storage Portfolio (ERSP).</p> <p>Metropolitan’s emergency water storage objective is based on the potential for major earthquake damage to the State Water Project and Colorado River aqueducts that transport imported water supplies to Southern California (following the San Andreas M7.8 ‘Great ShakeOut’ scenario developed by the US Geological Survey).</p> <p>MET has established a Member Agency Workgroup to consider updates to MET’s emergency storage objective, including:</p> <ol style="list-style-type: none"> <li>1. Updating emergency criteria,</li> <li>2. Revising the framework for determining emergency storage volume. The new framework would shift from a traditional single equation for determining emergency storage volume, to an updated evaluation that considers various combinations of criteria to determine a storage amount that provides an envelope of alternatives for MET’s emergency storage that could provide reliability during the outage period.</li> <li>3. Proposed periodic re-evaluation of emergency storage volume to coincide with completion of each new IRP (every 5 years).</li> </ol>

<b>MET Evaluation of Regional Storage Portfolio (ERSP) - continued</b>	<p>MET released a White Paper on October 29, 2018 to member agencies for their review and feedback. The paper discusses a methodology for review and update of emergency criteria and re-evaluation of Metropolitan's emergency storage.</p> <p>Included in the proposed outage period criteria is:</p> <ul style="list-style-type: none"> <li>A. Recognition that an outage on the SWP could exceed previous estimates of six months (now one to two years), and</li> <li>B. Incorporation of increased operational flexibility of the MET system which was demonstrated during the last drought. Some areas in the MET's service area that normally receive SWP water from the East Branch could be served by delivering DVL water to Mills through the Inland Feeder/Lakeview Pipeline intertie.</li> </ul> <p>These changes modify the Emergency Outage Criteria from a minimum/ maximum outage criteria to an 'effective outage' duration which better represents conditions.</p> <p>A third Workgroup meeting was held November 1, 2018 which continued the discussion on updating emergency storage criteria and re-evaluation of Metropolitan's Emergency Storage Requirements. Based on these discussions, it appears as if MET staff will only be making marginal changes in the existing emergency storage recommendations.</p>
<b>Doheny Ocean Desalination Project</b>	<p>South Coast WD is still working on the response to comments portion of their Doheny Ocean Desalination Project Draft Environmental Impact Report (EIR). Additional modeling work has been required to respond to some of the comments; they anticipate a "spring" completion of the Final EIR. Consultant GHD is also working on an updated Coastal Hazard Technical Study to address comments received.</p> <p>South Coast WD staff also submitted a grant application for up to \$20 million for project construction through Bureau of Reclamation 'Water SMART: Desalination Construction Projects under the WIIN Act'. The Bureau of Reclamation expects to contact potential award recipients and unsuccessful applications any time now (January 2019).</p>
<h2>EMERGENCY PREPAREDNESS</h2>	
<b>Coordination with WEROC Member Agencies</b>	<p>Ongoing: WEROC, with Michael Baker as the lead consultant, is facilitating 19 agencies through the process of updating the Orange County Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan. Update: CalOES has completed their review of the Hazard Mitigation Plan and requested a few minor revisions. Francisco is working with the participating agencies and the consultant to address the revisions and re-submit the plan to CalOES and FEMA by January 18, 2019.</p> <p>Francisco and Kelly Hubbard met with the new Security &amp; Emergency Planning Specialist for the Orange County Sanitation District. Staff provided background information on WEROC, how to coordinate during a disaster and worked on the upcoming January 2019 disaster exercise. WEROC offered to continue to help him connect with Orange County agencies and to learn about OC response processes and programs.</p>

<b>Training and Programs</b>	<p>Francisco Soto hosted three (3) 800 MHz Radio Trainings for WEROC EOC staff. The training focused on reviewing the purpose, function, and protocols for using the radio system. Additionally, staff had an opportunity for hands-on training.</p> <p>Kelly facilitated a Disaster Finance Discussion for a CSU Long Beach Government Finance Masters Class hosted at the City of Seal Beach. Kelly, along with the City's Emergency Manager and City Manager were on a panel together. The class is taught by Vikki Beatley, Finance Director for City of Seal Beach.</p> <p>Kelly hosted a WEROC Public Information Officer training with MWDOC Public Affairs Staff and WEROC Staff. The training was structured to provide lessons and tools learned from Kelly's response to the Camp Fire and to have discussion on how to incorporate those concepts into the WEROC program.</p>
<b>Coordination with the County of Orange</b>	<p>Kelly, Francisco, and Janine attended the December OCEMO meeting at the Knott's Berry Farm Hotel. Presentation topics included OA Managers Report, Grant Updates, CalOES report, Sub-committee Updates and the presentation of the annual OCEMO Awards to Emergency Manager's in the County that have contributed to the profession or the OC community through a special project or program.</p> <p>Francisco attended two meetings to assist the County on the annual Threat and Hazard Identification and Risk Assessment/Stakeholder Preparedness Report (THIRA/SPR) process. The THIRA is a three-step risk assessment process that helps communities assess the threats and hazards that can affect the community, identify the impacts those threats and hazards have on the community, and identify capabilities that should exist to address the threats. Francisco provided water and wastewater specific concepts for incorporation. The THIRA/SPR is used in the Homeland Security Grant process for identification and prioritization of grant projects.</p> <p>Francisco and Kelly participated in various conference calls that took place throughout November and December for the possible activation of the Holy Fire Debris Flow Plan and the Canyon 2 Debris Flow Plan due to various rain events. The calls detail the current rain forecast and each agency's response actions and concerns for possible debris flows. Trabuco Canyon Water District (TCWD) has infrastructure that can be impacted by the Holy Fire Debris Flow area. TCWD participates in the calls and WEROC staff are aware of their concerns and possible need to coordination should a debris flow occur. The most significant storm was on December 6<sup>th</sup> and had significant flood related damages/impacts in Newport Beach and the Holy Canyon area. There were no significant impacts to water utilities.</p> <p>Kelly attended the County WebEOC/Communications meeting at the OA EOC. The meeting focused on the latest changes made to WebEOC and current/future modifications to the system.</p> <p>Kelly attended the County-wide exercise planning meeting at the City of Huntington Beach Emergency Operations Center. The meeting focused on assisting participating agencies in developing their Master Sequence of Events List (MSEL) and how to enter information onto WebEOC for the January 30, 2019 exercise.</p>



<b>EOC Readiness</b>	<p>Janine Schunk successfully participated in the OA and MET Radio Test and WebEOC tests for the month.</p> <p>Janine facilitated the monthly test of the WEROC Radio System.</p>
<b>Fire Response Activities</b>	<p>Kelly will provide a presentation to the MWDOC Planning and Operations Committee on January 14, 2019 on the Woolsey and Camp Fires. The presentation will include fire statistics, support provided and lessons learned. Some additional details regarding these support activities are provided in the accompanying staff report for the presentation.</p>
<b>WATER USE EFFICIENCY</b>	
<b>Orange County Public Affairs Workgroup (PAW) Meeting</b>	<p>On December 13, Rachel Davis and Rachel Waite attended the PAW meeting to provide an update on water use efficiency programs. Updates included:</p> <ul style="list-style-type: none"> <li>• Fiscal Year 18-19 Turf Removal Program changes</li> <li>• Upcoming Qualified Water Efficient Landscaper (QWEL) class schedule</li> <li>• Metropolitan's region wide marketing efforts</li> </ul>
<b>Qualified Water Efficient Landscaper (QWEL) and California Landscape Contractors Association (CLCA) Co-Marketing Meeting</b>	<p>On January 3, Rachel Davis and Tiffany Baca participated in a conference call with Gregory Plum, QWEL board member, and David Silva, CLCA Water Programs Manager, to discuss co-marketing MWDOC's upcoming QWEL courses and CLCA's upcoming Certified Water Management course.</p>
<b>PUBLIC/GOVERNMENT AFFAIRS</b>	
<b>Member Agency Relations</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>• Created 4 flyers for Qualified Water Efficient Landscape (QWEL) training courses</li> <li>• Provided content to Water Use Efficiency for California Sprinkler Adjustment Notification System (CSANS) updates</li> </ul>

<b>Member Agency Relations - continued</b>	<ul style="list-style-type: none"> <li>Planned, hosted, and participated in a Public Affairs Workgroup for MWDOC member agencies. Speakers included Kevin Lyons, Co-Founder of Flashvote, and John Seiler, Press Secretary for Senator John Moorlach.</li> <li>Developed an activity/presentation for MWDOC's participation in the 2019 Children's Water Festival</li> </ul> <p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>Sent out 2019 ISDOC and WACO calendars to various agencies and individuals</li> </ul>
<b>Education</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>Continued administrative responsibilities for Girl Scouts Patch Program clinics – Jan. 26, Apr. 6, and Apr. 13</li> <li>Participated in several conference calls with Inside the Outdoors to discuss Voice4Planet video contest promotions</li> <li>Created outreach letters for both Elementary and High School program contractors</li> <li>Updated participating member agencies with Elementary School program attendance reports and visit schedules</li> <li>Updated participating member agencies with High School program attendance reports and visit schedules</li> <li>Met with High School program contractor Inside the Outdoors to streamline keypad response reporting</li> <li>Provided details to El Toro Water District for El Toro High School program visit</li> <li>Created CAWaterFix resource materials for High School program</li> <li>Provided City of Fountain Valley information on Elementary School program visits</li> <li>Produced Certificates of Recognition for El Toro Water District and Laguna Beach County District for hosting Girl Scout clinics</li> <li>Shared details on Laguna Niguel Elementary visit with Moulton Niguel Water District</li> <li>Provided City of Tustin with Columbus Tustin School visit details</li> <li>Provided City of San Juan Capistrano with High School program visit details</li> <li>Provided Mesa Water with details for upcoming elementary school visits</li> <li>Coordinated with Metropolitan to host the Traveling Student Art Exhibit</li> </ul>
<b>Media Relations</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>Prepared and posted daily social media content across all platforms</li> <li>Worked with Digital Communications contractor HashtagPinpoint several times throughout the month to discuss social media strategy, content, and opportunities</li> </ul>

<b>Media Relations - continued</b>	<ul style="list-style-type: none"> <li>Coordinated logistics and worked with Digital Communications contractor HashtagPinpoint and Girl Scouts of Orange County to produce Girl Scout Patch Program promotional video</li> </ul>
<b>Staff Training and Development</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>Participated in WEROC EOC Training: Crisis Communications Systems and Standard Operation Procedures</li> <li>Participated in California Association of Public Information Officers Award Entry Webinar</li> </ul>
<b>Special Projects</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>Met with Metropolitan inspection trip staff to review itineraries for upcoming trips</li> <li>Currently working on itineraries, trip logistics, guest and Director requirements for the following inspection trips:             <ul style="list-style-type: none"> <li>January 11-12, Director Ackerman CRA</li> <li>February 8, Director McKenney Infrastructure</li> <li>February 22-23, Director Dick SWP/Ag</li> </ul> </li> <li>Participated in an Orange County Water Summit committee meeting with President Barbre and Director Thomas</li> <li>In addition to completing several routine District website updates, updated content on the Water Rates page, added a Qualified Water Efficient Landscape page, and restructured the Scouts page</li> <li>Participated in a conference call with Water Use Efficiency staff, Qualified Water Efficient Landscaper staff and California Landscape Contractors Association staff to discuss marketing strategies for the Qualified Water Efficient Landscaper trainings hosted by MWDOC and MWDOC member agencies</li> <li>Prepared a resolution for former Metropolitan Chairman, Randy Record</li> <li>Developed an Introduction to Orange County Water booklet for elected officials and others</li> <li>Prepared a Memorandum of Understanding between MWDOC and the Orange County Council – Boy Scouts of America for the Soil and Water Conservation Merit Badge program</li> <li>Assisted in providing updates to the Orange County Water Reliability Study briefing paper</li> <li>Assisted in the preparation of slides for presentation at ACC-OC</li> </ul> <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> <li>Met with staff from OCWD along with Director Dick and OCWD's Director Green to review and discuss updated WACO bylaws</li> <li>Coordinated with Matt Thomas of Black &amp; Veatch and others on non-compliant districts information gathering</li> <li>Coordinated D.C. luncheon briefing book pages from participating member agencies</li> <li>Sent out the ISDOC Quarterly Luncheon invitation for January 31, 2019</li> </ul>

<b>Special Projects - continued</b>	<ul style="list-style-type: none"><li>• Coordinated with Public Affairs to update the ISDOC and WACO website pages to reflect the 2019 dates and programs</li><li>• Coordinated with January WACO speaker Joe Yun from the California Water Commission</li><li>• Staffed the WACO meeting</li><li>• Staffed the ISDOC Executive Committee Meeting</li></ul>
<b>Water Policy Dinner</b>	Public Affairs Staff: <ul style="list-style-type: none"><li>• Secured speaker Curt Schmutte for February 21, 2019 dinner</li><li>• Secured Westin South Coast Plaza ballroom</li></ul>
<b>Legislative Affairs</b>	Governmental Affairs Staff: <ul style="list-style-type: none"><li>• Participated in ACWA's Safe Drinking Water working group in Sacramento on Dec. 12 and Dec. 18</li><li>• Sent out information on the Governor's budget regarding safe and affordable drinking water</li></ul>

**INFORMATION CALENDAR**

**MWDOC GENERAL INFORMATION  
ITEMS**

**MWDOC BOARD OF DIRECTORS**

- Brett R. Barbre
- Larry D. Dick
- Wayne Osborne
- Joan Finnegan
- Sat Tamaribuchi
- Jeffery M. Thomas
- Megan Yoo Schneider