

REVISED

REGULAR MEETING
OF THE BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
18700 Ward Street, Board Room, Fountain Valley, California
February 20, 2019, 8:30 a.m.

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. 2080

CONSENT CALENDAR (Items 1 to 8)

(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. January 2, 2019 Workshop Board Meeting
- b. January 16, 2019 Regular Board Meeting
- c. January 5, 2019 Special Board Meeting

Recommendation: Approve as presented.

2. COMMITTEE MEETING REPORTS

- a. Planning & Operations Committee Meeting: January 14, 2019
- b. Administration & Finance Committee Meeting: January 9, 2019
- c. Public Affairs & Legislation Committee Meeting: January 21, 2019
- d. Executive Committee Meeting: January 17, 2019

- e. MWDOC/OCWD Joint Planning Committee Meeting: January 23, 2019

Recommendation: Receive and file as presented.

3. TREASURER'S REPORTS

- a. MWDOC Revenue/Cash Receipt Register as of January 31, 2019
- b. MWDOC Disbursement Registers (January/February)

Recommendation: Ratify and approve as presented.

- c. Summary of Cash and Investment and Portfolio Master Summary Report (Cash and Investment report) as of December 31, 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 December 31, 2018
- b. Quarterly Budget Review

Recommendation: Receive and file as presented.

5. WATER USE EFFICIENCY RESEARCH PROJECTS

Recommendation: Approve implementation of research projects as outlined in the write up, including: (1) a contribution of \$15,000 to the California Water Efficiency Partnership for the development of Water Use Efficiency Standards Compliance and Water Conservation Tracking Tools; and (2) a professional services contract with Water Systems Optimization, Inc. to conduct Water Balance Validation Research and staff training in an amount not to exceed \$56,000 and conduct Leak Detection Research and staff training in an amount not to exceed \$100,000.

6. AUTHORIZATION OF TELEPHONE SERVER UPGRADE

Recommendation: Authorize the General Manager to enter into a contract with Resilient Communications for the telephone server upgrade for a total cost of \$18,537.72.

7. TRAVEL TO WASHINGTON, DC TO COVER FEDERAL ADVOCACY INITIATIVES

Recommendation: Ratify the travel expenses as reported.

8. TRAVEL TO SACRAMENTO TO COVER STATE ADVOCACY INITIATIVES

Recommendation: Ratify the travel expenses as reported.

End Consent Calendar**ACTION ITEMS****9-1 SB 134 (HERTZBERG) – WATER LOSS PERFORMANCE STANDARDS**

Recommendation: Adopt a support position on SB 134 (Hertzberg).

9-2 SB 204 (DODD) – STATE WATER PROJECT: CONTRACTS

Recommendation: Adopt an oppose position on SB 204 (Dodd).

9-3 SUPPORT FOR DIRECTOR BOCKMILLER - ACWA/JPIA EXECUTIVE COMMITTEE RES. NO. _____

Recommendation: Adopt a concurring nomination resolution for Director Fred Bockmiller from Mesa Water District to be a candidate for the Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA) Executive Committee.

9-4 ASSOCIATION OF CALIFORNIA WATER AGENCIES/CALIFORNIA MUNICIPAL UTILITIES ASSOCIATION SAFE DRINKING WATER TRUST PROPOSAL

Recommendation: Adopt a “support in concept” position on the Association of California Water Agencies/California Municipal Utilities Association Safe Drinking Water Trust proposal.

9-5 THE SMALL SYSTEM WATER AUTHORITY ACT OF 2019

Recommendation: Adopt a “support in concept” position on the Small System Water Authority Act of 2019.

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

10. GENERAL MANAGER'S REPORT, FEBRUARY 2019 (ORAL AND WRITTEN)

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

11. 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.

CLOSED SESSION ITEMS

12. PUBLIC EMPLOYEE PERFORMANCE EVALUATION

Title: General Manager

Government Code Section 54957

13. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: (one case)

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**

January 2, 2019

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 (absent)
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
Heather Baez, Governmental Affairs Manager
Tiffany Baca, Public Affairs Manager

*Also MWDOC MET Directors

OTHER MWDOC MET DIRECTORS

Larry McKenney

OTHERS PRESENT

Kathryn Freshley
Mark Monin
Michael Gaskins
Mike Dunbar
Steve LaMar
Doug Reinhart
Peer Swan
Paul Weghorst
Jim Fisler
Don Froelich
Kelly Rowe
John Kennedy
Adam Hutchinson
Mike Markus
Chuck Gibson
Dennis Erdman
Rick Shintaku
Brooke Jones
James Barker
Liz Mendelson-Goossens
Kristy Khachigian
Skylar Stephens

El Toro Water District
El Toro Water District
El Toro Water District
Emerald Bay Service District
Irvine Ranch Water District
Irvine Ranch Water District
Irvine Ranch Water District
Irvine Ranch Water District
Mesa Water
Moulton Niguel Water District
Orange County Water District
Orange County Water District
Orange County Water District
Orange County Water District
Santa Margarita Water District
South Coast Water District
South Coast Water District
Yorba Linda Water District

San Diego County Water Authority
San Diego County Water Authority
San Diego County Water Authority

PUBLIC PARTICIPATION/PUBLIC COMMENTS

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

No public comments were received, however President Barbre introduced Jim Barker (MWDOC's federal legislative advocate) and El Toro Water District's new Director Michael Gaskins to the audience.

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 the changes to the Coordinated Operating Agreement (between the Central Valley Project/State Water Project) were settled. Following a brief discussion, it was suggested that staff report on the details of the changes at an upcoming meeting.

Director McKenney noted that the Foundational Action Grant Program was deferred for a month and that MET adopted its new legislative guidelines.

President Barbre highlighted the upcoming swearing in ceremony for new MET Chair Gloria Gray (January 8th).

WATER SUPPLY UPDATE

MWDOC Water Resources Analyst, Kevin Hostert, provided a presentation on the U.S. drought monitor, climate outlook, local 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.

PRESENTATION OF GROUNDWATER CONDITIONS IN THE METROPOLITAN SERVICE AREA

MET Senior Engineer, Matt Hacker, presented an overview of current groundwater conditions within the MET service area. His presentation included an overview of the groundwater basins (they represent one-third of regional supplies and include 88 basins and sub-basins), how groundwater production is tracked, stormwater recharge (declining since 2000), and overall storage conditions

Discussion ensued regarding the recharge areas, climate change impacts, stormwater capture, MET's role in ensuring healthy groundwater basins, and financial and technical challenges (e.g., Quagga mussels) with storing MET water in local basins.

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 Delta Conveyance Design and Construction Authority (DCA) and Delta Conveyance Finance Authority activities, noting that both meetings were held on December 20th and that modifications to the 2018/19 budget were made (reduced by \$61.8 million). Dr. Baum-Haley advised that the next meeting of both boards would be held on January 17, 2019.

Director Tamaribuchi suggested staff prepare a timeline of all actions taken thus far with respect to the California WaterFix.

Discussion then shifted to the issues going on with the Colorado River Drought Contingency Plan, and the Board suggested staff prepare a one-page fact sheet outlining the issues/terms.

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 December 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 LEGAL COUNSEL—ANTICIPATED LITIGATION

Significant exposure to litigation pursuant to paragraph (2) of subdivision (d) of Section 54956.9: (1 case)

At 9:50 a.m, the Board adjourned to closed session for a conference with Legal Counsel regarding anticipated litigation, pursuant to Government Code 54956.9 (one case).

RECONVENE INTO OPEN SESSION

The Board reconvened at 10:10 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, the meeting adjourned at 10:11 a.m.

Maribeth Goldsby
Board Secretary

**MINUTES OF THE REGULAR MEETING
OF THE BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
January 16, 2019**

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 Thomas 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 (absent)
Jeffery M. Thomas
Megan Yoo Schneider

STAFF

Robert Hunter, General Manager
Karl Seckel, Assistant General Manager
Megan Garibaldi, Legal Counsel
Maribeth Goldsby, Board Secretary
Harvey De La Torre, Associate General Manager
Cathy Harris, Admin. Services Manager
Melissa Baum-Haley, Sr. Water Resources Analyst
Joe Berg, Director of Water Use Efficiency
Tiffany Baca, Public Affairs Manager

ALSO PRESENT

Linda Ackerman
Larry McKenney
Kathryn Freshley
Mike Gaskins
Peer Swan
Paul Weghorst
Jim Atkinson
Kelly Rowe
John Kennedy
Dennis Erdman
Rick Erkeneff
Rick Shintaku
Brooke Jones

MWDOC MET Director
MWDOC MET Director
El Toro Water District
El Toro Water District
Irvine Ranch Water District
Irvine Ranch Water District
Mesa Water
Orange County Water District
Orange County Water District
South Coast Water District
South Coast Water District
South Coast Water District
Yorba Linda Water District

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.

It was noted that staff distributed (and posted) revised staff write-ups outlining the Committee recommendations for both Item 7-3 (OCWD Proposed Groundwater Storage Agreement Study with MNWD) and Item No. 7-4 (Receive and File Final Report: 2018 Orange County Water Reliability Study).

EMPLOYEE SERVICE AWARDS

President Barbre advised that he would present Employee Service awards later in the agenda.

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 Osborne, and carried (4-0), the Board approved the Consent Calendar items as follows. Directors Barbre, Dick, Osborne, and Thomas voted in favor; Directors Finnegan, Yoo Schneider, and Tamaribuchi were absent.

MINUTES

The following minutes were approved.

December 5, 2018 Workshop Board Meeting
December 19, 2018 Regular Board Meeting
December 6, 2018 Special Board Meeting

COMMITTEE MEETING REPORTS

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

Planning & Operations Committee Meeting: December 3, 2018
Administration & Finance Committee Meeting: December 12, 2018
Public Affairs & Legislation Committee Meeting: December 17, 2018
Executive Committee Meeting: December 20, 2018

TREASURER'S REPORTS

The following items were ratified and approved as presented.

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

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 November 30, 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 November 30, 2018

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

The Board ratified the list of Standing Committee and Ad Hoc Committee Appointments as presented by the President of the Board; and ratified the Committee meeting dates/times for 2019.

PRUDENT COMPANION POLICY

The Board approved eliminating the Prudent Companion Policy. The General Manager was directed to prepare a written statement as to how this new practice would 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 CALENDAR

ASSOCIATION AND COMMISSION APPOINTMENTS FOR 2019

President Barbre announced that the proposed appointments to the Associations and Commissions for 2019 were before the Board for consideration.

Upon MOTION by Director Thomas, seconded by Director Osborne, and carried (4-0), the Board ratified the appointment of Representatives and Alternates to Associations, as recommended by the President of the Board; and adopted RESOLUTION NO. 2079 approving the appointment of Jeffery Thomas as Representative, and Karl Seckel as Alternate to the Santiago Aqueduct Commission (SAC), for submission to SAC. Said RESOLUTION NO. 2079 was adopted by the following roll call vote:

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

CONTINUATION OF WATER LOSS CONTROL TECHNICAL ASSISTANCE PROGRAM

Upon MOTION by Director Thomas, seconded by Director Osborne, and carried (4-0), the Board (1) authorized 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) authorized the General Manager to extend Choice-based Technical Assistance agreements with agencies for two additional years. Directors Barbre, Dick, Osborne, and Thomas voted in favor; Directors Finnegan, Yoo Schneider, and Tamaribuchi were absent.

(Director Yoo Schneider arrived at 8:35 a.m.)

OCWD PROPOSED GROUNDWATER STORAGE AGREEMENT STUDY WITH MNWD

The Board discussed the proposed Groundwater Storage Agreement Study between OCWD and MNWD, as well as the Planning & Operations Committee recommendation that staff continue to work with all involved to provide input and analysis on items from a comprehensive perspective in a manner similar to the OC Water Reliability Study; that any Storage Agreement should involve all agencies in South Orange County and not be centered with just a single agency; and that this item be agendized for discussion between the MWDOC and OCWD Boards at the upcoming January 23 Joint Planning Committee.

The Board expressed general support for the concept, but agreed that such an arrangement should include all of the South County agencies and as well as MWDOC in the discussions.

Upon MOTION by Director Thomas, seconded by Director Yoo Schneider, and carried (5-0), the Board received and filed the report and Planning & Operations Committee recommendation. Directors Barbre, Dick, Osborne, Yoo Schneider and Thomas voted in favor; Directors Finnegan and Tamaribuchi were absent.

RECEIVE AND FILE FINAL REPORT: 2018 ORANGE COUNTY WATER RELIABILITY STUDY

Upon MOTION by Director Dick, seconded by Director Yoo Schneider, and carried (5-0), the Board received and filed the final report for the 2018 Orange County Water Reliability Study. Directors Barbre, Dick, Osborne, Yoo Schneider and Thomas voted in favor; Directors Finnegan and Tamaribuchi were absent.

INFORMATION CALENDAR**EMPLOYEE SERVICE AWARDS**

The Board, along with General Manager Hunter and Assistant General Manager Seckel, presented awards to Beth Fahl for 15 years of service to the District, and Maribeth Goldsby for 25 years of service to the District.

GENERAL MANAGER'S REPORT, JANUARY 2019

General Manager Hunter advised that the General Manager's report was included in the Board packet. Mr. Hunter highlighted the upcoming Water Policy Forum dinner scheduled for February 21, 2019 (at the Westin South Coast Plaza), featuring Curt Schmutte as keynote speaker.

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 MWDOC Administration & Finance and Planning & Operations Committee meetings, and the Board and Special Board meetings, as well as a meeting with representatives from South Coast Water District, a meeting with representatives from Moulton Niguel Water District, the O.C. Board of Supervisors Swearing-In Ceremony, the SOCWA board meeting (Kelly Hubbard spoke), the Coffee Chat with San Juan Capistrano, a meeting with representatives from Santa Margarita Water District, and she served as guest lecturer at UC Riverside.

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 OC Water Summit Planning meetings.

Director Osborne advised that he attended the Special Board meeting and the Administration & Finance Committee meeting, as well as the MWDOC Board meeting.

Director Dick reported on attending the following meetings: the Administration & Finance and Planning & Operations Committee meetings, the Special Board meeting, the MET Board meeting, a meeting with Serrano Water District, the WACO Planning Committee meeting, and the Chamber of Commerce Legislative Committee meeting.

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 Al Mendez (inspection trip issues), the MWDOC MET Director Caucus (early), the MWDOC Inland Empire Caucus, the MET Board meeting, and a meeting with John Watts (Senator Feinstein). In his capacity as MWDOC Director he attended the following meetings: the Workshop and Regular Board meetings, the Special Board meeting, the Administration & Finance Committee meeting, a meeting with Yorba Linda Councilman Carlos Rodriguez, a meeting with Paul Hernandez (OC Political/Water Issues), and his legislative trip to Washington, DC.

B. REQUESTS FOR FUTURE AGENDA TOPICS

No future agenda topics were requested.

ADJOURNMENT

There being no further business to come before the Board, President Barbre adjourned the meeting at 9:08 a.m.

Respectfully submitted,

Maribeth Goldsby, Secretary

MINUTES OF THE SPECIAL MEETING
OF THE BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
January 5, 2019

At 9:00 a.m., President Barbre called to order the Special Meeting of the Municipal Water District of Orange County Board of Directors at the Westin Hotel, 686 Anton Blvd., Executive Board Room, 3rd Floor, Costa Mesa, California.

MWDOC DIRECTORS

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

STAFF PRESENT

Robert Hunter, General Manager

ALSO PRESENT

Denise Dolor

Orchard Dale Water District

PUBLIC COMMENTS

Director Denise Dolar from Orchard Dale Water District introduced herself to the Board.

CLOSED SESSIONS ITEM

PUBLIC EMPLOYEE PERFORMANCE EVALUATION

At 9:02 a.m., the Board adjourned to closed session pursuant to Government Code Section 54957, to conduct the performance evaluation of the General Manager.

RECONVENE

ANNOUNCEMENTS FROM CLOSED SESSION

The Board reconvened from closed session at 2:35 p.m., and President Barbre announced that no reportable action was taken in closed session.

ADJOURNMENT

At 2:36 p.m., President Barbre adjourned the special meeting.

Respectfully submitted,

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
January 14, 2018 – 8:35 a.m. to 10:15 a.m.
Conference Room 101

P&O Committee:

Director Wayne Osborne (absent)
Director Sat Tamaribuchi
(via teleconference)
Director Megan Yoo Schneider
Director Larry Dick

Staff:

Rob Hunter, Karl Seckel, Joe Berg,
Katie Davanaugh, Harvey De La Torre,
Charles Busslinger, Melissa Baum Haley,
Kevin Hostert, Francisco Soto,
Damon Micalizzi, Heather Baez,
Kelly Hubbard, Chris Lingad

Also Present:

Director Joan Finnegan
MWDOC MET Director Linda Ackerman
MWDOC MET Director Larry McKenney
Kelly Rowe, Orange County Water District
John Kennedy, Orange County Water District
Adam Hutchinson, Orange County Water District
Mike Markus, Orange County Water District
Peer Swan, Irvine Ranch Water District
Paul Weghorst, Irvine Ranch Water District
Kathryn Freshley, El Toro Water District

Director Yoo Schneider chaired the meeting in the absence of Director Osborne and called it to order at 8:35 a.m. Director Dick sat on the Committee.

Director Tamaribuchi attended the meeting via teleconference. All Brown Act requirements were complied with.

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

Mr. Hunter reported that a letter was received from Orange County Water District regarding a groundwater storage agreement with Moulton Niguel Water District.

ACTION ITEMS**CONTINUATION OF WATER LOSS CONTROL TECHNICAL ASSISTANCE PROGRAM**

Mr. Berg reported that the District has been utilizing the services of Water Systems Optimization (WSO) for the last 3 years for a variety of services related to technical assistance for development of the water loss control program, in conjunction with MWDOC member agencies. The request before the Committee is to extend those services.

Upon MOTION by Director Dick, which was seconded by Director Tamaribuchi, and carried (3-0), the Committee recommended the Board approve the extension of services with WSO for water loss control technical services at the January 16, 2019 Board meeting. Directors Tamaribuchi, Yoo Schneider and Dick voted in favor.

OCWD PROPOSED GROUNDWATER STORAGE AGREEMENT STUDY WITH MOULTON NIGUEL WATER DISTRICT (MNWD)

Mr. Seckel noted the recent agreement between Orange County Water District and Moulton Niguel Water District wherein the agencies intend to review existing water storage programs for south Orange County. Recent discussions over the past several months between MWDOC and Orange County Water District have concluded that the two agencies should improve working relations and work in a more collaborative and inclusive manner. It is MWDOC's intention to be included in discussions, processes and decisions pertaining to additional storage options for south Orange County as a whole, thereby benefitting the whole region and not just select agencies.

Mr. Kennedy noted that MWDOC will be included in the discussions at some point and that the agreement is intended for review and discussions for a small pilot project.

Director Yoo Schneider stressed the importance of a collaborative process that will benefit the county as a whole, reduce duplication of work, and increase reliability.

Mr. Hunter noted that staff will continue working in a more collaborative manner with Orange County Water District.

Mr. Markus noted that the OCWD Board adopted a policy several years ago wherein OCWD would work towards developing groundwater storage options available during a MET drought allocation and that is the intent of the agreement with Moulton Niguel Water District. He noted that the OCWD Board will take action on the agreement on January 16th. Additionally, that MWDOC will be included in discussions, as appropriate.

Director Yoo Schneider recommended that MWDOC and OCWD schedule a meeting to discuss the details of the pilot program. Mr. Markus responded that the upcoming Joint Planning meeting would allow an opportunity for the OCWD Board to address questions. Mr. Markus noted that MNWD will be financing the study.

Follow-up discussions will inevitably continue.

RECEIVE AND FILE FINAL REPORT: 2018 ORANGE COUNTY WATER RELIABILITY STUDY

Mr. Seckel noted that 2 comment letters were received on the final OC Water Reliability Report and those requests, as outlined in the staff report, will be incorporated into the final report. It was noted that OCWD presented a 3rd comment letter and the requests in that letter are a bit more challenging to address. Mr. Hunter noted that the water reliability study is intended as a tool for planning purposes.

Upon MOTION by Director Dick, which was seconded by Director Yoo Schneider, and carried (3-0), the Committee recommended the Board receive and file the 2018 Orange County Water Reliability Study at the January 16, 2019 Board meeting. Directors Tamaribuchi, Yoo Schneider and Dick voted in favor.

DISCUSSION ITEM**WOOLSEY AND CAMP FIRES: RESPONSE, MUTUAL AID AND LESSONS LEARNED**

Ms. Hubbard provided data on both fires, including cause, acreage burned, response agencies, location, number of structures destroyed, causes, etc. Ms. Hubbard's report also reviewed lessons learned including water billing issues, problems due to the Edison power shut off plans, difficulty in coordination efforts due to severity and size of fires, and problems with access routes. Ms. Hubbard also included information on Orange County water agencies' Christmas fundraising efforts for the Paradise Irrigation District employees and her experience with both of these fires, which are devastatingly historic and will have long-lasting impacts on many.

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 10:15 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**

January 9, 2019 – 8:35 a.m. to 10:10 a.m.

MWDOC Conference Room 101

Committee Members:

Director Jeff Thomas, Chair
Director Joan Finnegan
Director Larry Dick

Staff:

Robert Hunter, Karl Seckel, Cathy Harris,
Katie Davanaugh, Hilary Chumpitazi,
Joe Berg, Damon Micalizzi,
Charles Busslinger, Maribeth Goldsby
Harvey DeLaTorre

Ex Officio Member: Director Barbre

Also Present:

Director Sat Tamaribuchi (via teleconference)
Director Brett Barbre
Director Megan Yoo Schneider
MWDOC MET Director Larry McKenney
Peer Swan, Irvine Ranch Water District
Saundra Jacobs, Santa Margarita Water District
Marwan Khalifa, Mesa Water
Neely Shahbakhti, El Toro Water District
Mark Monin, El Toro Water District

Director Thomas called the meeting to order at 8:35 a.m.

Director Tamaribuchi attended the meeting via teleconference. All Brown Act requirements were complied with.

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 – December 2018
- b. Disbursement Approval Report for the month of January 2019
- c. Disbursement Ratification Report for the month of December 2018
- d. GM Approved Disbursement Report for the month of December 2018

- e. Water Use Efficiency Projects Cash Flow – December 31, 2018
- f. Consolidated Summary of Cash and Investment – November 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 January 16, 2019 Board meeting. Directors Dick, Finnegan and Thomas voted in favor.

FINANCIAL REPORT

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

Upon MOTION by Director Finnegan, seconded by Director Dick and carried (3-0), the Committee recommended the Financial Report for approval at the January 16, 2019 Board meeting. Directors Finnegan, Dick and Thomas voted in favor.

ACTION ITEMS

PRUDENT COMPANION POLICY

The Committee held robust discussion whether the District should adopt a formal policy utilizing a prudent companion for travel, including conferences, and state and federal legislative meetings. Discussion was held on the cost of having an additional staff or Board member to travel and under what criteria a prudent companion might be beneficial.

Following discussion and comments, 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 that planning for travel and meetings between Directors, the General Manager and staff can be coordinated appropriately, and report the outcomes of said meetings.

Upon MOTION by Director Thomas, seconded by Director Dick and carried (3-0), the Committee recommended the Board approve Option 5 (eliminate the Prudent Companion Policy) at the January 16, 2019 Board meeting. Directors Thomas, Dick and Finnegan voted in favor.

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

The Committee reviewed the proposed schedule of Standing Committee Appointments and upon MOTION by Director Dick, seconded by Director Finnegan and carried (3-0), the Committee recommended the Standing Committee and ad hoc Appointments for approval at the January 16, 2019 Board meeting. Directors Dick, Finnegan and Thomas voted in favor.

ASSOCIATION AND COMMISSION APPOINTMENTS FOR 2019

It was noted that Linda Ackerman should act as representative for the ACWA Federal Affairs Committee with Director Barbre as the alternate. The ACWA Business Development Committee was also added, with MET Director Larry McKenney as chairperson.

The Committee reviewed the Association and Commission Appointments and upon MOTION by Director Dick, seconded by Director Finnegan and carried (3-0), the Committee recommended the 2019 Association and Commission Appointment for approval at the January 16, 2019 Board meeting. Directors Dick, Finnegan and Thomas voted in favor.

DISCUSSION ITEMS**FY 2018-19 BUDGET YEAR END PROJECTIONS & CONCEPTUAL FY 2019-20 BUDGET REVIEW**

Saundra Jacobs thanked MWDOC staff for their efforts in expediting the budget process and also noted the increase to the MWDOC reserves.

Mr. Hunter provided a review of the projected reserve fund balances as well as the 2019-20 budget process which were fully outlined on page 46/65 of the staff report.

Other topics of review and discussion included election expenses and proposed additions to the 2019-20 budget, including the National Endangered Species Act Reform Coalition, California Municipal Utilities Association, Water Education Foundation, and new staffing for Water Use Efficiency and Engineering. A number of activities and tasks that will continue into next fiscal include evaluation of the water reliability study follow-up items with MET, work on the shutdown of the AMP, and several others.

Discussion was held on options to accelerate paying off the CalPERS unfunded liability, which could be paid off by utilizing reserve funds, thereby saving the District a substantial amount of money, but reducing the reserve levels at the same time. Director Barbre noted that the District is presently on a 10-year payoff schedule. Following discussion, staff was directed to review payoff options and present findings at a future Administration & Finance Committee.

INFORMATION ITEMS**DEPARTMENT ACTIVITIES REPORTS**

- a. Administration
- b. Finance and Information Technology

Administrative activities reviewed from the staff report included the Personnel Manual and the performance manual evaluation process. It was noted that an annual conference schedule was completed and staff will provide a copy to all Directors.

Mr. Hunter noted that staff from 6 of MWDOC member agencies contributed to Paradise Irrigation District, in light of the fire tragedies in December.

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

The report was 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 10:10 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

January 21, 2019 – 8:30 a.m. to 9:35 a.m.

MWDOC Conference Room 101

Committee:

Director Dick, Chairman
Director Thomas
Director Osborne (absent)

Staff: R. Hunter, K. Seckel, H. Baez,
D. Micalizzi, T. Dubuque, H. Baez, J. Berg,
M. Baum-Haley, B. Roberto, S. Wilson,
H. De La Torre, M. Goldsby, C. Busslinger

Also Present:

Director Brett Barbre
Director Megan Yoo Schneider
Director Joan Finnegan
Larry McKenney, MWDOC MET Director
Syrus Devers, BB&K
John Lewis, Lewis Consulting
Jim Barker, (via teleconference)
Nick Crockett (via teleconference with
Jim Barker)
Jim Leach, SMWD
Sherri Seitz, ETWD
Alicia Dunkin, OCWD

Director Dick called the meeting to order at 8:30 a.m.; due to the absence of Director Osborne, Director Barbre 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

No items were distributed.

DISCUSSION ITEMS

LEGISLATIVE ACTIVITIES

a. Federal Legislative Report (Barker)

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

Mr. Barker highlighted the recent legislative trip to Washington D.C. and discussed the

meetings that he, Director Barbre and General Manager Hunter had with the new Orange County legislative delegation. He advised that the meetings covered the WaterFix and issues dealing with the Colorado River Drought Contingency Plan. Mr. Barker described these meetings as very positive.

It was noted that, Director Barbre provided the delegates an overview of MWDOC, and he invited each of the representatives to come to Orange County.

State Legislative Report (BBK)

Mr. Syrus Devers reviewed his written report that was included in the packet. Mr. Devers highlighted the effect of the pending PG&E bankruptcy on rate payers. He also provided an overview on ACWA's work on the Water Tax proposal.

b. County Legislative Report (Lewis)

John Lewis reviewed his written report that was included in the packet. He highlighted the 3rd District Supervisor race and current snowpack in the mountains.

c. Legal and Regulatory Report (Ackerman)

Dick Ackerman was not present for the meeting.

The Committee received and filed the report.

MWDOC LEGISLATIVE AND REGULATORY PRIORITIES FOR 2019

The Committee received and filed the report.

SOUTHERN CALIFORNIA WATER ISSUES CONGRESSIONAL DELEGATION BRIEFING LUNCHEON (DC)

This event was discussed, noting that the new Orange County delegation members are enthusiastic about attending this event.

The Committee received and filed the report

INFORMATION ITEM

WATER POLICY FORUM & DINNER SPEAKERS SERIES (February 21, 2019)

Director Barbre suggested that the outgoing MET Directors, including Directors Beard, Camacho, Martinez and members of the SDCWA delegation, should be invited, recognized and honored at this event.

The Committee received and filed the report.

2019 OC Water Summit (May 31, 2019)

The Committee received and filed the report.

EDUCATION PROGRAM UPDATE

Responding to a request made by Director Dick, Director of Public Affairs Micalizzi advised that he would provide the Board with a few of the sample tests given to the students.

The Committee received and filed the report.

PUBLIC AFFAIRS ACTIVITIES REPORT

The Committee received and filed the report.

SOLE SOURCE CONTRACT WITH ROSENBERG + ASSOCIATES REGARDING MWDOC A/C REPLACEMENTS FOR 2019

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 9:35 a.m.

MINUTES OF THE MEETING OF THE
BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
jointly with the
EXECUTIVE COMMITTEE
January 17, 2019, 8:30 a.m. to 9:20 a.m.
Conference Room 102

Committee:

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

Staff:

R. Hunter, M. Goldsby

Also Present:

Director Dick
Director Tamaribuchi

At 8:30 a.m., President Barbre called the meeting to order. In the absence of Director Finnegan, Director Dick 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. MWDOC/OCWD Joint Planning Committee Meeting

The Committee discussed each agenda item. It was noted that OCWD requested two items be added, namely the WACO Bylaws and an update on the Carson IPR Project; Committee agreed that these items be added.

b. Planning & Operations Committee Meeting

No new items were added to the agenda.

c. Workshop Board Meeting

Although no new items were added to the agenda, considerable discussion was held regarding the WaterFix and support for the twin tunnels. Staff was asked to prepare an outline of the critical path to construction (including decision makers, etc.).

d. Administration & Finance Committee meeting

Per the Committee's discussion (below) regarding the Elected Officials Forum, an informational item was added to the agenda.

e. Public Affairs & Legislation Committee

No new items were added to the agenda.

f. Executive Committee

No new items were added to the agenda.

DISCUSSION REGARDING UPCOMING ACTIVITIES OF SIGNIFICANCE

General Manager Hunter advised that the next Elected Officials Forum is scheduled for April 4, 2019. Discussion ensued regarding these meetings (held semi-annually) and the Committee suggested the Board continue with the spring meeting, but no longer hold the fall meeting. It was noted that an information item would be included in an upcoming Administration & Finance Committee reflecting the Executive Committee's decision.

DISCUSSION RE CONTINUED PARTICIPATION IN ORGANIZATIONS

It was noted that participation in various organizations would be addressed during the budget process.

MEMBER AGENCY RELATIONS

No additional information was discussed.

GENERAL MANAGER'S REPORTS

No discussion was held.

REVIEW AND DISCUSS DISTRICT AND BOARD ACTIVITIES

No new information was addressed.

ADJOURNMENT

There being no further business to be brought before the Committee, the meeting adjourned at 9:29 a.m.

MEETING REPORT

JOINT PLANNING COMMITTEE WITH BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY and
ORANGE COUNTY WATER DISTRICT
January 23, 2019 - 8:30 a.m. – 9:30 a.m.
MWDOC Conference Room 101

MWDOC DIRECTORS

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

OCWD DIRECTORS

Cathy Green
Tri Ta
Roger Yoh (absent)
Dina Nguyen
Denis Bilodeau (absent)
Kelly Rowe
Vicente Sarmiento
Jordan Brandman
Bruce Whitaker
Steve Sheldon

MWDOC STAFF

Rob Hunter
Karl Seckel
Maribeth Goldsby
Melissa Baum-Haley
Damon Micalizzi
Kevin Hostert
Chris Lingad
Charles Busslinger
Heather Baez
Harvey De La Torre

OCWD STAFF

Mike Markus
John Kennedy
Adam Hutchinson
Alicia Dunkin

ALSO PRESENT

Peer Swan
Paul Weghorst
Jim Atkinson
Don Froelich
Brooke Jones
Skylar Stephens
Megan Couch
Kristy Khachigian
John Earl

Irvine Ranch Water District
Irvine Ranch Water District
Mesa Water
Moulton Niguel Water District
Yorba Linda Water District
San Diego County Water Authority
San Diego County Water Authority
San Diego County Water Authority

OCWD Director Green chaired the meeting.

PUBLIC COMMENTS

No public comments were received.

STATUS OF IMPORTED WATER SUPPLIES

MWDOC Water Resources Analyst Kevin Hostert updated the Boards on the current imported water supply conditions, highlighting the Northern California accumulated precipitation (it is slightly above normal), and noting that if wet conditions continue it could be an average to above average year.

UPDATE ON OCWD LOCAL WATER SUPPLIES

OCWD Executive Director of Engineering and Water Resources John Kennedy updated the Committee on the status of OCWD operations, including the Anaheim Field Headquarters rain gauge, updates on the recent Prado Dam operations, the OCWD groundwater basin accumulated overdraft, and the estimated FY 18-19 groundwater basin water balance estimates and averages.

JANUARY 9, 2019 OCWD LETTER TO MWDOC – FOUR MWD WATER POLICY ISSUES

Mr. Kennedy provided an overview of OCWD's letter to MWDOC, highlighting OCWD's four main issues they would like MWDOC to promote at MET, which are: a permanent In-Lieu program, modifications to the Water Supply Allocation Plan to include groundwater basin agencies in more consistent manner, phase-out the Conjunctive Use Program (CUP) program, and approval to pump potable water supplies through the MET system.

Considerable discussion ensued, and General Manager Hunter was asked to schedule a meeting with Deven Upadhyay (MET).

CARSON INDIRECT POTABLE REUSE PROJECT UPDATE

MWDOC General Manager Hunter reported that the construction of the demo project is almost complete and that it will become operational thereafter. He noted that a conceptual planning study is underway (regarding design, alignment, rates, etc.) and that meetings are scheduled with various MET agencies to discuss the study's findings. Discussion was held regarding the timeline for completion of the full scale project, with estimates given that it would be approximately 4 years after the EIR work is complete.

UPDATE ON STORAGE DISCUSSIONS BETWEEN OCWD AND MNWD

OCWD General Manager Mike Markus advised that the OCWD Board approved entering into an MOU with MNWD to study issues in the potential development of a pilot storage agreement between OCWD and MNWD. He advised that an RFP was issued to select a consultant to conduct the study, that proposals should be received in the next few weeks, and that MWDOC will be invited to the kick-off meetings.

Considerable discussion ensued, with emphasis on cost, whether such an arrangement (storage opportunity) would be open to all non-basin agencies, how this would affect the Huntington Beach desalination facility, and any impact to the OC basin producers.

General Manager Hunter stated that MWDOC would like the opportunity to participate in a storage program; OCWD acknowledged the request, noting the issue would be discussed once the results of the Study are completed.

OCWD MWDOC RELATIONS

General Managers Hunter and Markus highlighted a number of resolutions that have been adopted over the years between the two Boards, addressing agency collaboration and working relationships.

Each Board member present weighed-in expressing support for a positive, healthy working relationship, but acknowledged there may be a cultural issue lingering between the two agencies. Mr. Hunter highlighted the fundamental differences between each agency's roles and responsibilities and the importance of allowing each agency the freedom to accomplish their respective goals.

Following discussion, it was determined that President Barbre would meet with OCWD President Sarmiento and develop a plan of action for review by each of their respective boards.

WACO BYLAWS

Mr. Kennedy advised that WACO will be revising its Bylaws and that the revisions will be presented to each of the MWDOC and OCWD Boards. The Committee received and filed the report.

NEXT COMMITTEE MEETING

The next meeting is scheduled for April 24, 2019.

ADJOURNMENT

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

**Municipal Water District of Orange County
REVENUE / CASH RECEIPT REPORT
January 2019**

WATER REVENUES


Date	From	Description	Amount
01/04/19	City of Brea	November 2018 Water deliveries	176,024.55
01/09/19	City of La Habra	November 2018 Water deliveries	1,762.40
01/09/19	Santa Margarita Water District	November 2018 Water deliveries	1,808,759.21
01/09/19	City of Garden Grove	November 2018 Water deliveries	310,148.85
01/10/19	Laguna Beach County Water District	November 2018 Water deliveries	229,351.20
01/10/19	City of Westminster	November 2018 Water deliveries	255,552.02
01/10/19	Mesa Water	November 2018 Water deliveries	353,595.86
01/11/19	South Coast Water District	November 2018 Water deliveries	469,122.47
01/11/19	El Toro Water District	November 2018 Water deliveries	400,258.50
01/14/19	Serrano Water District	November 2018 Water deliveries	96,842.57
01/14/19	City of San Juan Capistrano	November 2018 Water deliveries	488,033.79
01/14/19	City of Orange	November 2018 Water deliveries	368,027.44
01/14/19	East Orange County Water District	November 2018 Water deliveries	330,387.95
01/15/19	City of Seal Beach	November 2018 Water deliveries	14,038.43
01/15/19	City of Buena Park	November 2018 Water deliveries	174,404.86
01/15/19	City of La Palma	November 2018 Water deliveries	4,280.03
01/15/19	Orange County Water District	November 2018 Water deliveries	5,366,410.82
01/15/19	Golden State Water Company	November 2018 Water deliveries	244,188.36
01/15/19	Yorba Linda Water District	November 2018 Water deliveries	50,927.24
01/15/19	Moulton Niguel Water District	November 2018 Water deliveries	2,084,193.49
01/15/19	Irvine Ranch Water District	November 2018 Water deliveries	675,604.71
01/23/19	City of Newport Beach	December 2018 Water deliveries	484,859.78
01/25/19	City of Huntington Beach	December 2018 Water deliveries	523,840.56
01/25/19	City of San Clemente	December 2018 Water deliveries	442,996.90
01/28/19	City of Garden Grove	December 2018 Water deliveries	30,922.35
01/31/19	City of Fountain Valley	December 2018 Water deliveries	12,696.64

TOTAL REVENUES \$ 15,397,230.98

Municipal Water District of Orange County
REVENUE / CASH RECEIPT REPORT
January 2019

MISCELLANEOUS REVENUES

Date	From	Description	Amount
01/31/19	Metropolitan Water District	10/11/18 Water Policy dinner	91.52
01/30/19	Paypal	2/21/19 Water Policy dinner	989.51
01/09/19	Stan Sprague	Jan-Feb 2019 Retiree Health insurance	485.54
01/09/19	Judy Pfister	Jan-Mar 2019 Retiree Health insurance	121.44
01/31/19	Keith Lyon	February 2019 Retiree Health insurance	288.99
01/09/19	Cathy Harris	Movie tickets	198.00
01/10/19	Cathy Green	Movie tickets	85.00
01/31/19	Janice Kovacevic	Movie tickets	17.00
01/30/19	Paypal	ISDOC Luncheon	669.63
01/31/19	AT&T	Refund for cancelled U-verse service for WEROC North EOC	58.00
01/18/19	El Toro Water District	November 2018 Smartimer rebate program	104.00
01/25/19	City of San Clemente	November 2018 Smartimer rebate program	150.46
01/31/19	City of Fountain Valley	October 2018 Turf Removal rebate program	222.00
01/22/19	City of Orange	November 2018 Turf Removal rebate program	111.00
01/31/19	City of Newport Beach	November 2018 Turf Removal rebate program	91.45
01/31/19	Irvine Ranch Water District	November 2018 Turf Removal rebate program	1,967.39
01/18/19	Irvine Ranch Water District	November 2018 Turf Removal and Spray to Drip rebate program	9,993.36
01/25/19	City of San Clemente	October 2018 Smartimer and Turf Removal rebate program	2,368.90
01/15/19	Moulton Niguel Water District	October 2018 Smartimer, Rotating Nozzle & Turf Removal rebate program	22,286.29
01/22/19	Moulton Niguel Water District	November 2018 Smartimer, Rotating Nozzle & Turf Removal rebate program	24,391.10
01/15/19	Moulton Niguel Water District	November 2018 So Cal Watersmart rebate program	6,600.00
01/25/19	City of San Clemente	November 2018 So Cal Watersmart rebate program	1,175.00
01/08/19	Bureau of Reclamation	Apr-Sep 2018 CLWUE Phase II	162,953.35
01/15/19	Santa Margarita Water District	Practical Plumbing Handbook	526.00
01/15/19	City of Seal Beach	Water Loss Control technical assistance - WSO, Inc	39,872.00
TOTAL MISCELLANEOUS REVENUES			\$ 275,816.93
TOTAL REVENUES			\$ 15,673,047.91


 Robert J. Hunter, General Manager


 Hilary Chumitazi, Treasurer

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

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
Core Expenditures:		
	Richard C. Ackerman	
1217	January 2019 Consulting on legal and regulatory matters	1,100.00
	*** Total ***	1,100.00
	Aleshire & Wynder LLP	
49506	November 16-December 31, 2018 Legal services	247.50
49967	January 2019 Legal services	607.50
	*** Total ***	855.00
	Alta FoodCraft	
51900639	1/3/19 Coffee & tea supplies	322.84
51902216	1/31/19 Coffee & tea supplies	226.21
	*** Total ***	549.05
	ARC Document Solutions, LLC	
10010442	50% Construction draft plan copies for seismic retrofit for MWDOC office remodel	116.16
10014798	50% Construction draft plan copied to PDF for seismic retrofit for MWDOC office remodel	191.90
	*** Total ***	308.06
	Autumn Print Group	
3028	Mission statement sign for conference room 101	323.25
	*** Total ***	323.25
	Best Best and Krieger LLP	
55401-DEC18	December 2018 Legal services	12,425.18
839911	December 2018 State legislative advocacy services	8,590.23
	*** Total ***	21,015.41
	Calif. Society of Municipal Finance Officers	
300001306	2019 Membership renewal for H. Chumpitazi	110.00
	*** Total ***	110.00
	CDM Smith	
90056893	8/19/18-9/21/18 Engineering services for O.C. Water Reliability Investigation	15,972.50
	*** Total ***	15,972.50
	CSU Fullerton ASC	
AR168694	2nd Quarter FY 18/19 CDR Support	11,761.07
	*** Total ***	11,761.07
	Dudek	
20188579	12/1/18-12/28/18 Planning level reliability for South County Interconnection	6,185.78
20190040	12/29/18-1/25/19 Planning level reliability for South County Interconnection	7,803.75
	*** Total ***	13,989.53

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

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	GovConnection, Inc.	
56457443	1/6/19-1/5/24 Barracuda e-mail security subscription renewal	4,346.00
56450313	Network card for Hyper-V server	360.35
	*** Total ***	4,706.35
	Government Finance Officers Association	
0122001	4/1/19-3/31/20 Annual membership renewal for H. Chumpitazi	160.00
	*** Total ***	160.00
	GovernmentJobs.com, Inc.	
INV26835	12/28/18-12/27/19 Performance management software subscription, setup and training	6,503.00
	*** Total ***	6,503.00
	Green Shades Software, Inc.	
148222	2018 W-2 Upload fee	16.43
150104	Federal tax identification number verification for 2018 1099 forms	133.30
	*** Total ***	149.73
	Hashtag Pinpoint Corporation	
1180	December 2018 Social Media consultation & services	7,917.00
1182	January 2019 Social Media consultation & services	7,917.00
	*** Total ***	15,834.00
	IDS Group Inc.	
17X114.02-1	11/28/18-12/27/18 Interior design for MWDOC office remodel	5,650.00
17X114.00-5	12/28/18-1/31/19 Interior design for MWDOC office remodel	447.50
18X093.00-2	11/29/18-1/31/19 Engineering and support for MWDOC and WEROC S. EOC Seismic Retrofit project	37,645.47
	*** Total ***	43,742.97
	Independent Special Dist of OC	
ISDOC013119-REG	1/31/19 ISDOC meeting registrations for Directors Barbre, Finnegan and Thomas	51.00
013019-PAYPAL	12/28/18-1/30/19 PayPal receipts for 1/31/19 meeting	669.63
	*** Total ***	720.63
	James C. Barker, P.C.	
105-0119	January 2019 Federal legislative advocacy services	8,000.00
	*** Total ***	8,000.00
	Karen's Detail Custom Frames, LLC	
3058	Custom framing for resolution for R. Record	134.69
	*** Total ***	134.69
	Lawnscape Systems, Inc.	
399448	1/11/19 Landscape maintenance for atrium	295.00
	*** Total ***	295.00

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

Invoice#	Vendor / Description	Amount to Pay
	Lewis Consulting Group	
2019-107	January 2019 Consulting services	2,500.00
	*** Total ***	2,500.00
	Christopher S. Lingad	
121518	8/25/18-12/14/18 Education reimbursement	2,856.28
	*** Total ***	2,856.28
	Edward G. Means III	
MWDOC-1067	January 2019 Consulting on MET issues and guidance to engineering staff	625.00
	*** Total ***	625.00
	Patricia Meszaros	
APR-DEC2018	April-December 2018 Retiree medical premium	1,206.00
	*** Total ***	1,206.00
	NDS	
716829	1/11/19 Delivery charges for Board packets	145.81
	*** Total ***	145.81
	New Horizons CLC	
2562	3/4-8/19 Class for VMare vSphere software installation, configuration and management	3,187.50
	*** Total ***	3,187.50
	National Water Research Institute	
2019 CWF	2019 Children's Water Education Festival sponsorship	2,500.00
	*** Total ***	2,500.00
	Office Solutions	
I-01502625	1/7/19 Office supplies	369.38
I-01502637	1/7/19 Office supplies	6.79
I-01502991	1/8/19 Office supplies	32.61
I-01507780	1/15/19 Office supplies	86.98
I-01511108	1/18/19 Office supplies	63.03
I-01511162	1/18/19 Office supplies	133.70
I-01511428	1/18/19 Office supplies	86.96
I-01511480	1/18/19 Office supplies	131.37
	*** Total ***	910.82
	Orange County Fast Print, Inc.	
57367	Business cards for F. Soto	83.66
	*** Total ***	83.66
	Orange County Water District	
19848	December 2018 50% share of WACO expense	246.93
19883	December 2018 Postage, shared office & maintenance expense	8,185.69
	*** Total ***	8,432.62

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

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	Patricia Kennedy Inc.	
10720	February 2019 Plant maintenance	214.00
	*** Total ***	214.00
	Petty Cash	
JAN2019	January 2019 Petty Cash reimbursement	330.34
	*** Total ***	330.34
	Lester A. Rosenberg	
19-05	Engineering services for replacement of air conditioning units for MWDOC IT server room and WEROC S. EOC	3,750.00
	*** Total ***	3,750.00
	Curtis Schmutte	
012319	2/21/19 Water Policy Dinner speaker's reimbursement for airfare	233.96
	*** Total ***	233.96
	Joey C. Soto	
MWDOC#008	December 2018 Grant research and acquisition assistance	2,998.95
	*** Total ***	2,998.95
	Southern California Water Committee	
042	WaterFix Communications sponsorship	25,000.00
	*** Total ***	25,000.00
	Staples Advantage	
8052942511	1/19/19 Office supplies	90.94
	*** Total ***	90.94
	Top Hat Productions	
94804	1/17/19 Lunch for Managers' meeting	504.81
	*** Total ***	504.81
	WageWorks, Inc.	
INV1177340	January 2019 Cafeteria plan administration	196.07
	*** Total ***	196.07
	Total Core Expenditures	<hr/> 201,997.00

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

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
Choice Expenditures:		
	Discovery Science Center	
013119MWDOC	January 2019 Elementary School program	22,619.34
	*** Total ***	22,619.34
	Enterprise Information Sys Inc	
#MWDOC-22010	2019 Web hosting for California Sprinkler Adjustment Notification System program	2,400.00
	*** Total ***	2,400.00
	Mission RCD	
2633	December 2018 Field verifications for Water Use Efficiency rebate programs	2,823.80
	*** Total ***	2,823.80
	Orange County Water District	
19883	December 2018 Postage for Water Use Efficiency programs	28.59
	*** Total ***	28.59
	Top Hat Productions	
94775	1/8/19 Lunch for Water Loss Control meeting	467.10
	*** Total ***	467.10
	Total Choice Expenditures	28,338.83

Other Funds Expenditures:

	California Emergency Services Association	
300000259	2019 Annual membership renewal for K. Hubbard and F. Soto	130.00
	*** Total ***	130.00
	CSU Fullerton ASC	
AR168717	Maps with Southern California Edison public safety shutoff zones for WEROC	1,744.04
	*** Total ***	1,744.04
	Fry's Electronics	
22713156	Electronic supplies for WEROC S. EOC	81.82
	*** Total ***	81.82
	Mega Maids Cleaning Service	
10156	1/22/19 Cleaning services for WEROC S. EOC	90.00
	*** Total ***	90.00
	Michael Baker International	
1037732	10/29/18-12/31/18 O.C. Regional Water/Wastewater Multi-jurisdictional Hazardous Mitigation plan update	2,996.36
	*** Total ***	2,996.36

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

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<i>Mission RCD</i>	
2633	December 2018 Field verifications for Water Use Efficiency rebate programs	2,121.45
	*** Total ***	2,121.45
	<i>Office Solutions</i>	
I-01512418	1/22/19 Office supplies for WEROC S. EOC	29.96
	*** Total ***	29.96
	<i>Water Systems Optimization, Inc.</i>	
1489	December 2018 Water Loss Control program	18,572.50
1498	January 2019 Water Loss Control program	10,911.69
	*** Total ***	29,484.19
	<i>Total Other Funds Expenditures</i>	<hr/> 36,677.82
	<i>Total Expenditures</i>	<hr/> <hr/> 267,013.65

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

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
Core Disbursements:				
138619	1/4/19	SPECTB	Spectrum Business	
		0375210122018	January 2019 Telephone and internet expense	1,099.14
			***Total ***	1,099.14
138620	1/4/19	VERIZO	Verizon Wireless	
		9820932696	December 2018 4G Mobile broadband unlimited service	114.03
			***Total ***	114.03
138625	1/15/19	DUBUQU	Tina Dubuque	
		120318	November-December 2018 Business expense	140.81
			***Total ***	140.81
138628	1/15/19	IRONMO	Iron Mountain	
		AKMS313	January 2019 Archived document storage fees	209.70
			***Total ***	209.70
138636	1/15/19	SPECTB	Spectrum Business	
		0343564010119	January 2019 Telephone expense for 3 analog fax lines	108.13
			***Total ***	108.13
ACH003727	1/15/19	ACKEEX	Linda Ackerman	
		123118	December 2018 Business expense	76.30
			***Total ***	76.30
ACH003730	1/15/19	BARBRE	Brett Barbre	
		123118	December 2018 Business expense	183.12
			***Total ***	183.12
ACH003731	1/15/19	BAUMHA	Melissa Baum-Haley	
		123018	December 2018 Business expense	154.96
			***Total ***	154.96
ACH003732	1/15/19	BERGIO	Joseph Berg	
		123118	December 2018 Business expense	281.91
			***Total ***	281.91
ACH003733	1/15/19	BUIJEA	Jeannie Bui	
		113018	November 2018 Business expense	54.11
			***Total ***	54.11
ACH003734	1/15/19	DAVISR	Rachel Davis	
		123118	December 2018 Business expense	34.24
			***Total ***	34.24
ACH003735	1/15/19	DICKEX	Larry Dick	
		123118	December 2018 Business expense	114.48
			***Total ***	114.48

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

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
ACH003736	1/15/19	FAHLBE 123118	Beth Fahl December 2018 Business expense ***Total ***	 21.36 21.36
ACH003737	1/15/19	FINNEG 113018	Joan Finnegan November 2018 Business expense	147.25
ACH003738	1/15/19	123118	December 2018 Business expense ***Total ***	85.07 232.32
ACH003740	1/15/19	GUNAWA 123118	Lina Gunawan December 2018 Business expense ***Total ***	 16.68 16.68
ACH003747	1/15/19	MULDOO 113018	Traci L. Muldoon November 2018 Business expense ***Total ***	 21.97 21.97
ACH003755	1/15/19	SCHNEI 123118	Megan Yoo Schneider December 2018 Business expense ***Total ***	 315.56 315.56
ACH003756	1/15/19	SECKEL 120118	Karl Seckel July-December 2018 Business expense ***Total ***	 407.05 407.05
138687	1/31/19	USBANK 0403/4140/5443-DEC18	U.S. Bank 11/24/18-12/24/18 Cal Card charges ***Total *** (See attached sheet for details)	 22,077.24 22,077.24
ACH003759	1/31/19	BACATI 120118	Tiffany Baca November-December 2018 Business expense ***Total ***	 35.21 35.21
ACH003760	1/31/19	BAEZHE 123118	Heather Baez December 2018 Business expense ***Total ***	 48.00 48.00
ACH003761	1/31/19	BUIJEA 123118	Jeannie Bui December 2018 Business expense ***Total ***	 18.59 18.59
ACH003762	1/31/19	BUSSLI 123118	Charles Busslinger December 2018 Business expense ***Total ***	 73.29 73.29
ACH003763	1/31/19	DAVANK 011419	Kathryn Davanaugh January 2019 Business expense ***Total ***	 100.00 100.00

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

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
ACH003764	1/31/19	DELATO 012519	Harvey De La Torre January 2019 Business expense ***Total ***	 88.34 88.34
ACH003765	1/31/19	HARRIS 011519	Cathleen M. Harris January 2019 Business expense ***Total ***	 221.02 221.02
ACH003771	1/31/19	THOMAS 123118	Jeffery Thomas December 2018 Business expense ***Total ***	 807.80 807.80
ACH003772	1/31/19	WILSON 123118	Sarah C. Wilson December 2018 Business expense ***Total ***	 17.88 17.88
Total Core Disbursements				27,073.24

Choice Disbursements:

138627	1/15/19	HOMED1 7785-DEC18	Home Depot Credit Services 100 Foot reel tape measure ***Total ***	 38.84 38.84
138687	1/31/19	USBANK 4140-DEC18	U.S. Bank 11/24/18-12/24/18 Cal Card charges ***Total *** (See attached sheet for details)	 9.95 9.95
Total Choice Disbursements				48.79

Other Funds Disbursements:

138620	1/4/19	VERIZO 9820932696	Verizon Wireless December 2018 4G Mobile broadband unlimited service ***Total ***	 76.02 76.02
138621	1/15/19	ATTCALN 000012389491 000012389492	AT&T December 2018 WEROC N. & S. EOC telephone expense December 2018 WEROC N. EOC telephone expense ***Total ***	 206.07 106.53 312.60
138631	1/15/19	MFHETD 122118BRLP	Multi Family HET Direct Barcelona Resorts L.P. (Aliso Viejo) ***Total ***	 81,300.00 81,300.00

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

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
ACH003732	1/15/19	BERGIO	Joseph Berg	
		123118	December 2018 Business expense	4.50
			***Total ***	4.50
		DRIPPR	Spray to Drip Program	
138640	1/25/19	S2D2-R-IRWD-5028-13241	A. Reyes	297.80
138641	1/25/19	S2D2-R-MESA-35292-17312	K. Mueller	270.00
			***Total ***	567.80
		TURFRP	Turf Removal Program	
138642	1/25/19	TR11-R-SM-26794-26716	C. McPherson	501.80
138643	1/25/19	TR11-C-HB-26833-26749	Seacliff Seabreeze (Huntington Beach)	3,220.00
138644	1/25/19	TR12-R-IRWD-5028-26782	A. Reyes	1,178.00
138645	1/25/19	TR11-C-HB-26833-26796	Seacliff Seabreeze (Huntington Beach)	5,820.03
138646	1/25/19	TR11-C-HB-26833-26798	Seacliff Seabreeze (Huntington Beach)	7,820.00
138647	1/25/19	TR11-C-HB-26833-26799	Seacliff Seabreeze (Huntington Beach)	9,568.00
138648	1/25/19	TR11-C-HB-26833-26800	Seacliff Seabreeze (Huntington Beach)	7,976.40
138649	1/25/19	TR11-C-BREA-7699-26812	City of Brea	4,577.00
138650	1/25/19	TR11-C-HB-26891-26816	Seaside Village (Huntington Beach)	45,153.60
138651	1/25/19	TR11-C-BREA-7699-26820	City of Brea	36,340.00
138652	1/25/19	TR11-R-IRWD-26925-26850	T. Tackett	912.00
138653	1/25/19	TR12-R-ETWD-26972-26898	B. Phan	3,000.00
138654	1/25/19	TR12-R-MNT-27061-26983	S. Vale	1,606.00
138655	1/25/19	TR12-R-IRWD-28097-28019	D. Bryan	382.00
138656	1/25/19	TR12-R-WEST-28120-28043	H. Nguyen	1,500.00
138657	1/25/19	TR12-R-MNT-28124-28050	F. Heaton	3,000.00
138658	1/25/19	TR12-R-IRWD-29137-29062	B. Nakum	1,276.00
138659	1/25/19	TR12-R-IRWD-29142-29067	M. Endo	803.00
138660	1/25/19	TR12-R-IRWD-29172-29096	J. Levesque	468.00
138661	1/25/19	TR12-R-IRWD-29175-29099	A. Damian	623.00
138662	1/25/19	TR12-R-IRWD-29176-29100	J. Moore	910.00
138663	1/25/19	TR12-R-MNT-29191-29113	K. Munselle	1,226.00
138664	1/25/19	TR12-R-IRWD-29196-29118	T. Vu	1,500.00
138665	1/25/19	TR12-R-IRWD-29205-29125	N. Todd	514.00
138666	1/25/19	TR12-R-IRWD-29210-29129	M. Nguyen	302.00
138667	1/25/19	TR12-R-IRWD-29214-29135	E. Avalos	393.00
138668	1/25/19	TR12-R-ETWD-29222-29144	C. Keyes	600.00
138669	1/25/19	TR12-R-MNT-29225-29147	P. English	2,270.00
138670	1/25/19	TR12-R-IRWD-30230-30153	M. Dekarver	248.00
138671	1/25/19	TR12-R-IRWD-30232-30154	C. Fessenden	388.00
138672	1/25/19	TR12-R-MNT-30233-30155	M. Ewry	1,098.00
138673	1/25/19	TR12-R-MNT-30238-30162	N. Fyson	538.00
138674	1/25/19	TR12-R-MNT-30243-30167	K. Henderson	2,140.00
138675	1/25/19	TR12-R-MNT-30247-30171	R. Lum	634.00
138676	1/25/19	TR12-R-IRWD-35266-35192	V. Meitzler	499.00
138677	1/25/19	TR12-R-IRWD-35280-35209	M. Vande Wydeven	838.00
138678	1/25/19	TR12-R-MNT-35284-35213	K. St Peter	1,558.00
138679	1/25/19	TR12-R-IRWD-35301-35226	A. Valdez	309.00

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

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
138680	1/25/19	TR12-R-IRWD-4397-35229	W. Chang-Chien	708.00
138681	1/25/19	TR12-R-MNT-35308-35233	E. Gilhooley	740.00
138682	1/25/19	TR12-R-IRWD-35314-35239	D. Brown	482.00
138683	1/25/19	TR12-R-IRWD-35326-35252	H. Huynh	947.00
			***Total ***	154,566.83
138686	1/31/19	SANTI1 NOV2018	Santiago Aqueduct Commission November 2018 SAC Pipeline operation surcharge	3,011.68
			***Total ***	3,011.68
138687	1/31/19	USBANK 4140-DEC18	U.S. Bank 11/24/18-12/24/18 Cal Card charges	1,335.47
			***Total ***	1,335.47
			(See attached sheet for details)	
138688	1/31/19	WSIP WSP4523	Water Savings Incentive Program Cartel Electronics, Inc. (Placentia)	15,000.00
			***Total ***	15,000.00
ACH003770	1/31/19	SANTAM NOV2018	Santa Margarita Water District November 2018 SCP Pipeline operation surcharge	27,732.97
			***Total ***	27,732.97
EFT-190131	1/31/19	METWAT 9561	Metropolitan Water District November 2018 Water deliveries	15,713,695.57
			***Total ***	15,713,695.57
			Total Other Funds Disbursements	15,997,603.44
			Total Disbursements	16,024,725.47



Robert J. Hunter, General Manager



Hilary Chumpitazi, Treasurer

Cal Card Charges
Statement Date: December 24, 2018
Payment Date: January 31, 2019

<u>Date</u>	<u>Description</u>	<u>Amount</u>
<u>Public Affairs</u>		
11/28/2018	Legislative Activities in Washington, DC on Nov. 27, 2018 - In-flight wi-fi service for D. Micalizzi	16.00
11/28/2018	Portable speaker for MWDOC events	131.40
11/30/2018	Public Relations Society of America annual membership renewal for T. Baca	260.00
11/30/2018	Public Relations Society of America annual membership renewal for D. Micalizzi	260.00
12/4/2018	UPS packaging and delivery charges for Public Affairs workshop speaker's gift	17.25
12/13/2018	Lunch for Public Affairs workshop	285.32
	Total	<u>\$ 969.97</u>

Cal Card Charges
Statement Date: December 24, 2018
Payment Date: January 31, 2019

Date	Description	Amount
<u>K. Seckel Card</u>		
11/24/2018	10/24/18-11/23/18 Web hosting service for MWDOC website	15.67
11/26/2018	American Water Works Association California-Nevada Section Water Use Efficiency Grade I workshop in Rancho Cucamonga, CA from Dec. 5-6, 2018 - Registration for S. Fetter and J. Meier	750.00
11/26/2018	WACO meeting on Dec. 7, 2018 - Accommodations for guest speaker D. Eggerton	282.70 1
11/30/2018	Federal Express delivery charges for National Notary Association on Nov. 27, 2018	18.05
11/30/2018	ACWA Fall conference in San Diego, CA from Nov. 27-30, 2018 - Accommodations for M. Baum Haley	673.59
11/30/2018	ACWA Fall conference in San Diego, CA from Nov. 27-30, 2018 - Accommodations for H. De La Torre	673.59
11/30/2018	ACWA Fall conference in San Diego, CA from Nov. 27-30, 2018 - Accommodations for H. Baez	708.59
11/30/2018	2019 California Chamber of Commerce annual membership renewal	469.00
12/1/2018	Legislative Activities in Washington, DC from Nov. 27-30, 2018 - Accommodations for D. Micalizzi	700.79
12/2/2018	12/01/18-12/31/18 E-mail service for California Sprinkler Adjustment Notification System	9.95
12/3/2018	UPS delivery charges for Board packets on Nov. 28 & 30, 2018	72.38
12/3/2018	70 Regal movie tickets for employee purchase	640.00
12/3/2018	Legislative Activities in Sacramento, CA on Dec. 12, 2018 - Airfare refund for date change for H. Baez	(34.00)
12/3/2018	Lunch for staff development meeting	70.37
12/4/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Refund for duplicate accommodations deposit for M. Baum Haley	(168.94)
12/4/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Refund for duplicate accommodations deposit for H. De La Torre	(146.26)
12/5/2018	Orange County Emergency Management Organization Holiday lunch in Buena Park, CA on Dec. 6, 2018	1,335.47 2
12/10/2018	UPS delivery charges for Board packets on Nov. 30, 2018 and Dec. 7, 2018	100.19
12/10/2018	California Water Efficiency Partnership Quarterly meeting in Napa, CA from Dec. 11-13, 2018 - Airfare for J. Berg	531.96
12/10/2018	California Water Efficiency Partnership Quarterly meeting in Napa, CA from Dec. 11-13, 2018 - Accommodations for J. Berg	273.60
12/12/2018	American Water Works Association California-Nevada Section Water Use Efficiency certification for S. Fetter	135.00
12/12/2018	American Water Works Association California-Nevada Section Water Use Efficiency certification for J. Meier	135.00
12/12/2018	Legislative Activities in Sacramento, CA on Dec. 18, 2018 - Airfare for H. Baez	529.96
12/13/2018	8 Toner cartridges	301.55
12/14/2018	Food for staff development meeting	29.99
12/14/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 - Accommodations for H. De La Torre	377.57

Cal Card Charges
Statement Date: December 24, 2018
Payment Date: January 31, 2019

Date	Description	Amount
12/14/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 11-14, 2018 -Accommodations for M. Baum Haley	384.54
12/14/2018	Southern California Water Coalition Quarterly Luncheon meeting in Irvine, CA on Jan. 25, 2019 - Registration for H. Baez and M. Baum Haley	150.00
12/14/2018	Southern California Water Coalition Quarterly Luncheon meeting in Irvine, CA on Jan. 25, 2019 - Registration for Director Tamaribuchi	75.00
12/17/2018	Emergency repair to board up shattered atrium window	495.00
12/17/2018	UPS delivery charges for Board packets on Dec. 7, 12 & 14, 2018	127.50
12/18/2018	Shutterstock license downloads for Images on Demand	29.00
12/19/2018	Laptop computer for Director Barbre	3,378.83 3
Total		<u>\$ 13,125.64</u>

- 1 OCWD will reimburse MWDOC for \$141.35
- 2 Lunch attendees reimbursed MWDOC
- 3 Director Barbre reimbursed MWDOC \$1,378.83, balance will be paid through payroll deductions as an employee computer loan

Cal Card Charges
Statement Date: December 24, 2018
Payment Date: January 31, 2019

Date	Description	Amount
<u>R. Hunter Card</u>		
11/26/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-14, 2018 - Airfare for Director Barbre	173.98 ¹
11/26/2018	ACWA Fall conference in San Diego, CA from Nov. 27-29, 2018 - Accommodations for R. Hunter	519.06
11/26/2018	ACWA Fall conference in San Diego, CA from Nov. 27-29, 2018 - Accommodations for Director Tamaribuchi	519.06
11/26/2018	ACWA Fall conference in San Diego, CA from Nov. 28-29, 2018 - Accommodations for Director Yoo Schneider	259.53
11/27/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA from Dec. 5-6, 2018 - Airfare for Director Yoo Schneider	432.96
11/28/2018	ACWA Fall conference in San Diego, CA from Nov. 27-29, 2018 - Lunch for Director Tamaribuchi, R. Hunter and guest	119.66
11/28/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA from Dec. 5-6, 2018 - Accommodations for Director Yoo Schneider	240.35
11/28/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA from Dec. 5-7, 2018 - Accommodations for Director Tamaribuchi	492.20
11/29/2018	Association of California Cities Orange County Washington DC Federal Advocacy trip in Washington, DC from Jan. 27-30, 2019 - Airfare for Director Barbre	1,478.40 ²
11/30/2018	ACWA Fall conference in San Diego, CA from Nov. 27-30, 2018 - Accommodations for Director Thomas	851.95
12/1/2018	Legislative Activities in Washington, DC from Nov. 27-30, 2018 - Accommodations for Director Barbre	776.44 ³
12/3/2018	California Environmental Dialogue Plenary meeting in Sacramento, CA on Dec. 7, 2018 - Refunded airfare for R. Hunter	(529.96)
12/4/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-14, 2018 - Refund for duplicate accommodations deposit for Director Thomas	(146.26)
12/4/2018	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 12-14, 2018 - Airfare for Director Thomas	191.98 ⁴
12/5/2018	Legislative Activities in Washington, DC from Jan. 9-11, 2019 - Airfare for Director Barbre	1,528.40 ⁵
12/7/2018	Food for Elected Officials meeting	900.77
12/19/2018	Staff holiday luncheon	1,518.53
Total		<u>\$ 9,327.05</u>

- ¹ Flight canceled, funds available for future flight
- ² Director Barbre to reimburse MWDOC \$1,021.80
- ³ Director Barbre reimbursed MWDOC \$161.50
- ⁴ Flight canceled, funds available for future flight
- ⁵ Director Barbre to reimburse MWDOC \$1,071.80

Municipal Water District of Orange County
GM Approved Disbursement Report ⁽¹⁾
For the month of January 2019

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
Core Disbursements:				
138689	1/31/19	WESTIN M-EDN07IA	Westin South Coast Plaza Deposit for 2/21/19 Water Policy Dinner event facility	5,000.00
			***Total ***	5,000.00
ACH003769	1/31/19	PATRIC 10677	Patricia Kennedy Inc. January 2019 Plant maintenance	214.00
			***Total ***	214.00
			Total Core Disbursements	5,214.00
Choice Disbursements:				
138639	1/24/19	PARKSR 925-2014-012-2019	State of California 2/1/19-1/31/20 Lease for Doheny Ocean Desal site (4th extension)	29,172.15
			***Total ***	29,172.15
			Total Choice Disbursements	29,172.15
Other Funds Disbursements:				
			Total Other Funds Disbursements	0.00
			Total Disbursements	34,386.15



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
 December 31, 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

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
Designated Reserves		
General Operations	\$3,341,910	19.31%
Grant & Project Cash Flow	1,500,000	8.67%
Election Expense	608,000	3.51%
Building Repair	385,408	2.23%
OPEB	297,147	1.72%
Total Designated Reserves	6,132,465	35.44%
General Fund	8,287,029	47.87%
Water Fund	2,845,092	16.44%
Conservation Fund	(231,676)	(1.34%)
Desalination Feasibility Study Fund	(145,268)	(0.84%)
WEROC Fund	390,869	2.26%
Trustee Activities	28,911	0.17%
Total	\$17,307,422	100.00%

The funds are invested as follows:

Term of Investment	% of Portfolio	Book Value	Market Value
Cash	0.58%	\$100,264	\$100,264
Short-term investment			
• LAIF	58.57%	\$10,136,894	\$10,136,894
• OCIP	22.92%	3,967,673	3,967,673
Long-term investment			
• Corporate Bond	6.66%	1,152,591	1,124,779
• Certificates of Deposit	11.27%	1,950,000	1,925,724
Total	100.00%	\$17,307,422	\$17,255,334

The average number of days to maturity/call as of December 31, 2018 equaled 158 and the average yield to maturity is 2.229%. During the month, the District's average daily balance was \$24,673,325.97. 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 December 2018.

The (\$52,088) difference between the book value and the market value on December 31, 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

December 31, 2018

12/31/2018	Par Value	Market Value	Book Value	% of Portfolio	Days to Mat/Call	YTM @ Cost
Negotiable Certificate Of Deposit	1,950,000.00	1,925,723.50	1,950,000.00	11.33	859	2.504
Corporate Bond	1,150,000.00	1,124,779.50	1,152,590.99	6.68	755	2.290
Local Agency Investment Funds	10,136,893.83	10,136,893.83	10,136,893.83	58.93	1	2.282
Orange County Investment Pool	3,967,672.61	3,967,672.61	3,967,672.61	23.06	1	1.939
Total Investments	17,204,566.44	17,155,069.44	17,207,157.43	100.00	149	2.229
Cash						
Cash	100,264.11	100,264.11	100,264.11		1	0.00
Total Cash and Investments	17,304,830.55	17,255,333.55	17,307,421.54		149	2.229

Total Earnings	Month Ending November	Fiscal Year to Date
Current Year	54,373.23	297,849.38
Average Daily Balance	24,673,325.97	
Effective Rate of Return	2.229%	

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

2-5-19


Hilary Chumipitazi, Treasurer

Date

02/05/2019

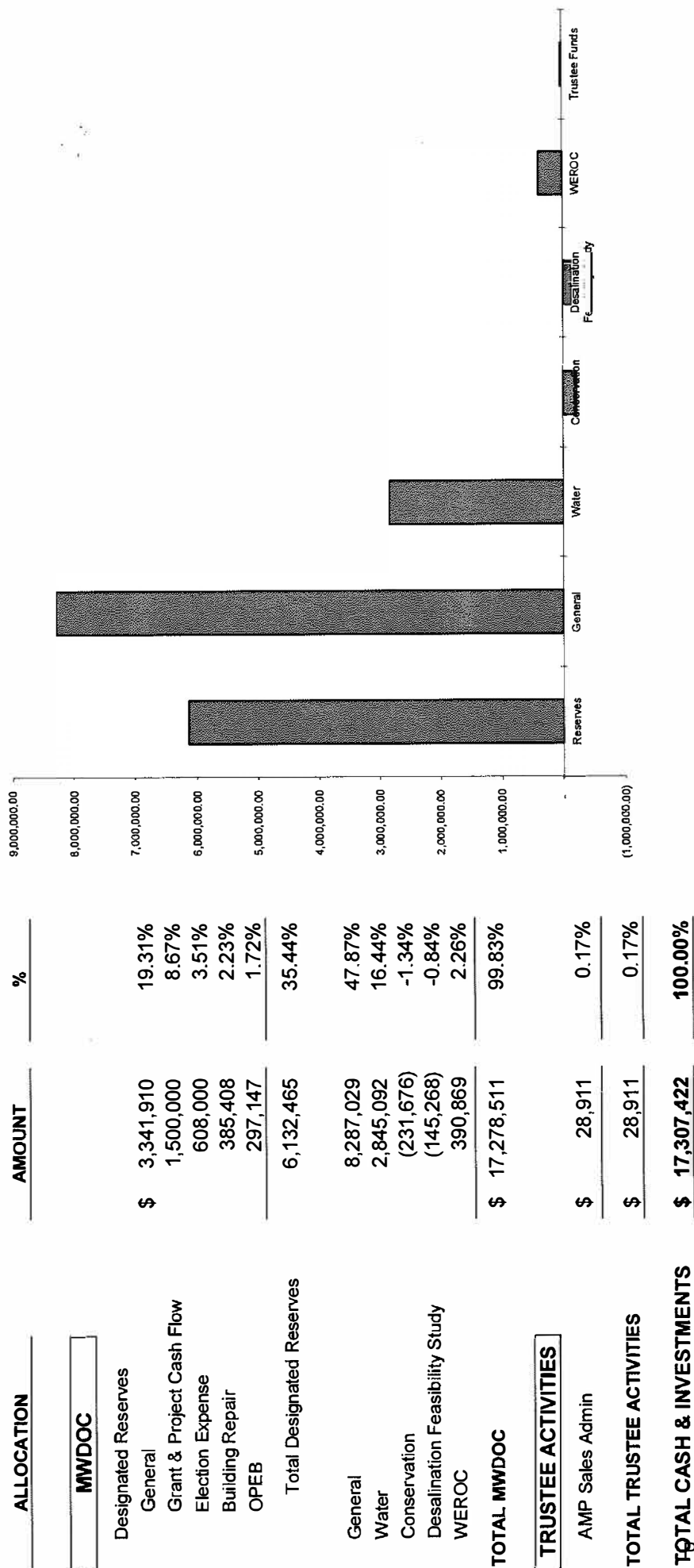
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Portfolio Management
Long-Term Portfolio Details - Investments
December 31, 2018

Issuer	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
Negotiable Certificate Of Deposit									
Barclays Bank	06740KKY2	9/27/2017	250,000.00	240,085.00	250,000.00	2.250	2.250	1,366	9/27/2022
Capital One Bank	14042E6C9	9/2/2015	250,000.00	249,140.00	250,000.00	1.950	1.950	246	9/3/2019
Comenity Capital	20033AUX2	7/25/2017	200,000.00	194,426.00	200,000.00	2.000	2.000	928	7/16/2021
Discover Bank	254673RV0	7/25/2018	250,000.00	247,640.00	250,000.00	3.300	3.300	1,667	7/25/2023
Goldman Sachs Bank	38148PT98	8/8/2018	250,000.00	248,092.50	250,000.00	3.350	3.350	1,681	8/8/2023
HSBC Bank	40434AK65	1/21/2016	250,000.00	249,955.00	250,000.00	2.250	2.534	21	1/21/2021
Morgan Stanley Bank	61747MJ36	2/1/2018	250,000.00	247,120.00	250,000.00	2.500	2.500	763	2/1/2021
Synchrony Bank	87164XBY1	7/25/2014	250,000.00	249,265.00	250,000.00	2.050	2.050	211	7/30/2019
Sub Total			1,950,000.00	1,925,723.50	1,950,000.00	2.468	2.504	859	
Corporate Bond									
JP Morgan Chase	46625HKA7	11/2/2015	500,000.00	495,020.00	500,494.12	2.250	2.152	357	1/23/2020
National Rural Util Coop	63743FE51	7/27/2017	200,000.00	189,432.00	200,000.00	2.500	2.500	1,292	7/15/2022
Wells Fargo	94974BGR5	1/13/2016	250,000.00	246,477.50	250,636.89	2.550	2.409	707	12/7/2020
Westpac Banking Corp	961214DQ3	7/25/2017	200,000.00	193,850.00	201,459.98	2.500	2.278	1,275	6/28/2022
Sub Total			1,150,000.00	1,124,779.50	1,152,590.99	2.402	2.290	755	
Total Investments			3,100,000.00	3,050,503.00	3,102,590.99	2.444	2.425	820	
Total Earnings									
Current Year		Month Ending November	6,363.25	Fiscal Year To Date	36,761.72				

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Portfolio Management
Short-Term Portfolio Details - Cash and Investments
December 31, 2018

Investments	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
Local Agency Investment Funds									
LAIF LGIP	LAIF	6/30/2010	10,136,893.83	10,136,893.83	10,136,893.83	2.282	2.282	1	N/A
Sub Total			10,136,893.83	10,136,893.83	10,136,893.83	2.282	2.282	1	
Orange County Investment Pool									
County of Orange LGIP	OCIP	6/29/2005	3,967,672.61	3,967,672.61	3,967,672.61	1.939	1.939	1	N/A
Sub Total			3,967,672.61	3,967,672.61	3,967,672.61	1.939	1.939	1	
Total Investments			14,104,566.44	14,104,566.44	14,104,566.44	2.186	2.186		
Cash									
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	99,764.11	99,764.11	99,764.11	0.000	0.000	1	N/A
Total Cash			100,264.11	100,264.11	100,264.11	0.000	0.000	1	
Total Cash and Investments			14,204,830.55	14,204,830.55	14,204,830.55	2.186	2.186	1	
Total Earnings									
Current Year		Month Ending November	48,009.98	Fiscal Year To Date	261,087.66				

**Municipal Water District of Orange County
Cash and Investments at December 31, 2018**



MUNICIPAL WATER DIST OF ORANGE COUNTY
PARS Post-Employment Benefits Trust**Account Report for the Period**
12/1/2018 to 12/31/2018Rob Hunter
General Manager
Municipal Water Dist of Orange County
18700 Ward Street
Fountain Valley, CA 92708**Account Summary**

Source	Beginning Balance as of 12/1/2018	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 12/31/2018
OPEB	\$2,065,285.13	\$0.00	-\$81,237.45	\$430.26	\$0.00	\$0.00	\$1,983,617.42
PENSION	\$202,972.21	\$0.00	-\$7,983.86	\$42.29	\$0.00	\$0.00	\$194,946.06
Totals	\$2,268,257.34	\$0.00	-\$89,221.31	\$472.55	\$0.00	\$0.00	\$2,178,563.48

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	-3.93%	-6.83%	-4.12%	4.94%	3.94%	-	10/26/2011
PENSION	-3.93%	-6.83%	-	-	-	-	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

PARS DIVERSIFIED PORTFOLIOS MODERATE

Q4 2018

WHY THE PARS DIVERSIFIED MODERATE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

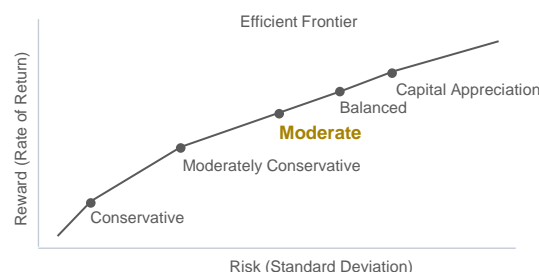
In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

INVESTMENT OBJECTIVE

To provide 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.



ASSET ALLOCATION — MODERATE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	40 - 60%	50%	51%
Fixed Income	40 - 60%	45%	46%
Cash	0 - 20%	5%	3%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

Current Quarter*	-6.71%
Blended Benchmark*, **	-6.48%
Year To Date	-4.03%
Blended Benchmark	-3.37%
1 Year	-4.03%
Blended Benchmark	-3.37%
3 Year	4.96%
Blended Benchmark	5.04%
5 Year	3.95%
Blended Benchmark	4.36%
10 Year	7.78%
Blended Benchmark	7.35%

* Returns less than 1-year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 – Present: 26.5% S&P500, 5% Russell Mid Cap, 7.5% Russell 2000, 3.25% MSCI EM (net), 6% MSCI EAFE (net), 33.50% BBG Barclays US Agg, 10% ICE BofAML 1-3 Yr US Corp/Gov't, 1.50% ICE BofAML US High Yield Master II, 1.75% Wilshire REIT, and 5% FTSE 1 Mth T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 43% S&P 500; 2% Russell 2000, 5% MSCI EAFE (net), 15% ICE BofAML 1-3 Year Corp./Gov't, 30% BBG Barclays US Agg, 5% FTSE 1 Mth T-Bill. Prior to April 2007: the blended benchmark was 50% S&P 500, 15% ICE BofAML 1-3Yr Corp/Gov, 30% BBG Barclays US Agg, and 5% FTSE 1 Mth T-Bill.

Index Plus Composite (Passive)

Current Quarter*	-6.46%
Blended Benchmark*, **	-6.48%
Year To Date	-4.03%
Blended Benchmark	-3.37%
1 Year	-4.03%
Blended Benchmark	-3.37%
3 Year	4.72%
Blended Benchmark	5.04%
5 Year	3.85%
Blended Benchmark	4.36%
10 Year	7.20%
Blended Benchmark	7.35%

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-22.88%
2009	21.47%
2010	12.42%
2011	0.55%
2012	12.25%
2013	13.06%
2014	4.84%
2015	0.14%
2016	6.45%
2017	13.19%
2018	-4.03%

Index Plus Composite (Passive)

2008	-18.14%
2009	16.05%
2010	11.77%
2011	2.29%
2012	10.91%
2013	12.79%
2014	5.72%
2015	-0.52%
2016	7.23%
2017	11.59%
2018	-4.03%

PORTFOLIO FACTS

HighMark Plus (Active)

Composite Inception Date	10/2004
No of Holdings in Portfolio	18

Index Plus (Passive)

Composite Inception Date	05/2006
No of Holdings in Portfolio	12

HOLDINGS

HighMark Plus (Active)

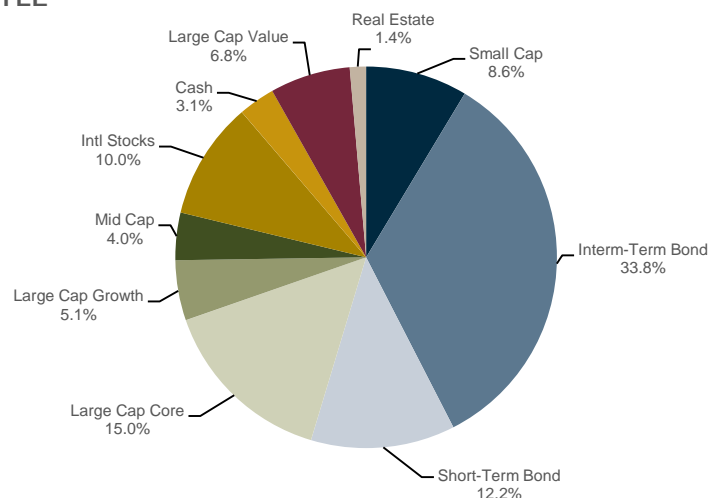
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
Harbor Capital Appreciation - Retirement
T. Rowe Price Growth Stock - I
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value
T. Rowe Price New Horizons - I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth – R6
Hartford Schroders Emerging Markets Eq
Vanguard Short-Term Invest-Grade Adm
PIMCO Total Return Fund - Inst
PGIM Total Return Bond – R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value
iShares S&P 500 Growth
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value
iShares Russell 2000 Growth
iShares MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Composites are managed by HighMark's HighMark Capital Advisors (HCA) with full investment authority according to the PARS Moderate active and passive objectives.

The adviser to the PARS portfolios is US Bank, and HighMark serves as sub-adviser to US Bank to manage these portfolios. US Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. As of December 31, 2018, the blended rate is 0.58%. US Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with US Bank. The 36 basis points paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a 10 million initial value would grow to \$12.55 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. Client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Free Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The US High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg Barclays Capital (BC) U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The Merrill Lynch (ML) 1-3 Year U.S. Corporate & Government Index tracks the bond performance of The ML U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark), an SEC-registered investment adviser, is a wholly owned subsidiary of MUFG Union Bank, N.A. (MUB). HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. MUB, a subsidiary of MUFG Americas Holdings Corporation, provides certain services to HighMark and is compensated for these services. Past performance does not guarantee future results. Individual account management and construction will vary depending on each client's investment needs and objectives. **Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.**

HIGHMARK CAPITAL MANAGEMENT

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has nearly 100 years (including predecessor organizations) of institutional money management experience with \$7.5 billion in assets under management and \$7.3 billion in assets under advisement*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®

Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®

Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Randy Yurchak, CFA®

Senior Portfolio Manager
Investment Experience: since 2002
HighMark Tenure: since 2017
Education: MBA, Arizona State University; BS, University of Washington

Asset Allocation Committee

Number of Members: 16
Average Years of Experience: 27
Average Tenure (Years): 14

Manager Review Group

Number of Members: 7
Average Years of Experience: 18
Average Tenure (Years): 6

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. Assets under advisement ("AUA") include assets for which HighMark provides certain investment advisory services (including, but not limited to, investment research and strategies) for client assets of its parent company, MUFG Union Bank, N.A.

**Municipal Water District of Orange County
WATER USE EFFICIENCY PROJECTS**
Cash Flow as of 01/31/19

	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
Cash - Beginning Balance	\$ 280,051.97	\$ 273,554.92	\$ 407,387.74	\$ 170,892.71	\$ 70,974.64	\$ (267,020.46)	\$ (231,676.04)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	
REVENUES:													
BUREC	4,605.00	111.00		102,395.93			162,953.35						\$ 270,065.28
City of Brea													-
City of Buena Park	222.00	222.00											222.00
City of Fountain Valley			1,376.29	663.05	111.00		222.00						2,594.34
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											22,623.33
City of San Juan Capistrano				1,683.99	3,312.00	1,245.00	3,694.36						-
City of Santa Ana													-
City of Tustin													-
City of Newport Beach		3,343.80		1,980.57		2,314.05	91.45						7,729.87
City of Orange	444.00		913.75	1,134.10	173.85	428.00	111.00						3,204.70
City of Westminster	333.00	539.00	555.00		666.00								2,083.00
County of Orange													-
Department of Water Resources	32,990.80												32,990.80
East Orange County Water District													-
El Toro Water District		774.00		2,544.00	4,063.10	290.00	104.00						7,775.10
Irvine Ranch Water District	8,271.11	47,878.73		11,090.04	98,495.70	108,960.16	11,960.75						286,666.49
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	14,020.41						232,179.88
Moulton Niguel Water District	38,341.68	7,726.23	10,281.98	10,872.48	21,400.00	32,011.70	53,277.39						173,911.46
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
Miscellaneous Revenues													
Miscellaneous	2,228.14			1,587.30									3,815.44
Interest Revenue	91,568.53	262,233.99	13,297.02	134,144.44	128,321.65	172,720.95	246,434.71	-	-	-	-	-	\$ 1,048,717.29
Total Revenues													
EXPENDITURES:													
Budget Based Tiered Rates, Ratfells	2,220.00	1,050.00	1,800.00	11,960.00	730.00	5,150.00	2,080.00						24,990.00
Droplet													-
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	2,324.45	2,324.45						57,187.69
Multi Family HET Direct			4,800.00		75,975.00	100,275.00	81,300.00						262,350.00
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	567.80						13,740.52
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	154,566.83						907,540.59
Water Savings Incentive Program							15,000.00						15,000.00
Miscellaneous Expenses													
Interest Expense													-
Salary & Benefit			5,563.51	1,700.00	1,785.00	1,275.00							10,323.51
Total Expenditures	98,045.58	128,401.17	249,792.05	234,068.51	466,316.75	137,376.53	255,839.08	-	-	-	-	-	\$ 1,568,829.67
Cash - Ending Balance	\$ 273,554.92	\$ 407,387.74	\$ 170,892.71	\$ 70,974.64	\$ (267,020.46)	\$ (231,676.04)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	\$ (241,080.41)	

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
COMBINED FINANCIAL STATEMENTS
AND
BUDGET COMPARATIVE
JULY 1, 2018 THRU DECEMBER 31, 2018

**Municipal Water District of Orange County
Combined Balance Sheet
As of December 31, 2018**

<u>ASSETS</u>	Amount
Cash in Bank	100,264.11
Investments	17,207,157.43
Accounts Receivable	21,860,097.82
Accounts Receivable - Other	118,294.92
Accrued Interest Receivable	159,018.20
Prepays/Deposits	326,850.97
Leasehold Improvements	3,735,829.68
Furniture, Fixtures & Equipment	563,307.34
Less: Accum Depreciation	<u>(2,964,217.56)</u>
TOTAL ASSETS	<u>\$41,106,602.91</u>
 <u>LIABILITIES AND FUND BALANCES</u>	
Liabilities	
Accounts Payable	23,083,083.35
Accounts Payable - Other	390.85
Accrued Salaries and Benefits Payable	434,448.87
Other Liabilities	291,522.84
Unearned Revenue	954,311.68
Total Liabilities	<u>24,763,757.59</u>
 Fund Balances	
Restricted Fund Balances	
Water Fund - T2C	994,121.02
Total Restricted Fund Balances	<u>994,121.02</u>
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	297,147.00
Total Designated Reserves	<u>6,132,464.81</u>
General Fund	3,071,799.80
General Fund Capital	525,009.00
WEROC Capital	115,298.58
WEROC	183,846.12
Total Unrestricted Fund Balances	<u>10,028,418.31</u>
Excess Revenue over Expenditures	
Operating Fund	5,570,730.79
Other Funds	<u>(250,424.80)</u>
Total Fund Balance	<u>16,342,845.32</u>
TOTAL LIABILITIES AND FUND BALANCES	<u>\$ 41,106,602.91</u>

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

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<u>REVENUES</u>						
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>52,627.79</u>	<u>285,767.74</u>	<u>390,000.00</u>	<u>73.27%</u>	<u>0.00</u>	<u>104,232.26</u>
Subtotal	<u>52,627.79</u>	<u>8,481,785.49</u>	<u>8,586,018.00</u>	<u>98.79%</u>	<u>0.00</u>	<u>104,232.51</u>
Choice Programs	0.00	1,084,394.86	1,174,750.00	92.31%	0.00	90,355.14
Miscellaneous Income	44.76	3,254.83	3,000.00	108.49%	0.00	(254.83)
School Contracts	4,052.46	34,528.11	102,031.00	33.84%	0.00	67,502.89
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>4,097.22</u>	<u>1,122,181.41</u>	<u>1,285,057.00</u>	<u>87.33%</u>	<u>0.00</u>	<u>162,875.59</u>
TOTAL REVENUES	<u>56,725.01</u>	<u>9,603,966.90</u>	<u>9,871,075.00</u>	<u>97.29%</u>	<u>0.00</u>	<u>267,108.10</u>

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

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<u>EXPENSES</u>						
Salaries & Wages	284,670.04	1,745,259.54	3,522,982.00	49.54%	0.00	1,777,722.46
Salaries & Wages - Grant Recovery	0.00	(3,837.94)	(6,300.00)	60.92%	0.00	(2,462.06)
Salaries & Wages - Recovery	(1,071.00)	(4,712.40)	0.00	0.00%	0.00	4,712.40
Director's Compensation	15,146.49	93,551.85	255,360.00	36.64%	0.00	161,808.15
MWD Representation	9,206.69	59,991.98	145,920.00	41.11%	0.00	85,928.02
Employee Benefits	84,746.45	516,231.23	1,108,564.00	46.57%	0.00	592,332.77
CALPERS Unfunded Liability 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	(204.00)	(897.60)	0.00	0.00%	0.00	897.60
Director's Benefits	7,224.65	44,062.05	94,767.00	46.50%	0.00	50,704.95
Health Insurance for Retirees	7,922.61	31,477.55	70,519.00	44.64%	0.00	39,041.45
Training Expense	1,020.00	2,960.78	25,000.00	11.84%	0.00	22,039.22
Tuition Reimbursement	2,856.28	2,856.28	5,000.00	57.13%	0.00	2,143.72
Temporary Help Expense	0.00	0.00	5,000.00	0.00%	0.00	5,000.00
Personnel Expenses	411,518.21	2,693,067.75	5,433,812.00	49.56%	0.00	2,740,744.25
Engineering Expense	24,289.28	202,317.98	330,000.00	61.31%	122,108.42	5,573.60
Legal Expense	12,672.68	84,465.25	255,000.00	33.12%	170,534.75	0.00
Audit Expense	0.00	19,380.00	29,000.00	66.83%	0.00	9,620.00
Professional Services	42,190.45	393,718.27	1,430,758.00	27.52%	505,578.10	531,461.63
Professional Fees	79,152.41	699,881.50	2,044,758.00	34.23%	798,221.27	546,655.23
Conference-Staff	229.81	10,116.81	42,880.00	23.59%	0.00	32,763.19
Conference-Directors	75.00	5,630.81	24,930.00	22.59%	0.00	19,299.19
Travel & Accom.-Staff	7,413.21	21,683.63	99,600.00	21.77%	0.00	77,916.37
Travel & Accom.-Directors	5,640.04	14,545.17	51,750.00	28.11%	0.00	37,204.83
Travel & Conference	13,358.06	51,976.42	219,160.00	23.72%	0.00	167,183.58
Membership/Sponsorship	909.19	116,102.36	141,662.00	81.96%	0.00	25,559.64
CDR Support	0.00	23,522.14	47,044.00	50.00%	23,522.12	(0.26)
Dues & Memberships	909.19	139,624.50	188,706.00	73.99%	23,522.12	25,559.38
Business Expense	68.19	1,506.59	5,600.00	26.90%	0.00	4,093.41
Maintenance Office	7,972.65	50,275.47	132,796.00	37.86%	79,019.69	3,500.84
Building Repair & Maintenance	1,006.08	5,399.04	20,000.00	27.00%	15,095.96	(495.00)
Storage Rental & Equipment Lease	209.70	1,256.10	3,460.00	36.30%	1,203.90	1,000.00
Office Supplies	2,658.98	13,706.30	36,000.00	38.07%	2,427.47	19,866.23
Postage/Mail Delivery	1,777.67	4,786.44	9,000.00	53.18%	2,624.44	1,589.12
Subscriptions & Books	0.00	375.65	1,500.00	25.04%	0.00	1,124.35
Reproduction Expense	(18.40)	5,266.05	33,073.00	15.92%	1,302.21	26,504.74
Maintenance-Computers	0.00	2,442.19	8,000.00	30.53%	1,332.76	4,225.05
Software Purchase	6,503.00	30,077.70	45,861.00	65.58%	869.20	14,914.10
Software Support	2,883.28	25,757.59	51,934.00	49.60%	1,200.00	24,976.41
Computers and Equipment	0.00	9,041.24	11,850.00	76.30%	0.00	2,808.76
Automotive Expense	1,120.06	9,243.60	17,262.00	53.55%	0.00	8,018.40
Toll Road Charges	66.48	464.36	1,000.00	46.44%	0.00	535.64
Insurance Expense	8,787.18	54,803.55	138,500.00	39.57%	0.00	83,696.45
Utilities - Telephone	1,960.89	11,142.05	20,178.00	55.22%	787.35	8,248.60
Bank Fees	0.00	4,079.87	21,225.00	19.22%	0.00	17,145.13
Miscellaneous Expense	5,538.61	40,648.28	119,205.00	34.10%	0.00	78,556.72
MWDOC's Contrb. to WEROC	41,436.33	121,178.02	216,868.00	55.88%	0.00	95,689.98
Depreciation Expense	2,822.33	16,934.01	0.00	0.00%	0.00	(16,934.01)
Other Expenses	84,793.03	408,384.10	893,312.00	45.72%	105,862.98	379,064.92
Election Expense	0.00	0.00	304,000.00	0.00%	0.00	304,000.00
Building Expense	6,545.00	26,787.41	531,827.00	5.04%	188,298.00	316,741.59
Capital Acquisition	0.00	13,514.43	255,500.00	5.29%	0.00	241,985.57
TOTAL EXPENSES	596,275.90	4,033,236.11	9,871,075.00	40.86%	1,115,904.37	4,721,934.52
NET INCOME (LOSS)	(539,550.89)	5,570,730.79	0.00			

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

	Month to Date	Year to Date	Annual Budget	% Used	Budget Remaining
<u>WATER REVENUES</u>					
Water Sales	5,636,380.20	92,973,050.10	188,976,940.00	49.20%	96,003,889.90
Readiness to Serve Charge	903,260.48	5,419,562.88	10,902,178.00	49.71%	5,482,615.12
Capacity Charge CCF	321,247.50	1,927,485.00	3,854,976.00	50.00%	1,927,491.00
SCP/SAC Pipeline Surcharge	23,010.49	185,196.73	365,000.00	50.74%	179,803.27
Interest	<u>2,217.24</u>	<u>10,218.49</u>	<u>13,000.00</u>	<u>78.60%</u>	<u>2,781.51</u>
TOTAL WATER REVENUES	<u>6,886,115.91</u>	<u>100,515,513.20</u>	<u>204,112,094.00</u>	<u>49.25%</u>	<u>103,596,580.80</u>
<u>WATER PURCHASES</u>					
Water Sales	5,636,380.20	92,973,050.10	188,976,940.00	49.20%	96,003,889.90
Readiness to Serve Charge	903,260.48	5,419,562.88	10,902,178.00	49.71%	5,482,615.12
Capacity Charge CCF	321,247.50	1,927,485.00	3,854,976.00	50.00%	1,927,491.00
SCP/SAC Pipeline Surcharge	<u>23,010.49</u>	<u>185,196.73</u>	<u>365,000.00</u>	<u>50.74%</u>	<u>179,803.27</u>
TOTAL WATER PURCHASES	<u>6,883,898.67</u>	<u>100,505,294.71</u>	<u>204,099,094.00</u>	<u>49.24%</u>	<u>103,593,799.29</u>
EXCESS OF REVENUE OVER EXPENDITURES	<u><u>2,217.24</u></u>	<u><u>10,218.49</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 December 2018

	Year to Date Actual	Annual Budget	% Used
Spray To Drip Conversion			
Revenues	14,883.26	128,540.00	11.58%
Expenses	15,646.86	128,540.00	12.17%
Excess of Revenues over Expenditures	(763.60)	0.00	
Member Agency Administered Passthru			
Revenues	281,150.00	100,000.00	281.15%
Expenses	281,150.00	100,000.00	281.15%
Excess of Revenues over Expenditures	0.00	0.00	
ULFT Rebate Program			
Revenues	10,198.34	43,500.00	23.44%
Expenses	10,198.34	43,500.00	23.44%
Excess of Revenues over Expenditures	0.00	0.00	
HECW Rebate Program			
Revenues	124,722.54	425,000.00	29.35%
Expenses	124,758.63	425,000.00	29.35%
Excess of Revenues over Expenditures	(36.09)	0.00	
CII Rebate Program			
Revenues	109,230.00	462,500.00	23.62%
Expenses	109,230.00	462,500.00	23.62%
Excess of Revenues over Expenditures	0.00	0.00	
Turf Removal Program			
Revenues	389,600.30	1,345,000.00	28.97%
Expenses	770,656.06	1,345,000.00	57.30%
Excess of Revenues over Expenditures	(381,055.76)	0.00	
Comprehensive Landscape (CLWUE)			
Revenues	61,335.95	366,840.00	16.72%
Expenses	83,753.15	366,840.00	22.83%
Excess of Revenues over Expenditures	(22,417.20)	0.00	
Large Landscape Survey Program			
Revenues	1,124.41	64,000.00	1.76%
Expenses	8,824.69	64,000.00	13.79%
Excess of Revenues over Expenditures	(7,700.28)	0.00	
WSIP - Industrial Program			
Revenues	0.00	36,755.00	0.00%
Expenses	0.00	36,755.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
WUE Projects			
Revenues	992,244.80	2,972,135.00	33.38%
Expenses	1,404,217.73	2,972,135.00	47.25%
Excess of Revenues over Expenditures	(411,972.93)	0.00	
WEROC			
Revenues	312,558.02	489,160.00	63.90%
Expenses	171,943.85	489,160.00	35.15%
Excess of Revenues over Expenditures	140,614.17	0.00	



Memorandum

DATE: February 13, 2019

TO: Administrative & Finance Committee
(Directors Thomas, Finnegan, Osborne)

FROM: Robert Hunter

SUBJECT: Quarter ending December 2018 Fiscal YTD Financials Actual versus Budget

The following reports are attached:

- Revenues and Expenditures Actual versus Budget for the General Fund
- Revenues and Expenditures Actual versus Budget Detailed Comparative Report for the General Fund
- Revenues and Expenditures Actual versus Budget for Water Funds
- Revenues and Expenditures Actual versus Budget for Other Funds
- Revenues and Expenditures Actual versus Budget for the Water Use Efficiency Projects

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget Summary Report
Fiscal Year to Date ending December 2018 (Unaudited)
(\$000 Omitted)
General Fund and Reserve Fund

GENERAL FUND

	<u>YTD Actual</u>	<u>Annual Budget</u>	<u>% Used</u>
<u>REVENUES</u>			
Water Rate revenues:			
Retail Connection Charge	7,697	7,697	100.0%
Ground Water Customer Charge	499	499	100.0%
Subtotal	8,196	8,196	100.0%
Other Revenues:			
Interest income	286	390	73.3%
Choice Programs	1,084	1,175	92.3%
School Contracts ⁽¹⁾	35	102	33.8%
Other income	3	3	108.6%
Transfer in from Reserve ⁽²⁾	0	5	0.0%
Subtotal	1,408	1,675	84.1%
TOTAL REVENUES	9,604	9,872	97.3%
<u>EXPENSES</u>			
Personnel Expenses (incl. Dir.)	2,693	5,434	49.6%
Professional services ⁽³⁾	413	1,460	28.3%
Outside engineering	202	330	61.3%
Legal expense ⁽⁴⁾	84	255	33.1%
Travel & Conference ⁽⁵⁾	52	219	23.7%
Dues and memberships ⁽⁶⁾	140	189	74.0%
General & Admin expense ⁽⁷⁾	408	1,197	34.1%
Building repair & expense ⁽⁸⁾	27	532	5.0%
Capital acquisition (not including building repairs) ⁽⁹⁾	14	256	5.3%
TOTAL EXPENSES	4,033	9,871	40.9%
EXCESS OF REVENUES OVER EXPENSES	5,571		

RESERVE FUND

Beginning Balance	5,520
Nov 2018 - excess from FY 17-18 General Fund	612
TOTAL RESERVE FUND	6,132

- (1) School Contracts begin in September
(2) Transfer in from Reserves is moved at year-end
(3) Professional Services - Projects in process
(4) Legal expense includes unanticipated events
(5) Travel & Conference scheduled throughout the fiscal year
(6) Dues and memberships are generally paid early in the fiscal year
(7) Pending the County's invoice for the election expense
(8) Building repair & expense scheduled throughout the fiscal year
(9) Capital acquisition being performed throughout the year

Municipal Water District of Orange County
Revenues and Expenditures Actual vs Budget Line Item Report
Fiscal Year to Date ending December 2018 (Unaudited)
General Fund

	YTD ACTUAL	ANNUAL BUDGET	% Used
REVENUES			
Retail Connection Charge	7,697,006	7,697,006	100.00%
Ground Water Customer Charge	499,012	499,012	100.00%
Water Rate Revenues	8,196,018	8,196,018	100.00%
Choice Programs	1,084,395	1,174,750	92.31%
Interest Revenue	285,768	390,000	73.27%
Miscellaneous Income	3,258	3,000	108.61%
School Contracts	34,528	102,031	33.84%
Transfer in from Reserve	0	5,276	0.00%
Other Revenues	1,407,949	1,675,057	84.05%
TOTAL REVENUES	9,603,967	9,871,075	97.29%

OPERATING EXPENSES			
Salaries & Wages	1,745,260	3,522,982	49.54%
less Recovery's	(8,550)	(6,300)	135.72%
Directors' Compensation	93,552	255,360	36.64%
MWD Representation	59,992	145,920	41.11%
Employee Benefits	516,231	1,108,564	46.57%
less Recovery's	(1,773)	0	0.00%
CALPERS Unfunded Liability Contribution	207,000	207,000	100.00%
Directors Benefits	44,062	94,767	46.50%
Health Insurances for Retirees	31,478	70,519	44.64%
Training Expense	2,961	25,000	11.84%
Tuition Reimbursement	2,856	5,000	57.13%
Temporary Help Expense	0	5,000	0.00%
Personnel Expenses	2,693,068	5,433,812	49.56%
Engineering Expense	202,318	330,000	61.31%
Legal Expense	84,465	255,000	33.12%
Audit Expense	19,380	29,000	66.83%
Professional Services	393,718	1,430,758	27.52%
Professional Fees	699,882	2,044,758	34.23%
Conference-Staff	10,117	42,880	23.59%
Conference-Directors	5,631	24,930	22.59%
Travel & Accom.-Staff	21,684	99,600	21.77%
Travel & Accom.-Directors	14,545	51,750	28.11%
Travel & Conference	51,976	219,160	23.72%
Membership/Sponsorship	116,102	141,662	81.96%
CDR Support	23,522	47,044	50.00%
Dues & Memberships	139,625	188,706	73.99%

Municipal Water District of Orange County
Revenues and Expenditures Actual vs Budget Line Item Report
Fiscal Year to Date ending December 2018 (Unaudited)
General Fund

	YTD ACTUAL	ANNUAL BUDGET	% Used
Business Expense	1,507	5,600	26.90%
Maintenance Office	50,275	132,796	37.86%
Building Repair & Maintenance	5,399	20,000	27.00%
Storage Rental & Equipment Lease	1,256	3,460	36.30%
Office Supplies	13,706	36,000	38.07%
Postage/Mail Delivery	4,786	9,000	53.18%
Subscriptions & Books	376	1,500	25.04%
Reproduction Expense	5,266	33,073	15.92%
Maintenance-Computers	2,442	8,000	30.53%
Software Purchase	30,078	45,861	65.58%
Software Support	25,758	51,934	49.60%
Computers and Equipment	9,041	11,850	76.30%
Automotive Expense	9,244	17,262	53.55%
Toll Road Charges	464	1,000	46.44%
Insurance Expense	54,804	138,500	39.57%
Utilities - Telephone	11,142	20,178	55.22%
Bank Fees	4,080	21,225	19.22%
Miscellaneous Expense	40,648	119,205	34.10%
MWDOC's Contribution to WEROC	121,178	216,868	55.88%
Depreciation Expense	16,934	0	0.00%
Election Expense	0	304,000	0.00%
MWDOC Building Expense	26,787	531,827	5.04%
Capital Acquisition	13,514	255,500	5.29%
Other Expenses	448,686	1,984,639	22.61%
TOTAL EXPENSES	4,033,236	9,871,075	40.86%
EXCESS OF REVENUES OVER EXPENSES	5,570,731	0	

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Statement of Revenues and Expenditures
Fiscal Year to Date ending December 2018 (Unaudited)
Water Funds

	<u>YTD Actual</u>	<u>Annual Budget</u>	<u>Balance</u>
<u>Water Revenues</u>			
Water Sales	92,973,050	188,976,940	(96,003,890)
Readiness to Serve Charge	5,419,563	10,902,178	(5,482,615)
Capacity Charge CCF	1,927,485	3,854,976	(1,927,491)
SCP/SAC Pipeline Surcharge	185,197	365,000	(179,803)
Interest	<u>10,218</u>	<u>13,000</u>	<u>(2,782)</u>
Total Water Revenues	<u>100,515,513</u>	<u>204,112,094</u>	<u>(103,596,581)</u>
 <u>Water Purchases</u>			
Water Sales	92,973,050	188,976,940	(96,003,890)
Ready to Serve Charge	5,419,563	10,902,178	(5,482,615)
Capacity Charge	1,927,485	3,854,976	(1,927,491)
SCP/SAC Pipeline Surcharge	<u>185,197</u>	<u>365,000</u>	<u>(179,803)</u>
Total Water Purchases	<u>100,505,295</u>	<u>204,099,094</u>	<u>(103,593,799)</u>
 EXCESS OF REVENUES OVER EXPENDITURES	 <u>10,218</u>	 <u>13,000</u>	 <u>(2,782)</u>

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending December 2018 (Unaudited)
Other Funds

	<u>YTD Actual</u>	<u>Annual Budget</u>	<u>Balance</u>
<u>WEROC</u>			
Revenues	312,558	489,160	(176,602)
Expenditures	171,944	489,160	(317,216)
Excess of Revenues over Expenditures	140,614	0	140,614

WUE Projects (details on next page)

Revenues	992,245	2,972,135	(1,979,890)
Expenditures	1,404,218	2,972,135	(1,567,917)
Excess of Revenues over Expenditures	(411,973)	0	(411,973)

Footnote:

- 1) The excess of expense over revenue is waiting for reimbursement.
- 2) USBR (Federal) Grant is billed in October and April with funds being received one month later.
- 3) DWR is billed quarterly to county and takes a few months to a year to receive funds.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending December 2018 (Unaudited)
Water Use Efficiency Projects

	<u>Actual</u>	<u>Variance %</u>	<u>Fiscal Year Budget</u>	<u>% of Budget</u>	<u>Projected Final FY Budget</u>
<u>Spray to Drip Conversion</u>					
Revenues	14,883		128,540	11.58%	128,540
Expenditures	15,647		128,540	12.17%	128,540
Excess of Revenues over Expenditures	(764)	-5%			

Actual Variance: Payment to Program Participants ahead of Grant, Metropolitan (on water bill), and Retail Water Agencies reimbursements.

Budget Variance: To be on target the % of Budget should be closer to 50% for the first half of the year. All reporting current. Have requested marketing to increase to build participation. Year end likely outcome will be less than \$128,540.

Member Agency Administered Pass thru

Revenues	281,150		100,000	281.15%	100,000
Expenditures	281,150		100,000	281.15%	100,000
Excess of Revenues over Expenditures	0	0%			

Actual Variance: Reporting to collect Revenues on pace with Expenditures.

Budget Variance: After budget numbers were submitted, HE Toilet activity has increased significantly. We are currently at \$281,150, which is likely to increase even further. How much is unknown at this time.

ULFT Rebate Program

Revenues	10,198		43,500	23.44%	43,500
Expenditures	10,198		43,500	23.44%	43,500
Excess of Revenues over Expenditures	0	0%			

Actual Variance: This tracks MWDOC member agencies activities to provided supplemental funding to increase activity in their service territories.

Budget Variance: Work in progress.

HECW Rebate Program

Revenues	124,723		425,000	29.35%	425,000
Expenditures	124,759		425,000	29.35%	425,000
Excess of Revenues over Expenditures	(36)	0%			

Actual Variance: This tracks MWDOC member agencies activities to provided supplemental funding to increase activity in their service territories.

Budget Variance: Work in progress.

Notes:

[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.

[2] Fiscal year budget versus Actual

[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending December 2018 (Unaudited)
Water Use Efficiency Projects

	<u>Actual</u>	<u>Variance %</u>	<u>Fiscal Year Budget</u>	<u>% of Budget</u>	<u>Projected Final FY Budget</u>
<u>CII Rebate Program</u>					
Revenues	109,230		462,500	23.62%	462,500
Expenditures	109,230		462,500	23.62%	462,500
Excess of Revenues over Expenditures	0	0%			

Actual Variance: This tracks MWDOC member agencies activities to provided supplemental funding to increase activity in their service territories.

Budget Variance: Work in progress.

Turf Removal Program

Revenues	389,600		1,345,000	28.97%	1,345,000
Expenditures	770,656		1,345,000	57.30%	1,345,000
Excess of Revenues over Expenditures	(381,056)	-98%			

Actual Variance: Payment to Program Participants ahead of Grant, Metropolitan (on water bill), and Retail Water Agencies reimbursements.

Budget Variance: To be on target the % of Budget should be closer to 50% for the first-half of the year. All reporting current. Close to 50%.

Comprehensive Landscape (CLWUE)

Revenues	61,336		366,840	16.72%	366,840
Expenditures	83,753		366,840	22.83%	366,840
Excess of Revenues over Expenditures	(22,417)	-37%			

Actual Variance: Grant funded program. Revenues will catch up as Granting Agencies pay submitted invoices. All reporting is current.

Budget Variance: Budget percent for revenues will catch up at year-end closing. For expenditures, this will increase as we move through the fiscal year.

Large Landscape Survey Program

Revenues	1,124		64,000	1.76%	64,000
Expenditures	8,825		64,000	13.79%	64,000
Excess of Revenues over Expenditures	(7,700)	-685%			

Actual Variance: MWDOC currently has all Revenues sufficient to cover Expenditures. Revenue won't match expenses until year end closing.

Budget Variance: Budget percent for revenues will catch up at year-end closing. For expenditures, this will increase as we move through the fiscal year.

WSIP - Industrial Program

Revenues	0		36,755	0.00%	36,755
Expenditures	0		36,755	0.00%	36,755
Excess of Revenues over Expenditures	0	0%			

Actual Variance: Currently at '0' due to the lengthy implementation period for individual projects. Revenue amount is Grant funded.

Budget Variance: Several projects in the queue to finish this year.

Notes:

[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.

[2] Fiscal year budget versus Actual

[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.



CONSENT CALENDAR ITEM

February 20, 2019

TO: Board of Directors

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

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

SUBJECT: Water Use Efficiency Research Projects

STAFF RECOMMENDATION

Staff recommends the Board of Directors approve implementation of research projects as detailed below including:

1. A contribution of \$15,000 to the California Water Efficiency Partnership for the development of Water Use Efficiency Standards Compliance and Water Conservation Tracking Tools,
2. A professional services contract with Water Systems Optimization, Inc. to:
 - a. Conduct Water Balance Validation Research and staff training in an amount not to exceed \$56,000
 - b. Conduct Leak Detection Research and staff training in an amount not to exceed \$100,000

COMMITTEE RECOMMENDATION

Committee concurred with staff recommendation.

SUMMARY

Staff has identified the following four research projects for Board consideration this fiscal year:

- Water Use Efficiency Standards Compliance and Water Conservation Tracking Tools
- Water Balance Validation Research
- Leak Detection Research, and
- Pressure Regulating Valve Replacement Pilot Program and Water Savings Evaluation

Budgeted (Y/N): Yes	Budgeted amount: \$96,000	Core <u> X </u>	Choice <u> </u>
Action item amount: \$96,000		Line item: 35-7040	
Fiscal Impact (explain if unbudgeted):			

All four research projects are designed to assist agencies in complying with new water use efficiency standards included in Senate Bills 555 and 606, and Assembly Bill 1668.

The total cost for these research activities is \$353,500. Staff proposes to use a combination of budgeted research funds (\$75,000) and budgeted but repurposed landscape education funds (\$21,000) for a total of \$96,000 or 25 percent for MWDOC's contribution to the research. Repurposed landscape education funding is available because very favorable pricing was secured near the end of FY 2017-18 for the Qualified Water Efficient Landscaper Program instructor. MWDOC funds will leverage an additional \$265,500 or 75 percent from other funding sources such as Metropolitan, water suppliers from throughout the state, and the US Bureau of Reclamation.

DETAILED REPORT

The following provides descriptions of the four research projects including goals, funding partners, budget, etc.

Water Use Efficiency Standards Compliance and Water Conservation Tracking Tool

The California Water Efficiency Partnership (CalWEP), in conjunction with the Alliance for Water Efficiency, is seeking funds to develop tools to assist members with compliance with California's new water use efficiency mandates contained in Assembly Bill 1668 and Senate Bill 606. Two tools are targeted for development including:

1. A California Water Use Efficiency Standards Compliance Tool - This tool will allow an urban water supplier to calculate their water use objective and compare the objective to their actual water use. The water use objective will include volumes of water for indoor, outdoor, and water loss standards. Actual water use from billing data will be entered into the tool for comparison to the supplier's water use objective. The compliance tool will be developed in a way that will allow for the tool to be refined over time in response to the evolution of the standards. CalWEP will engage with the Department of Water Resources during the development process to ensure the tool is consistent with the new standards.
2. An Updated California-Specific Water Conservation Tracking Tool - This tool will allow an urban supplier to track the costs and water savings of water use efficiency program implementation over time. It also allows agencies to optimize program implementation by evaluating the costs and savings of customized water use efficiency program portfolios to meet a water savings goal. This tool was used to develop MWDOC's Water Use Efficiency Master Plan in 2013. The updated tool will include water conservation programs specific to California, such as:
 - Modular functionality that separates compliance detection and conservation planning to ensure compliance;
 - Improved indoor and outdoor water use accounting and GPCD target tracking;
 - New functionality to evaluate costs and benefits of CII mixed-use meter conversion;

- New functionality to assess water savings and cost-effectiveness of CII water use audits and management reports for different types and sizes of commercial and industrial water users;
- New functionality for tracking costs and water savings of water loss auditing, reporting, pressure management, and leak detection and repair activities;
- Updates to the Tracking Tool Library to incorporate the most current information on implementation costs and water savings for conservation activities aimed at reducing residential indoor, landscape, and CII water uses; and
- Updates to the Tracking Tool Library to incorporate the most current information on implementation costs and water savings for utility leak detection and repair activities including pressure management.

The proposal for the development of the tools is from M.Cubed and A&N Technical Services, Inc. and is provided as **Attachment A**. CalWEP is soliciting funding support from water agencies throughout the state to develop these tools. The cost for both tools is \$205,500. While the funding drive began this month, to date the following funding commitments have been made:

• Inland Empire Utilities Agency	\$15,000
• Municipal Water District of Orange County	\$15,000 (proposed)
• Regional Water Authority	\$20,000
• Solano County Water Agency	\$20,000
• Sonoma County Water Agency	\$10,000
• Western Municipal Water District	<u>\$10,000</u>
	\$90,000 (44%)

It is anticipated the funding drive will conclude this summer, at which time development of the tools will begin. The tools will be completed within 8 to 11 months including testing and user training. Staff requests board authorization for MWDOC to contribute \$15,000 toward the development of the tools. This represents less than eight percent of the cost of the tools, but leverages full access to the tools and shares the cost with water agencies throughout the state.

Water Balance Validation Research

On March 9, 2018, State Water Resources Control Board (Water Board) staff began a stakeholder process to develop rules requiring urban retail water suppliers to meet performance standards for the volume of water loss. This was the first of four stakeholder meetings the Water Board plans to hold. At this meeting, Water Board staff revealed they will base these performance standards on as little as two years of validated water loss audit data. This represents a significant area of concern for MWDOC staff. Not only is the Water Board planning to set the standards on a very limited data set (two years), but they are also planning to use two different validation processes. The 2017 validation process was funded by the Water Board and utilized two consultants working very closely to validate water audit reports for all urban water suppliers in the state. This provided a common validation approach and, therefore, a very consistent state-wide data set. In 2018, validations were done by a broader group of validators, including consultants and water agency staff who completed the Cal-Nev AWWA Water Audit Validator Certification. As a result, the

variability of water balance validations will increase significantly from 2017 to present and may result in the standard being set based upon poor quality data.

With this in mind, in 2018 the MWDOC Board authorized staff to utilize Water System Optimization, Inc. (WSO) to perform water balance validations for all member agencies in order to have a third consecutive year of consistently validated water balances. The results of the three-year dataset are provided in Figure 1. This dataset show moderate to significant variability from year to year for most agencies (64%) and minimal variability for others (36%). In addition, there is significant variability from agency to agency. Staff presented these results to the Water Board staff leading the process to set the water loss volume standard.

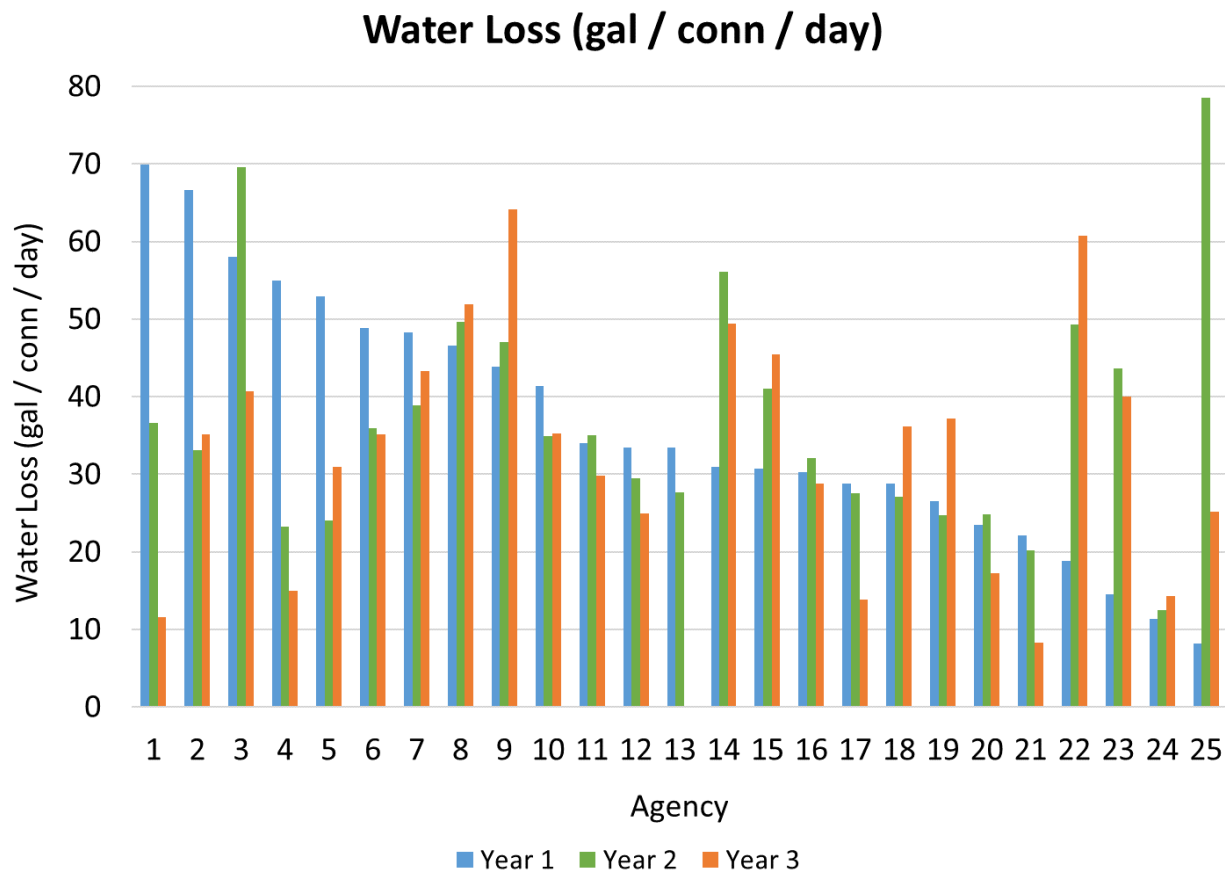


Figure 1

Both staff and WSO believe a five-year data set would be more appropriate for setting the performance standard for a volume of water losses, with an emphasis placed on the last two to three years of data in the five-year dataset. Staff is advocating that the Water Board adopt a two-step process for adopting the volume standard for water loss. The first step would extend the water loss audit reporting to five years before setting water loss standards. This will allow for agencies to continually improve the data used to compile the audit, thus improving the confidence in the water balance results. The second step would use the bigger and more consistent data set to set the volumetric standard for water loss.

Staff is proposing to extend our water loss audit report validation for 2019 to all member agencies as a Core program using MWDOC budgeted research funds. This project has two goals:

- Goal 1: Complete water balance validations for all MWDOC member agencies to establish a fourth consecutive year of consistently validated water balances.
- Goal 2: Provide hands on water balance validation training for MWDOC's Water Loss Control Programs Supervisor.

This will allow Orange County's data to be validated consistently for a fourth consecutive year. The results of this four-year data set will be shared with Water Board staff with the intent to use this data to better inform the standards setting process.

In addition, this validation process will serve as a training opportunity for MWDOC's new Water Loss Control Program Supervisor. One-on-one training will be provided by WSO using our member agencies as case studies. Once completed, the Supervisor will be ready to take the California-Nevada American Water Works Association Water Audit Validator Certification Course and Exam.

Staff discussed this research and training effort with WSO and negotiated a discounted cost of \$2,000 per agency¹. The total cost for this effort would be \$56,000 for 28 water balance validations. WSO was amenable to the discounted rate because they will work with a larger number of agencies, and the data will have value to the Water Board's standard setting process.

Staff recommends the Board of Directors authorize the General Manager to sign a professional services contract with Water Systems Optimization, Inc. to conduct Water Balance Validation Research in an amount not to exceed \$56,000

Leak Detection Research

Staff proposes to conduct a Leak Detection Research project in partnership with the Metropolitan Water District of Southern California, US Bureau of Reclamation, and member agencies. This project has two goals:

- Goal 1: Conduct leak detection and repair to evaluate water savings and feasibility of a standardized Conservation Credits Program incentive from Metropolitan.
- Goal 2: Hands on leak detection training for MWDOC's Leak Detection Technician.

Staff proposes to use our existing leak detection contractor, WSO to perform leak detection on 230 miles of distribution system while simultaneously training MWDOC Shared Services staff. Up to six retail water agencies with varying levels of water loss and pipe materials will be included in the research. WSO and MWDOC staff will document all leaks, track repairs, and quantify water savings. Leak detection results will also be used to corroborate estimates of real water loss calculated in annual water balances required by SB 555. All

¹ MWDOC technical assistance program includes water loss audit validation by WSO at a fixed cost of \$2,500 per retail agency.

information will be reported to Metropolitan to evaluate water savings and feasibility of a standardized Conservation Credits Program incentive from Metropolitan.

As summarized in Table 1, the budget for this research effort is \$100,000 and is proposed to be funded by MWDOC, Metropolitan, US Bureau of Reclamation, and in-kind support from participating member agencies. WSO will perform the leak detection while simultaneously training MWDOC's Leak Detection Technician. WSO will also establish data collection procedures, aggregate and analyze results, document results including recommendations and presents results to project partners. Data collection procedures will then be used by MWDOC staff administering water loss control shared services.

Table 1 Leak Detection Research Funding Partnership			
Funding Partner	Leak Detection and Training	Evaluation	Total
MWDOC		\$25,000	\$25,000
Metropolitan	\$30,000		\$30,000
US Bureau of Reclamation	\$45,000		\$45,000
Total:	\$75,000	\$25,000	\$100,000

Staff recommends the Board of Directors approve a professional services contract with Water Systems Optimization, Inc. to conduct Leak Detection Research and MWDOC staff training in an amount not to exceed \$100,000

Pressure Regulating Valve Replacement Pilot Program and Water Savings Evaluation

The California Plumbing Code requires homes and businesses to have a pressure regulating valve (PRV) when the water supply pressure or street pressure is 80 psi or greater.

According to the Uniform Plumbing Code Illustrated Training Manual:

"[a] limit of 80 psi (551.6 kPa) is the maximum static pressure of any water supply system. The reason for this is to reduce water hammer, unnecessary use of water, splashing, excessive discharge of pressure relief valves and to protect appliance and fixture valves and mechanisms from pressure that exceeds their design limits. Any installation with pressures above 80 psi will require a pressure regulating valve to limit the pressure to 80 psi or below.

PRVs appear to have a useful life of 10 – 12 years. When they fail, they usually fail in the open position, therefore increasing indoor water pressure to street pressure. As a result, all plumbing fixtures, appliances, and leaks are likely flowing at higher rates, resulting in increased water use. Staff is proposing implementation of a study, in partnership with host member agencies, to evaluate the viability of a PRV replacement program to save water. The study will rely on a plumber(s) to canvas targeted neighborhoods known to have high pressure. With homeowner permission, the plumber will test the PRV. If the test results in a failed PRV, the plumber will offer to replace it with a new one. Pre and post retrofit water use will be collected and analyzed by MWDOC staff to quantify water savings.

The study will be implemented using a combination of funding from MWDOC and Metropolitan. Staff is in the process of conducting a Request for Proposals (RFP) process to hire a plumber(s) to perform the field work. Staff will return to the Board this spring with a detailed proposal once the RFP process has been completed. If this research results in a significant amount of indoor water savings, PRVs could be added to the regional rebate program as a new water saving opportunity to assist agencies in meeting indoor water use standards contained in SB 606 and AB 1668.

Summary

In summary, these research efforts are designed to assist agencies to comply with new water use efficiency standards contained in Senate Bills 555 and 606, and Assembly Bill 1668. This research will provide quality data to better inform water loss standards, assist agencies in complying with standards, and train MWDOC water loss control shared services staff who will implement water loss programs to comply with standards.

As shown in Table 2, the total cost for these research activities is \$353,500. Staff proposes to use a combination of budgeted research funds (\$75,000) and budgeted but repurposed landscape education funds (\$21,000) for a total of \$96,000 or 25 percent for MWDOC's contribution to the research. Repurposed landscape education funding is available because very favorable pricing was secured near the end of FY 2017-18 for the Qualified Water Efficient Landscaper Program instructor. MWDOC funds will leverage an additional \$265,500 or 75 percent from other funding sources such as Metropolitan, water suppliers from throughout the state, and the US Bureau of Reclamation.

Table 2 Summary of Research Projects			
Research Project	MWDOC Contribution	Metropolitan or Other Contributions	Total:
Water Use Efficiency Standards Compliance and Water Conservation Tracking Tools	\$15,000	Other = \$190,500	\$205,500
Water Balance Validation Research	\$56,000	\$0.00	\$56,000
Leak Detection Research	\$25,000	Metropolitan = \$30,000 USBR = \$45,000	\$100,000
Pressure Regulating Valve Replacement Water Savings Evaluation	To Be Determined		
Total:	\$96,000	\$265,500	\$353,500



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DATE: December 3, 2018
TO: Joe Berg, California Water Efficiency Partnership Board
Mary Ann Dickenson, California Water Efficiency Partnership
FR: David Mitchell (M.Cubed) and Tom Chesnutt (A&N Technical Services)
RE: Proposal to develop Tools for New State Urban Water Use Standards

Introduction

This letter proposal sets forth development of two independent but related tools:

1. A California WUE Standards Compliance Tool (CalWEP Tool) and
2. An updated California-specific version of the AWE Water Conservation Tracking Tool (AWE Tool)

The first tool would be used to determine compliance with new State Urban Water Use Standards. The second would be used to attain or ensure compliance through planned design of intentional WUE programs. Members of CalWEP and AWE would have access to these planning (AWE tool) and California WUE Standards compliance (CalWEP tool) tools. The CalWEP tool would necessarily be a work in progress as the Standards are being finalized. The AWE Water Conservation Tracking Tool is an Excel-based planning model that water suppliers can use to evaluate the water savings, costs, and benefits of conservation (WUE) programs. Using information entered into the Tracking Tool from a utility's system, it provides a standardized methodology for water savings and benefit-cost accounting, and includes a library of pre-defined conservation activities from which users can build conservation programs.

The Tracking Tool is used widely across the nation. Many utilities in California rely on it for conservation planning. Different versions of the Tracking Tool have been developed for unique state regulatory environments. For example, one version is specific to the plumbing codes, appliance standards, and landscape requirements in California. However, California is currently in the process of making significant changes to these regulations. Helping water utilities plan for compliance with these regulatory changes is one of the main purposes of the Tracking Tool.

This proposal describes the pending changes to California urban water conservation regulations and proposes modifications to the Tracking Tool to help California urban water suppliers plan their water conservation programs to comply with the new state requirements. The proposal sets out a modular approach that separates (1) California state compliance from (2) the task of conservation program planning to ensure compliance. This modular approach will allow urban water suppliers to use alternative approaches to compliance determination or conservation planning at their choice. The modular approach would also allow use of the California-specific tools for cross-checking and validation of alternative approaches.

Changing State Urban Water Conservation Regulations

A major change on California's urban water management horizon is the implementation of Executive Order B-37-16. The stated goal of the order is to "help Californians *adopt permanent changes* to use water more wisely".¹ Specifically, the Executive Order states:

The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020 ... These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide water conservation than existing requirements, and shall be based on strengthened standards for:

- a. Indoor residential per capita water use;*
- b. Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data;*
- c. Commercial, industrial, and institutional water use; and*
- d. Water lost through leaks.*

New Per Capita Water Use Targets for Indoor and Outdoor Water Use

Key to the Executive Order is the requirement that urban water suppliers meet new water use targets that will replace the 20x2020 targets set under Senate Bill X7-7 passed in 2009. Importantly, the new targets must result in greater statewide water savings than the 20x2020 targets they are replacing.

The state is developing new standards and targets for indoor residential water use and outdoor residential and non-residential landscape water use. Current law (AB 1668 and SB 606) sets an initial indoor residential target of 55 gpcd. The target would be reduced to 52.5 gpcd in 2025 and to 50 gpcd in 2030, if studies of residential indoor water use support lowering the targets. Currently, indoor residential water use is thought to average about 58 gpcd², which is about 14% greater than the target being proposed for 2030.

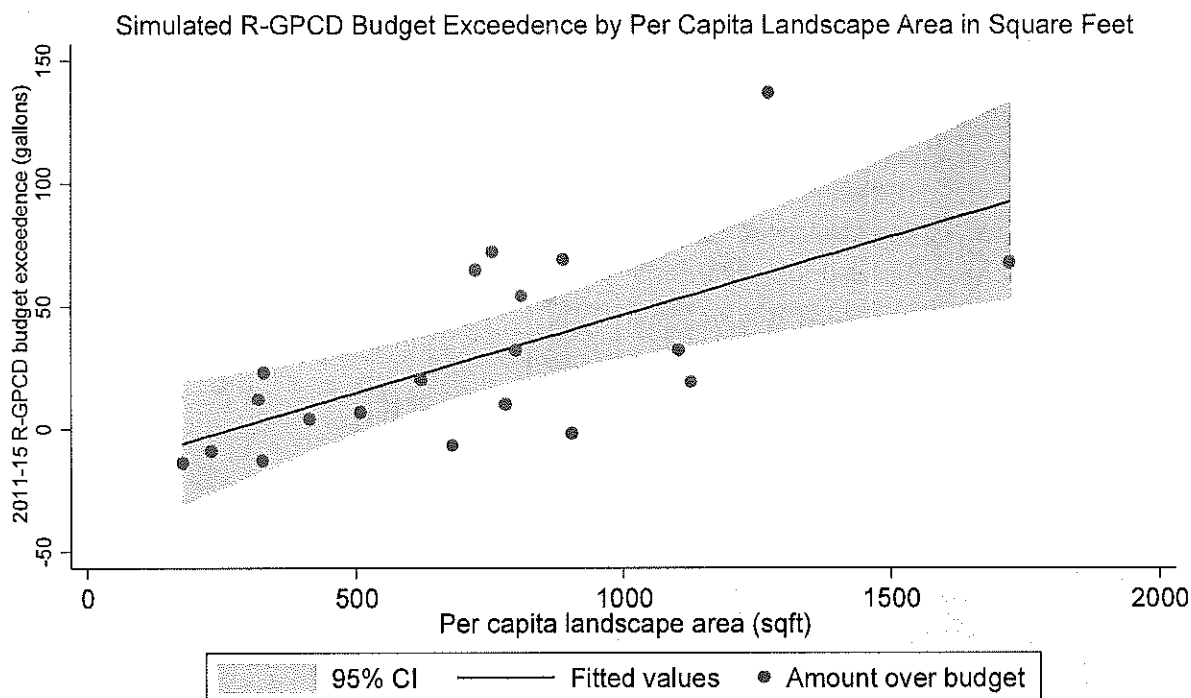
The outdoor component of the target will be based on estimated landscape area multiplied by a fraction of a measure of evapotranspiration using the principles of the Model Water Efficient Landscape Ordinance. While the fraction of measured evapotranspiration that will determine the outdoor water allowance has not been settled, it is likely to be somewhere in the range of 0.45 to 0.8.³

¹ State of California. 2017. Making Water Conservation a California Water of Life: Implementing Executive Order B-37-16. Prepared by California Department of Water Resources, State Water Resources Control Board, California Public Utilities Commission, California Department of Food and Agriculture, California Energy Commission.

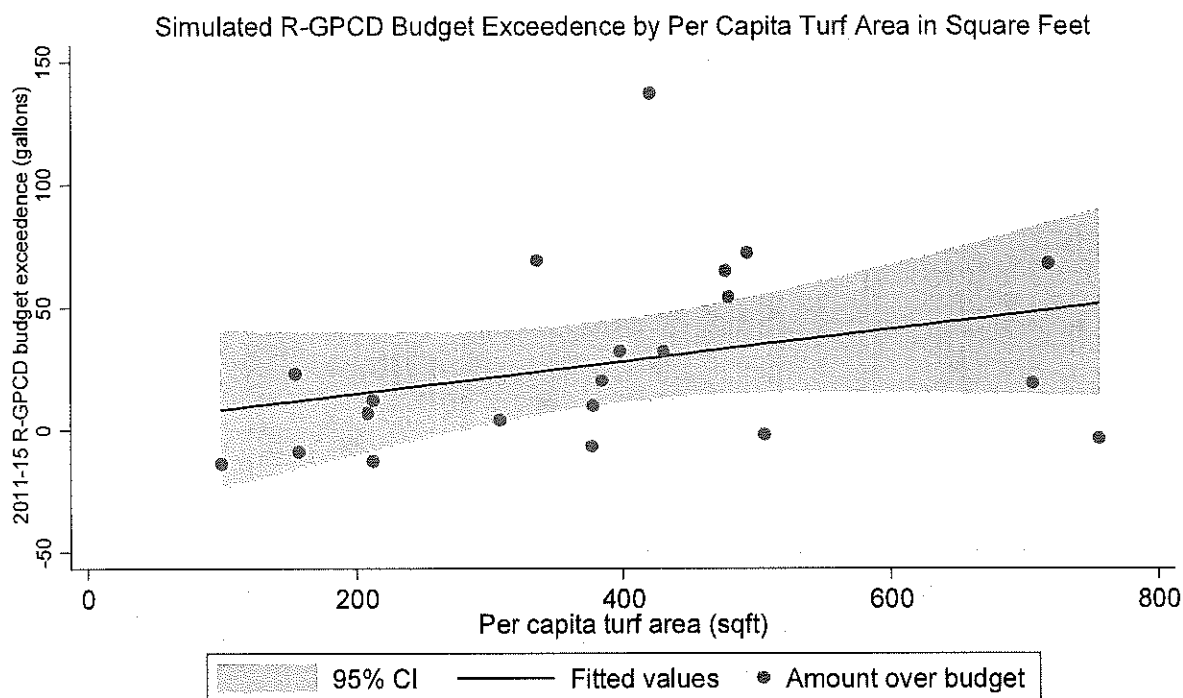
² M.Cubed. 2016. Projected Statewide and County-Level Effects of Plumbing Codes and Appliance Standards on Indoor GPCD. Prepared for the California Department of Water Resources.

³ This is based on changes DWR is proposing to make to the maximum applied water allowance (MAWA) in the Model Water Efficient Landscape Ordinance (MWELo) which would serve as the benchmark for setting the outdoor urban water use targets. The pre-2015 MAWA was 0.7 of ETo. The current MWELo (effective Feb. 2016) lowered the MAWA to 0.55 for residential landscape projects and to 0.45 for non-residential projects. See <https://www.water.ca.gov/LegacyFiles/wateruseefficiency/landscapeordinance/docs/2015%20MWELo%20Guidance%20for%20Local%20Agencies.pdf>

Analysis of recent historical residential water use and landscape area for a statewide sample of 20 water suppliers indicates that regions with significant landscape and turf area per capita may be challenged to meet the new outdoor standards. For example, the following two charts show the results of a simulation examining the extent to which 2011-15 average R-GPCD for the sampled suppliers would exceed a hypothetical residential water target.⁴ Simulation results are sorted by landscape and turf area per capita. The charts show a strongly positive correlation between the magnitude of per capita landscape and turf area and the magnitude of exceedance of the simulated target for the sampled districts. Moreover, budget exceedance in the simulation is commonplace even though residential demand was lower than normal in 2014 and 2015 due to drought water use restrictions.



⁴ The simulated monthly outdoor budgets were set to measured residential landscape area multiplied by $\max(\text{average monthly ET}_o \times 0.55 - 0.3 \times \text{average monthly precipitation}, 0)$. The annual budget is the sum of the monthly budgets. Indoor budgets were set to 55 gpcd. The budgets were compared to each supplier's average R-GPCD for 2011-2015.



The new indoor and outdoor targets will put new urgency on accurate assessments of the water savings potential and cost-effectiveness of conservation programs targeted to reduce residential and landscape water use. Modifications to the Tracking Tool are needed to better support indoor and outdoor water use accounting and to ensure that the Tracking Tool Library's indoor and landscape water conservation program specifications accurately incorporate the best available information on water savings and program implementation costs.

CII Performance Standards

The state is also proposing new performance measures for CII water use, including (1) classification of all CII accounts using the North American Industry Classification System (NAICS) and where feasible development of CII subsector water use benchmarks for identification of CII accounts with potential for water use efficiency improvements; (2) completion of water use audits or water management plans for CII accounts over a specified size, volume, or percentage threshold; and (3) conversion of all landscapes over a specified size threshold that are served by a mixed-use meter CII account to dedicated irrigation accounts.

It is not yet known what the threshold will be for completing water use audits or water management plans for CII accounts. The state indicated in its Making Conservation a California Way of Life report that it will develop regulations and guidelines by October 1, 2021 (CWC 10609.10(a)), though this may change under future legislation. It stands to reason that water suppliers with a high fraction of

commercial and industrial water use are likely to bear most of the burden of the new requirements. As a general rule, the top 10% of CII water users account for 70 to 80% of all CII water uses.⁵

Completing water use audits and management reports for these large CII customers will be a complex and expensive task which may require use of consultants with specialized knowledge in industrial process water use. Commercial and industrial audits and management plans can be highly technical and expensive to complete. Based on data compiled in 2005 by the California Urban Water Conservation Council, CII water use surveys and management reports were shown to have a median cost range of \$1,000 to \$30,000 and a mean cost range of \$4,000 to \$100,000 per intervention.⁶ The wide cost ranges are primarily driven by the complexity of the water end uses under investigation – completing a water use survey for a large industrial refinery, for example, requires much more effort and time than completing one for a small commercial laundry or kitchen.

Currently, the Tracking Tool's program library does not include default entries for CII water use audits and management reports. It will be important to add new program specifications for these activities to the library in anticipation of the state requirements.

CII Mixed Meter Conversion

The state has also proposed that urban water suppliers convert all landscapes above a certain size served by mix-use CII meters to dedicated irrigation meters. While the landscape size threshold has not yet been determined, it is conceivable that individual water suppliers may have to convert hundreds if not thousands of acres of landscape from mixed-use to dedicated irrigation meters. This represents a potentially significant task and cost for urban water suppliers. Large landscaped areas often are served by more than one meter and determining which meter is serving which parts of a landscape can be complicated and often can only be accomplished through trial and error.

Whether this requirement will yield cost-effective water savings is an unsettled question. Modifications to the Tracking Tool are needed to help water suppliers accurately assess the expected costs and benefits of CII mixed-use meter conversion.

System Water Loss Reporting and Reduction

Executive Order B-37-16 places significant emphasis on accelerating data collection and reporting on system water loss and taking actions to minimize leaks. Specifically, it states:

The Water Board and the Department [of Water Resources] shall direct actions to minimize water system leaks that waste large amounts of water. The Water Board, after funding projects to address health and safety, shall use loans from the Drinking Water State Revolving Fund to prioritize local projects that reduce leaks and other water system losses. The Water Board and the Department [of Water Resources] shall direct urban and

⁵ Mitchell, David and Thomas Chesnutt. 2017. CII Water Use and Drought Response: Case Study of California Water Service. Prepared for California Water Service, Department of Water Resources, and State Water Resources Control Board.

⁶ California Urban Water Conservation Council. 2005. BMP Costs & Savings Study: A Guide to the Data and Methods for Cost Effectiveness Analysis of Urban Water Conservation Best Management Practices. California Urban Water Conservation Council. Sacramento.

agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste. The California Public Utilities Commission shall order investor-owned water utilities to accelerate work to minimize leaks.

Senate Bill 555, passed in 2015, requires the Water Board to develop water loss performance standards for urban retail water suppliers between January 2019 and July 2020. These standards are expected to be incorporated into the new water use targets (SB 606 & AB 1668) the state is developing for urban water suppliers.

Modifications to the Tracking Tool are needed so that users can accurately account for the costs of state water loss auditing and reporting requirements, the costs of leak detection and minimization actions, and the expected water savings from these actions over time. (Note: SB 555 requires life-cycle cost analysis, and the state will need to apply and interpret this requirement.) This will require updating the Tracking Tool Library to include new water loss management activities. It may also require the development a new Tracking Tool module specifically designed for water loss accounting and tracking of water savings from leak minimization activities.

Summary of Needed Updates and Modifications to Tracking Tool

In light of the above, necessary updates and modifications to the Tracking Tool include:

- Modular functionality that separates compliance detection and conservation planning to ensure compliance
- Improved indoor and outdoor water use accounting and GPCD target tracking;
- New functionality to evaluate costs and benefits of CII mixed-use meter conversion;
- New functionality to assess water savings and cost-effectiveness of CII water use audits and management reports for different types and sizes of commercial and industrial water users;
- New functionality for tracking costs and water savings of water loss auditing, reporting, pressure management, and leak detection and repair activities;
- Updates to the Tracking Tool Library to incorporate the most current information on implementation costs and water savings for conservation activities aimed at reducing residential indoor, landscape, and CII water uses;
- Updates to the Tracking Tool Library to incorporate the most current information on implementation costs and water savings for utility leak detection and repair activities including pressure management.

Proposed Scope of Work

The Scope of Work follows the standard software development paradigm, breaking work tasks into the following five categories:

1. Requirements Analysis
2. Design
3. Development
4. Testing
5. Rollout

Requirements Analysis

The requirements analysis is arguably the most important step since it will guide everything that follows. The purpose of the requirements analysis is to determine the changes that need to be made to the Tracking Tool from the perspective of the user.

Task 1 – Formation of Project Advisory Committee. The first step in completing the requirements analysis will be formation of a Project Advisory Committee (PAC) comprised of California Water Efficiency Partnership members and staff. In addition to general project oversight, the PAC will provide a forum for the identification and prioritization of Tracking Tool modifications. This will be done over the course of several meetings with the PAC early in the project.

Task 2 – User Interviews. Up to 10 interviews will be conducted with Tracking Tool users and state agency staff. These users will be queried about how they currently use the Tracking Tool for conservation planning, whether and how they intend to use it in their planning for compliance with future state water use regulations, and what changes to the Tracking Tool would best facilitate this planning. Interview results will be compiled and summarized in a Technical Memorandum that will be distributed to the PAC.

Task 3 – Documented Requirements Analysis

Upon completion of the user interviews and initial PAC meetings, we will prepare a draft Technical Memorandum documenting the requirements analysis and describing in detail the proposed updates to the Tracking Tool and its Program Library in terms of its functionality, design, and data structure. Following review and comment by the PAC, the requirements analysis memorandum will be finalized.

Design

Task 4 – Preliminary Re-Design. A preliminary re-design of the Tracking Tool will be prepared based on the results of the requirements analysis. This preliminary re-design will be presented to the PAC for review and input. The re-design will consist of mock-ups of the user interface and output worksheets of the Tracking Tool.

Task 5 – Final Re-Design. Based on PAC feedback on the preliminary re-design, a final re-design of the Tracking Tool will be developed and presented to the PAC for approval.

Development

Task 6 Compliance Module Coding. This stand-alone module can be used independently of the AWE tracking tool. The module will allow an agency to enter service area specific data (population, landscape area, Et, etc.) into state performance metrics to determine compliance with its potential urban water use objective. The module will allow an agency to choose different levels of indoor water use, MAWA and water loss, through user-friendly pull downs to calculate its urban water use objective. It will also require the user to enter water use by customer class to compare to the objective. Additional state efficiency standards for CII non-outdoor use, efficient water loss levels, and estimated use for approved variances will also be included to complete the calculation of the agency's urban water use objective.

It is of course true that ultimate compliance with California state regulations for "Conservation as a California Way of Life" cannot be specified with certainty until the California state regulations have been

finalized. Ultimately, the state may provide a tool to assist in compliance determination. That said, a reasonable forecast can now be made on where state regulations will end up. California water utilities need to be able to reduce the current state of uncertainty surrounding their compliance. This task will develop an urban water use objective calculator to fill this void in the interim. Should the state quickly provide a compliance tool, this task can be scaled back.

Task 7 – Tracking Tool Coding. Coding of the Tracking Tool will commence following PAC approval of the re-design. This will entail updating existing Tracking Tool worksheets, adding new worksheets (including inputs from the Compliance Module), updating the navigation system, and updating or creating new back-end Visual Basic code.

Task 8 – Update Tracking Tool Library. This task will update the Tracking Tool’s library of conservation program activities to incorporate the most current information on implementation costs and water savings for conservation activities aimed at reducing residential indoor, landscape, and CII water uses. David Pekelney (A&N) will lead this activity. This task will also develop and add new water loss accounting, leak detection and repair, and pressure management activities to the library. We are currently checking with subject matter experts to add an additional team member to assist in defining water loss life cycle costs.

Task 9 – Update User Guide. Following completion of Tasks 6 and 7, the Tracking Tool’s User Guide will be updated to reflect the changes to the Tracking Tool’s design, functionality, and library.

Testing

Task 10 – Alpha Testing. Once the coding and library updating tasks are finished, the Tracking Tool will be tested for bugs and design flaws by the consultant team and CalWEP/AWE staff. Identified software bugs and design issues will be catalogued and fixes will be documented.

Task 11 – PAC Demonstration. Upon completion of alpha testing, the PAC will be given a demonstration of the updated Tracking Tool. This will be scheduled to align with one of the regular meetings of the California Water Efficiency Partnership, or will be done remotely via the internet to spare the PAC unnecessary travel and time away from work.

Task 12 – Beta Testing. Upon completion of alpha testing the Tracking Tool will be distributed to PAC members for additional testing and feedback. Again, any identified software bugs and design issues will be catalogued and fixes will be documented.

Rollout

Task 13 – Rollout Webinar. When the Tracking Tool is ready for public release, AWE will schedule a rollout webinar for California Water Efficiency Partnership members. The webinar will present the revised functionality of the Tracking Tool and illustrate ways it may be used to evaluate and plan for the new state water use regulations.

Development Team

The development team consists of staff from M.Cubed, A&N Technical Services, and AWE. David Mitchell of M.Cubed will serve as the project manager and will also be the lead on the requirements analysis, design and development tasks. Tom Chesnutt and David Pekelney of A&N Technical Services

will lead the library update and testing tasks. Bill Christiansen of AWE will support the requirements analysis and testing tasks and also will support the rollout tasks. Mary Ann Dickinson will provide general oversight and will be the primary liaison between the development team and the California Water Efficiency Partnership.

Schedule

Completion of the Scope of Work is expected to require 8 to 11 months from the project kick-off:

- Requirements Analysis – 2 months
- Design – 1 to 2 months
- Development – 3 to 4 months
- Testing – 1 to 2 months
- Rollout – 1 month

It is understood that initiation of the project as well as possible changes to the proposed schedule will be governed by the timing and content of state legislation and related regulations establishing the new urban water targets and reporting requirements.

Budget

Task budgets are provided in the following table. The total project cost is \$205,500.

Budget to Update AWE Water Conservation Tracking Tool for New State Urban Water Use Standards

Requirements Analysis	Task Cost
Task 1 PAC meetings	\$7,500
Task 2 User Interviews	\$10,000
Task 3 Documented Requirements Analysis	\$10,000
 Design	
Task 4 Preliminary Re-Design	\$15,000
Task 5 Final Re-Design	\$10,000
 Development	
Task 6 Compliance Module Coding	\$25,000
Task 7 Tracking Tool Coding	\$45,000
Task 8 Update Tracking Tool Library	\$40,000
Task 9 Update User Guide	\$10,000
 Testing	
Task 10 Alpha Testing	\$10,000
Task 11 PAC Demonstration	\$5,000
Task 12 Beta Testing	\$10,000
 Rollout	
Task 13 Rollout Webinar	\$5,000
 Travel and Project Incidentals	\$3,000
 Total Project Cost	\$205,500



CONSENT CALENDAR ITEM

February 20, 2019

TO: Board of Directors

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

Robert J. Hunter, General Manager,
Hilary Chumpitazi, Accounting Manager

SUBJECT: **Authorization of Telephone Server Upgrade**

STAFF RECOMMENDATION

It is recommended that the Board of Directors authorize the General Manager to enter into a contract with Resilient Communications for the Telephone Server Upgrade for a total cost of \$18,537.72.

COMMITTEE RECOMMENDATION

Committee concurred with staff recommendation.

SUMMARY

Our current Cisco telephone server and software are no longer being supported by Cisco and needs to be upgraded to the current version. Our existing hardware and software has been in service since March, 2011 and has served its useful life. Per our Administrative Code and Contracts Manual, staff sought three competitive bids for our Telephone Server Upgrade project which includes a new server, software, licensing and support.

We received the following three quotes:

Budgeted (Y/N): Y	Budgeted amount: \$27,000	Core <u>X</u>	Choice <u> </u>
Action item amount: \$18,537.72	Line item: 45 – 8810 - Capital Acquisition		
Fiscal Impact (explain if unbudgeted):			

	Product	Installation	Maintenance	Tax & Freight	Total
Resilient Communications	7,148.00	9,300.00	1,464.27	625.45	18,537.72
CDW-Government	9,505.43	18,687.50	2,764.66	831.73	31,789.32
Insight Public Sector	11,293.25	29,359.00	2,362.58	958.70	43,973.53

Based on the quotes received and the recommendation by OCWD, Staff recommends awarding the contract to Resilient Communications.

All products are by Cisco and Resilient Communications was used by OCWD for their upgrade.

In accordance with the Administrative Code this contract is within the General Manager's approval authority (under \$25,000) but, prior to receiving these quotes it was anticipated that it would be over and require Board approval. As such we left this as an Action Item.



CONSENT CALENDAR ITEM

February 20, 2019

TO: Public Affairs and Legislation Committee
(Directors Dick, Osborne, and Thomas)

FROM: Robert Hunter, General Manager

Staff Contact: Heather Baez

SUBJECT: TRAVEL TO WASHINGTON D.C. TO COVER FEDERAL ADVOCACY ISSUES

STAFF RECOMMENDATION

Staff recommends the Board of Directors review the travel expenses and ratify as reported.

COMMITTEE RECOMMENDATION

Committee will review this item on February 19, 2019.

REPORT

DIRECTORS

For the second quarter (October-December 2018) of fiscal year 2018-2019, one trip was taken.

- November 27-30: Director Barbre

The following is budgeted for fiscal year 2018/2019 for **directors**:

Washington D.C. Legislative Budget Travel - \$10,800, 6 trips

- Total cost for this quarter: \$3,394.26

Budgeted (Y/N): Y	Budgeted amount: Directors - \$10,800 Staff - \$10,800	Core X	Choice ____
Action item amount: None	Line item: 11-7155 12-7150		
Fiscal Impact (explain if unbudgeted):			

- Year-to-date spent: \$3,394.26
- Budget remaining: \$7,405.74

Costs for this quarter include credit lost due to a canceled trip in 2017 (airfare not used within one year charged to this fiscal year) and airfare purchased for an upcoming trip in the third quarter.

Projecting for the third quarter of fiscal year 2018-2019, one trip has been taken:

- January 9-11: Director Barbre

STAFF

For the second quarter (October-December 2018) of fiscal year 2018-2019, one trip was taken:

- November 27-30: Damon Micalizzi

The following is budgeted for fiscal year 2017/2018 for **staff**:

Washington D.C. Legislative Travel - \$10,800, 6 trips

- Total cost for this quarter: \$2,371.74
- Year-to-date spent: \$2,371.74
- Budget remaining: \$8,428.26

Projecting for the third quarter of fiscal year 2018-2019, one trip has taken:

- January 9-11: Rob Hunter

The focus of the trips this coming fiscal year will be on the importance of the CA WaterFix (federal permits and funding), Colorado River Drought Contingency Plans, funding opportunities for local and regional projects, long term conservation and tax parity water rebate issues (turf removal program, et al.), and visits to representative's offices to update them on issues of importance to MWDOC and its member agencies.



CONSENT CALENDAR ITEM

February 20, 2019

TO: Public Affairs and Legislation Committee
(Directors Dick, Osborne and Thomas)

FROM: Robert Hunter, General Manager

Staff Contact: Heather Baez

SUBJECT: TRAVEL TO SACRAMENTO TO COVER STATE ADVOCACY ISSUES

STAFF RECOMMENDATION

Staff recommends the Board of Directors review the travel expenses and ratify as reported.

COMMITTEE RECOMMENDATION

Committee will discuss this item on February 19, 2019.

REPORT

DIRECTORS

For the second quarter (October-December 2018) of fiscal year 2018-2019, zero trips were taken.

The following is budgeted for fiscal year 2018/2019 for **directors**:

Sacramento Legislative Budget Travel - \$4,600, 8 trips

- Total cost for this quarter: \$0
- Year-to-date spent: \$0
- Budget remaining: \$4,600

Budgeted (Y/N): Yes	Budgeted amount: \$4,600 – Directors \$10,500 – Staff	Core X	Choice ____
Action item amount: None	Line item: 11-7155 12-7150		
Fiscal Impact (explain if unbudgeted):			

Projecting for the third quarter of fiscal year 2018-2019, no trips have been scheduled.

STAFF

For the second quarter (October-December 2018) of fiscal year 2018-2019, five trips were taken:

- October 9 – Heather Baez
- October 26 – Heather Baez
- November 14 – Heather Baez
- December 12 – Heather Baez
- December 18 – Heather Baez

The following is budgeted for fiscal year 2017/2018 for **staff**:

Sacramento Legislative Travel - \$10,500, 18 trips

- Total cost for this quarter: \$2,645.99
- Year-to-date spent: \$4,663.14
- Budget remaining: \$4,836.86

Projecting out for the third quarter of fiscal year 2018-2019, five trips have been taken/scheduled.

- January 16/17 – Heather Baez
- February 1 – Heather Baez
- February 6/7 – Heather Baez
- February 22 – Heather Baez
- March 15 – Heather Baez

The focus of the trips are safe drinking water (i.e. “water tax” and alternative proposals), AB 401 (Low Income Rate Assistance program for water) implementation, California Water Plan implementation, California WaterFix and EcoRestore oversight, and State Water Resources Control Board meetings.



ACTION ITEM
February 20, 2019

TO: Board of Directors

FROM: **Public Affairs and Legislation Committee**
(Directors Dick, Osborne, and Thomas)

Robert Hunter
General Manager

Staff Contact: Heather Baez

SUBJECT: SB 134 (Hertzberg) – Water Loss Performance Standards

STAFF RECOMMENDATION

Staff recommends the Board of Directors vote to adopt a support position on SB 134 (Hertzberg).

COMMITTEE RECOMMENDATION

Committee will review this item on February 19, 2019 and make a recommendation to the Board.

BILL SUMMARY

SB 134 would prohibit the State Water Resources Control Board (State Board) from imposing liability for a violation of the performance standards for the volume of water losses except as part of the enforcement of an urban water use objective.

ARGUMENTS IN SUPPORT

SB 134 builds on SB 606 (Hertzberg, 2018) to ensure urban water suppliers have primary responsibility for meeting the standards-based water use targets. Specifically, it clarifies that the State Board will enforce an accumulative statewide performance standard, ensuring that the volume of water loss is not enforced separately from the other factors. This will ensure

Budgeted (Y/N): n/a	Budgeted amount: n/a	Core X	Choice ___
Action item amount: None		Line item:	
Fiscal Impact (explain if unbudgeted):			

that urban water suppliers are provided flexibility to achieve the water use efficiency goals established under Senate Bill 606 (Hertzberg, 2018).

ARGUMENTS IN OPPOSITION

None on file

STAFF COMMENTS

MWDOC's Legislative Policy Principles directly reflect supporting legislation that allows flexibility for local agencies to meet their conservation targets. Specifically, *it is MWDOC's policy to support legislation and regulation that: would allow flexibility and options for compliance in achieving statewide water reduction goals.*

DETAILED REPORT

The full text of SB 134 is attached.

Introduced by Senator Hertzberg

January 15, 2019

An act to amend Section 10608.34 of the Water Code, relating to water conservation.

LEGISLATIVE COUNSEL'S DIGEST

SB 134, as introduced, Hertzberg. Water conservation: water loss performance standards: enforcement.

Existing law requires each urban retail water supplier to calculate an urban water use objective no later than November 1, 2023, and by November 1 every year thereafter. Existing law requires the urban water use objective to be composed of the sum of certain water use estimates, including aggregate estimated efficient water losses. Existing law authorizes the State Water Resources Control Board to issue information orders, written notices, and conservation orders to an urban retail water supplier that does not meet its urban water use objective, and existing law authorizes the board to impose civil liability for a violation of an order or regulation issued pursuant to these provisions, as specified.

Existing law requires the board, no earlier than January 1, 2019, and no later than July 1, 2020, to adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses.

This bill would prohibit the board from imposing liability for a violation of the performance standards for the volume of water losses except as part of the enforcement of an urban water use objective.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. Section 10608.34 of the Water Code is amended to read:

10608.34. (a) (1) On or before January 1, 2017, the department shall adopt rules for all of the following:

(A) The conduct of standardized water loss audits by urban retail water suppliers in accordance with the method adopted by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0.

(B) The process for validating a water loss audit report prior to submitting the report to the department. For the purposes of this section, “validating” is a process whereby an urban retail water supplier uses a technical expert to confirm the basis of all data entries in the urban retail water supplier’s water loss audit report and to appropriately characterize the quality of the reported data. The validation process shall follow the principles and terminology laid out by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0. A validated water loss audit report shall include the name and technical qualifications of the person engaged for validation.

(C) The technical qualifications required of a person to engage in validation, as described in subparagraph (B).

(D) The certification requirements for a person selected by an urban retail water supplier to provide validation of its own water loss audit report.

(E) The method of submitting a water loss audit report to the department.

(2) The department shall update rules adopted pursuant to paragraph (1) no later than six months after the release of subsequent editions of the American Water Works Association’s Water Audits and Loss Control Programs, Manual M36. Except as provided by the department, until the department adopts updated rules pursuant to this paragraph, an urban retail water supplier may rely upon a subsequent edition of the American Water Works Association’s Water Audits and Loss Control Programs, Manual M36 or the Free Water Audit Software.

1 (b) On or before October 1, 2017, and on or before October 1
2 of each year thereafter, each urban retail water supplier shall submit
3 a completed and validated water loss audit report for the previous
4 calendar year or the previous fiscal year as prescribed by the
5 department pursuant to subdivision (a). Water loss audit reports
6 submitted on or before October 1, 2017, may be completed and
7 validated with assistance as described in subdivision (c).

8 (c) Using funds available for the 2016–17 fiscal year, the board
9 shall contribute up to four hundred thousand dollars (\$400,000)
10 towards procuring water loss audit report validation assistance for
11 urban retail water suppliers.

12 (d) Each water loss audit report submitted to the department
13 shall be accompanied by information, in a form specified by the
14 department, identifying steps taken in the preceding year to increase
15 the validity of data entered into the final audit, reduce the volume
16 of apparent losses, and reduce the volume of real losses.

17 (e) At least one of the following employees of an urban retail
18 water supplier shall attest to each water loss audit report submitted
19 to the department:

20 (1) The chief financial officer.

21 (2) The chief engineer.

22 (3) The general manager.

23 (f) The department shall deem incomplete and return to the
24 urban retail water supplier any final water loss audit report found
25 by the department to be incomplete, not validated, unattested, or
26 incongruent with known characteristics of water system operations.
27 A water supplier shall resubmit a completed water loss audit report
28 within 90 days of an audit being returned by the department.

29 (g) The department shall post all validated water loss audit
30 reports on its Internet Web site in a manner that allows for
31 comparisons across water suppliers. The department shall make
32 the validated water loss audit reports available for public viewing
33 in a timely manner after their receipt.

34 (h) Using available funds, the department shall provide technical
35 assistance to guide urban retail water suppliers' water loss detection
36 programs, including, but not limited to, metering techniques,
37 pressure management techniques, condition-based assessment
38 techniques for transmission and distribution pipelines, and
39 utilization of portable and permanent water loss detection devices.

- 1 (i) (1) No earlier than January 1, 2019, and no later than July
2 1, 2020, the board shall adopt rules requiring urban retail water
3 suppliers to meet performance standards for the volume of water
4 losses. In adopting these rules, the board shall employ full life-cycle
5 cost accounting to evaluate the costs of meeting the performance
6 standards. The board may consider establishing a minimum
7 allowable water loss threshold that, if reached and maintained by
8 an urban water supplier, would exempt the urban water supplier
9 from further water loss reduction requirements.
- 10 (2) *Notwithstanding paragraph (2) of subdivision (a) of Section*
11 *1846, the board shall not find a person or entity liable for a*
12 *violation of a regulation or order adopted pursuant to this*
13 *subdivision except as part of the enforcement of an urban water*
14 *use objective adopted pursuant to Section 10609.20.*

O



ACTION ITEM
February 20, 2019

TO: Board of Directors

FROM: **Public Affairs and Legislation Committee**
(Directors Dick, Osborne, and Thomas)

Robert Hunter
General Manager

Staff Contact: Heather Baez

SUBJECT: SB 204 (Dodd) – State Water Project: Contracts

STAFF RECOMMENDATION

Staff recommends the Board of Directors vote to adopt an oppose position on SB 204 (Dodd).

COMMITTEE RECOMMENDATION

Committee will review this item on February 19, 2019 and make a recommendation to the Board.

BILL SUMMARY

SB 204 would establish requirements for both the Department of Water Resources (DWR) and the Delta Conveyance, Design and Construction Authority Joint Powers Authority (JPA) to notify the legislature about pending State Water Project contracts allowing for public review, prior to those agencies moving forward with any work on the California WaterFix and EcoRestore project. In addition, it would prohibit the JPA from finally approving a contract for 90 days after the first hearing by the Legislature to review the proposed contract.

Budgeted (Y/N): n/a	Budgeted amount: n/a	Core X	Choice ___
Action item amount: None		Line item:	
Fiscal Impact (explain if unbudgeted):			

ARGUMENTS IN SUPPORT

According to the author, “In years past, there has been too little opportunity for impacted communities to influence this flawed project, which will have a massive impact on the Delta’s environment, the local economy and drinking water quality. This bill gives the Legislature and Delta residents a place at the table to learn about what’s going on, express concerns and offer solutions that will serve Californians.”

ARGUMENTS IN OPPOSITION

Current law already requires DWR to advise the Joint Legislative Budget Committee at least 60 days prior to the renewal or extension of water supply contracts between DWR and water contractors. The author’s assertion that there has been too little opportunity for the Delta communities to influence the project is not true. If anything, residents in the Delta communities have been the most vocal about the project and have shared their concerns to DWR, the State Water Resources Control Board, the Delta Stewardship Council, along with local, state, and federal leaders.

This bill is simply another attempt by the members of Legislature in the Delta Caucus to kill the California WaterFix and EcoRestore project and satisfy their vocal constituents.

STAFF COMMENTS

MWDOC’s Legislative Policy Principles directly reflect opposition to legislation that is intended to place further restrictions or delays on the California WaterFix project. Specifically, *it is MWDOC’s policy to oppose legislation and regulation that: Delays or impedes implementation of the California WaterFix and EcoRestore.*

DETAILED REPORT

The full text of SB 204 is attached.

Introduced by Senator Dodd

(Principal coauthor: Assembly Member Frazier)

(Coauthors: Senators Galgiani, Glazer, and Pan)

(Coauthors: Assembly Members Cooper, Eggman, Grayson, and McCarty)

February 4, 2019

An act to add Section 6525.5 to the Government Code, and to add Section 147.6 to, and to repeal and add Section 147.5 of, the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

SB 204, as introduced, Dodd. State Water Project: contracts.

(1) Under existing law, the Department of Water Resources operates the State Water Resources Development System, known as the State Water Project, in accordance with the California Water Resources Development Bond Act to supply water to persons and entities in the state. Existing law requires the department to present to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature the details of the terms and conditions of a long-term water supply contract between the department and a state water project contractor and to submit a copy of one long-term contract, as prescribed.

This bill would instead require the department to provide at least 10 days' notice to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature before holding public sessions to negotiate any potential amendment of a long-term water supply contract that is of projectwide significance with substantially similar terms intended to be offered to all contractors, or that would permanently transfer a contractual water amount between contractors. The bill would require the department, before the execution of a

specified proposed amendment to a long-term water supply contract and at least 60 days before final approval of such an amendment, to submit to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature certain information regarding the terms and conditions of a proposed amendment of a long-term water supply contract and to submit a copy of the long-term contract as it is proposed to be amended. The bill would prohibit the department from finally approving a long-term water supply contract for 90 days after the first hearing by the Legislature to review the proposed amendment, as specified.

(2) Existing law, the Joint Exercise of Powers Act, authorizes 2 or more public agencies to enter into an agreement to jointly exercise any power common to the contracting parties.

The bill would require a certain joint powers authority, at least 60 days before it enters into a contract for the planning, design, or construction of California WaterFix, to submit to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature certain information regarding the proposed contract. The bill would prohibit the joint powers authority from finally approving a contract for 90 days after the first hearing by the Legislature to review the proposed contract.

(3) This bill would make legislative findings and declarations as to the necessity of a special statute for the Sacramento-San Joaquin Delta.

Vote: majority. Appropriation: no. Fiscal committee: yes.
State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. Section 6525.5 is added to the Government Code,
- 2 to read:
- 3 6525.5. (a) For the purposes of this section, “joint powers
- 4 authority” means the Delta Conveyance Design and Construction
- 5 Joint Powers Authority, any successor to that authority, or any
- 6 joint powers authority created for the purposes of designing or
- 7 constructing a water conveyance in the Sacramento-San Joaquin
- 8 Delta to be owned and operated by the Department of Water
- 9 Resources.
- 10 (b) At least 60 days before the joint powers authority enters into
- 11 a contract for the planning, design, or construction of California
- 12 WaterFix, the joint powers authority shall submit to the Joint

1 Legislative Budget Committee and relevant policy and fiscal
2 committees of the Legislature information regarding the terms and
3 conditions of the proposed contract.

4 (c) If the Joint Legislative Budget Committee or relevant policy
5 and fiscal committees of the Legislature hold a hearing to review
6 a contract described in subdivision (b), the joint powers authority
7 shall not finally approve the contract for 90 days after the first
8 hearing by the Legislature to review the proposed contract.

9 SEC. 2. Section 147.5 of the Water Code is repealed.

10 ~~147.5. At least 60 days prior to the final approval of the renewal~~
11 ~~or extension of a long-term water supply contract between the~~
12 ~~department and a state water project contractor, the department~~
13 ~~shall present at an informational hearing before the Legislature~~
14 ~~the details of the terms and conditions of the contract and how~~
15 ~~they serve as a template for the remaining long-term water supply~~
16 ~~contracts. This presentation shall be made to the Joint Legislative~~
17 ~~Budget Committee and relevant policy and fiscal committees of~~
18 ~~both houses, as determined by the Speaker of the Assembly and~~
19 ~~the Senate Committee on Rules. The department shall submit a~~
20 ~~copy of one long-term contract to the Joint Legislative Budget~~
21 ~~Committee no less than 30 days prior to the scheduled hearing.~~

22 SEC. 3. Section 147.5 is added to the Water Code, to read:

23 147.5. The department shall provide at least 10 days' notice
24 to the Joint Legislative Budget Committee and relevant policy and
25 fiscal committees of the Legislature before holding public sessions
26 to negotiate any potential amendment of a long-term water supply
27 contract that is of projectwide significance with substantially
28 similar terms intended to be offered to all contractors, or that would
29 permanently transfer a contractual water amount between
30 contractors.

31 SEC. 4. Section 147.6 is added to the Water Code, to read:

32 147.6. (a) Before the execution of an amendment to a
33 long-term water supply contract described in subdivision (d) and
34 at least 60 days before final approval of such an amendment, the
35 department shall submit to the Joint Legislative Budget Committee
36 and relevant policy and fiscal committees of the Legislature
37 information regarding the terms and conditions of a proposed
38 amendment of a long-term water supply contract.

39 (b) The department shall submit the following information in
40 compliance with subdivision (a):

1 (1) A summary of the provisions of the proposed amendment.

2 (2) The estimated costs associated with the proposed
3 amendment, along with an estimate of the allocation of the costs
4 borne by each contractor.

5 (3) A copy of the long-term contract as it is proposed to be
6 amended.

7 (c) If the Joint Legislative Budget Committee or relevant policy
8 and fiscal committees of the Legislature hold a hearing to review
9 a proposed amendment described in subdivision (d), the department
10 shall not finally approve the long-term water supply contract for
11 90 days after the first hearing by the Legislature to review the
12 proposed amendment.

13 (d) (1) This section applies to a proposed amendment by the
14 department to a long-term water supply contract that is of
15 projectwide significance with substantially similar terms intended
16 to be offered to all contractors, and to a proposed contract
17 amendment that would permanently transfer a contractual water
18 amount between contractors.

19 (2) This section does not apply to an amendment for which a
20 copy of the long-term water supply contract as it was proposed to
21 be amended was submitted by the department to the Joint
22 Legislative Budget Committee in May 2018.

23 SEC. 5. The Legislature finds and declares that a special statute
24 is necessary and that a general statute cannot be made applicable
25 within the meaning of Section 16 of Article IV of the California
26 Constitution because of the unique circumstances of the
27 Sacramento-San Joaquin Delta.

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ACTION ITEM
February 20, 2019

TO: Board of Directors

FROM: **Public Affairs and Legislation Committee**
(Directors Dick, Osborne, and Thomas)

Robert Hunter
General Manager

Staff Contact: Heather Baez

**SUBJECT: ADOPT CONCURRING NOMINATION RESOLUTION FOR MESA WATER
DIRECTOR FRED BOCKMILLER – ACWA/JPIA EXECUTIVE COMMITTEE**

STAFF RECOMMENDATION

Staff recommends the Board of Directors adopt a concurring nomination resolution for Director Fred Bockmiller from Mesa Water District to be a candidate for the Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA) Executive Committee.

COMMITTEE RECOMMENDATION

Committee will review this item on February 19, 2019 and make a recommendation to the Board.

SUMMARY

At ACWA's Spring Conference in Monterey, there will be an Executive Committee election during the JPIA's Board of Directors' meeting to be held on May 6, 2019.

This election will fill four Executive Committee member positions, each for a four-year term each. The incumbents are E.G. "Jerry" Gladbach, Santa Clarita Valley WA; W.D. "Bill" Knutson, Yuima MWD; and Bruce Rupp, Humboldt Bay MWD. There is one vacant position.

The candidates' district must submit a nominating resolution and the candidates must also each receive concurring in nomination resolutions from three other JPIA members. Nominations and concurrent resolutions must be received by March 22, 2019.

Budgeted (Y/N): n/a	Budgeted amount: n/a	Core X	Choice ____
Action item amount: None	Line item:		
Fiscal Impact (explain if unbudgeted):			

Director Bockmiller has indicated a desire to serve as an Executive Committee member of ACWA/JPIA for the 2019-2023 term. Director Bockmiller currently represents Mesa Water District as a Board and Committee Member of the ACWA/JPIA, where he has served on the organization's Risk Management Committee for eleven years. He is asking the MWDOC Board of Directors to support him with a concurring nomination resolution.

Attached:

Letter of Request for Support from Mesa Water District
2019 JPIA Executive Committee Election Notice
Director Fred Bockmiller Biography
Concurring Resolution



*Dedicated to
Satisfying our Community's
Water Needs*

BOARD OF DIRECTORS

Shawn Dewane
*President
Division V*

Marice H. DePasquale
*Vice President
Division III*

Jim Atkinson
*Director
Division IV*

Fred R. Bockmiller, P.E.
*Director
Division I*

James R. Fisler
*Director
Division II*

Paul E. Shoenberger, P.E.
General Manager

Denise Garcia
District Secretary

Marwan Khalifa, CPA, MBA
District Treasurer

**Atkinson, Andelson,
Loya, Ruud & Romo**
Legal Counsel

1965 Placentia Avenue
Costa Mesa, CA 92627
tel 949.631.1200
fax 949.574.1036
info@MesaWater.org
MesaWater.org

February 1, 2019

The Honorable Brett Barbre
Board President
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708

Dear President Barbre:

On behalf of Mesa Water District, it is an honor to request that your agency support and vote for Fred R. Bockmiller, P.E., for election to the ACWA/JPIA Executive Committee.

Director Bockmiller has served on our Board for more than two decades making fair and informed decisions that have greatly benefited Mesa Water and its constituents. Since 2006, he has been our representative on the ACWA/JPIA Board and, since 2008, he has served on ACWA/JPIA's Risk Management Committee. He also serves on the AWCA Energy Committee.

Due to his elected public service experience, community volunteer service, and his 30-year career at the University of California, Irvine, Director Bockmiller possesses the qualifications, knowledge, and understanding of the many issues facing ACWA/JPIA. Attached for your review is a Statement of Qualifications for Director Bockmiller's election to the ACWA/JPIA Executive Committee. Our Board has the highest confidence in Director Bockmiller and his proven leadership abilities that can help guide ACWA/JPIA to continued organizational success and excellence in serving to its member agencies.

If you have any questions or requests for additional information, please feel free to contact our General Manager, Paul E. Shoenberger, P.E., by calling 949.631.1206 or emailing PaulS@MesaWater.org. Thank you for your consideration in voting for Director Bockmiller.

Sincerely,

Shawn Dewane
Mesa Water Board President

C: Mesa Water Board of Directors
Paul E. Shoenberger, P.E., Mesa Water General Manager



To: JPIA Members
From: Sylvia Robinson, Publications & Web Editor
Date: January 8, 2019
Subject: 2019 JPIA Executive Committee Election Notice

There will be an Executive Committee election during the JPIA's Board of Directors' meeting to be held on May 6, 2019, at the spring conference in Monterey.

This election will fill four Executive Committee member positions, each for a four-year term each. The incumbents are E.G. "Jerry" Gladbach, Santa Clarita Valley WA; W.D. "Bill" Knutson, Yuima MWD; and Bruce Rupp, Humboldt Bay MWD. There is one vacant position.

JPIA Directors who are interested in being candidates for the election must represent a District that participates in all four of the JPIA's Programs: Liability, Property, Workers' Compensation, and Employee Benefits.

The candidates' district must submit a nominating resolution and the candidates must also each receive concurring in nomination resolutions from **three** other JPIA members. However, JPIA members may **concur** in the nomination of as many candidates as they wish.

These nominations must reach the JPIA by the close of business (4:30 pm) on **Friday, March 22, 2019**. Nominations may be mailed to the attention of Sylvia Robinson at the JPIA: P. O. Box 619082, Roseville, CA 95661-9082 or emailed to srobinson@acwajpia.com.

The nominating procedures and copies of the nominating and concurring in nomination resolutions can be found on the JPIA's website.

RESOLUTION NO. _____
RESOLUTION OF THE BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
CONCURRING IN NOMINATION OF
FRED BOCKMILLER
TO THE EXECUTIVE COMMITTEE
OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES/
JOINT POWERS INSURANCE AUTHORITY (ACWA/JPIA)

WHEREAS, this District is a member district of ACWA/JPIA; and

WHEREAS, the Bylaws of the ACWA/JPIA provide that in order for a nomination to be made to ACWA/JPIA's Executive Committee, three member districts must concur with the nominating district; and

WHEREAS, another ACWA/JPIA member district, Mesa Water District, has requested that this district concur in its nomination of its member of the ACWA/JPIA Board of Directors to the Executive Committee of the ACWA/JPIA;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Municipal Water District of Orange County that this District concur with the nomination of **Fred Bockmiller** of Mesa Water District to the Executive Committee of ACWA/JPIA.

BE IT FURTHER RESOLVED, that the District Secretary is hereby directed to transmit a certified copy of this resolution to the ACWA/JPIA at P.O. Box 619082, Roseville, CA 95661-9082.

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

AYES:
NOES:
ABSENT:
ABSTAIN:

I hereby certify the foregoing is a 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 February 20, 2019.

ATTEST:

Maribeth Goldsby
District Secretary

Elect Fred R. Bockmiller, P.E. to ACWA/JPIA Executive Committee

Fred R. Bockmiller, P.E. Director, Mesa Water District



OBJECTIVE: To further the goals of ACWA/JPIA in best serving its members, and the industry as a whole, by applying my analytical and leadership skills, and my risk management experience, as a member of the ACWA/JPIA Executive Committee.

STATEMENT OF QUALIFICATIONS:

- Mesa Water District Director, 1996-present
- Five-term Board President, Mesa Water District
- ACWA/JPIA Board, 2006-present
- ACWA/JPIA Risk Management Committee, 2008-present
- ACWA Energy Committee, 2002-present
- Chair of all various Mesa Water District Committees (Executive, Audit Ad Hoc, Finance, Human Resources, IT Ad Hoc, Engineering and Operations, Public Information)
- Engineering Manager, UC Irvine Facilities Management Department

BIOGRAPHY: A Newport-Mesa native, Fred Bockmiller represents Division 1 -- encompassing the West Side of Costa Mesa and portions of Newport Beach -- on the Mesa Water District (Mesa Water®) Board of Directors. Having been Board President for five prior terms -- in 1999, 2000, 2004, 2011, and 2012 -- Director Bockmiller currently serves as Chairman of Mesa Water's Engineering and Operations Committee.

Director Bockmiller represents Mesa Water on the Board of the Association of California Water Agencies (ACWA) Joint Powers Insurance Authority (JPIA). He also serves on the ACWA/JPIA Risk Management Committee and the ACWA Energy Committee.

Director Bockmiller has previously chaired every Mesa Water committee (Executive, Audit Ad Hoc, Finance, Human Resources, IT Ad Hoc, Engineering and Operations, and Public Information). Additionally, he has represented Mesa Water at the City/Districts Liaison Committee, Orange County Council of Governments, Orange County Water District, and the Costa Mesa Westside Revitalization Oversight Committee.

Throughout his elected service, Director Bockmiller has championed water quality and cost-efficient service reliability through a perpetual agency philosophy of long-term planning for the future of Mesa Water and continuous infrastructure maintenance, renewal, and improvement. He has been a relentless champion of high-quality, fact-based decision making.

A Professional Engineer, Director Bockmiller is the Engineering Manager in the Facilities Management Department at UC Irvine (UCI), a leader in energy conservation and construction efforts for more than 20 years, including the campus' completion of more than \$3 billion in major capital construction projects and extensive energy and water conservation retrofits, which tripled the developed building space, reduced energy consumption in laboratories by 50 percent, and decreased per capita water use by more than 30%.

Developing the next generation is an area of interest for Director Bockmiller. He is a regular guest lecturer in UCI's Department of Mechanical and Aerospace Engineering, a mentor in the Junior Mentor Program at Newport Harbor High School, and was a Board member for 17 years of the Youth Employment Service—a local charity that provides youth with the tools to find jobs.

GENERAL MANAGER'S REPORT OF STAFF ACTIVITIES FEBRUARY 2019

MWDOC Agencies Managers Meeting

MWDOC held its Member Agency Managers' meeting at its office in Fountain Valley on January 17, 2019.

In attendance were: Bob Hill – ETWD, Mike Dunbar – EBSD, Mark Sprague – Fountain Valley, Cel Pasillas – Garden Grove, Ken Vecchiarelli – GSWD, Paul Weghorst – IRWD, Jake Chavira – La Palma, Paul Shoenberger – Mesa Water, Joone Lopez – MNWD, Steffen Catron – Newport Beach, Mike Markus & John Kennedy – OCWD, Jose Diaz – Orange, Dave Rebensdorf – San Clemente, Dan Ferons – SMWD, David Spitz – Seal Beach, Michael Perea – TCWD, Art Valenzuela & Mike Grisso – Tustin, Scott Miller – Westminster, Marc Marcantonio – YLWD, Greg Pennington – SCWD, Chris Davis – Huntington Beach.

MWDOC Staff: R. Hunter, K. Seckel, H. De La Torre, M. Baum-Haley, K. Hostert, J. Berg, C. Lingad, K. Hubbard, D. Micalizzi

Discussion Items:

- South Coast Air Quality Management District Proposed Amendment
- Asbestos Emissions from Demolition/Renovation
- WEROC Discussion: Public Safety Power Shutoff
- Water Loss Control Shared Services Business Plan
- MWDOC Budget Process
- OCWD Proposed Groundwater Storage Agreement Study with MNWD
- Metropolitan Second Lower Feeder Shutdown Discussion
- California Water Plan
- Governor's Budget and Inclusion of a Water Tax
- Small Non-Compliant Water Systems
- SB 998 Water Shutoffs Working Group Status Report
- Reliability Study Final Version Approved by MWDOC Board
- Colorado River Issues Update
- California Water Fix Update

Next meeting will tentatively be held February 21, 2018.

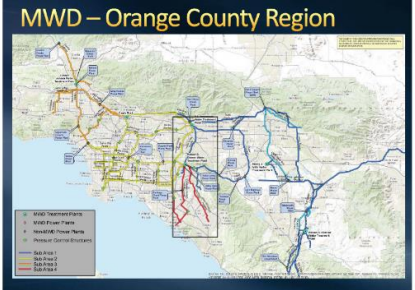
Meetings	<ul style="list-style-type: none"> • Charles Busslinger has been participating in conference calls hosted by CalDesal in anticipation of the January 2019 Public Scoping Meetings for the Triennial Review of the California Ocean Plan. The review is required by the US EPA. The State Water Board is using the public meetings to develop a list of 'projects' or tasks the State Water Board will address over the next two years. Three scoping meetings were held throughout the State in January 2019 including a January 14th meeting held in Costa Mesa. Charles attended the Costa Mesa meeting along with representatives with South Coast WD, Mesa WD, and West Basin MWD. • Numerous comments were received concerning revisions to the Desalination Amendment implementation provisions of the Ocean Plan. Members of the environmental community advocated to add ocean acidification, hypoxia (deprivation of adequate oxygen supply) and 'the newest science available' to the Plan. Those currently trying to secure the first desalination permit since the Ocean Plan Amendments were adopted 3-½ years ago, advocated for clearer guidance on interpretations of the Amendments (the rules); as some interpretations are not supported by the Ocean Plan Amendments and are making the permit process exceedingly lengthy. The timeline for the triennial review is: <ul style="list-style-type: none"> ➤ Release of Draft Staff Report & Proposed List of Projects May 2019 ➤ Formal Written Comments June 2019 ➤ Public Hearing June 2019 ➤ Response to Comments Sept. 2019 ➤ State Water Board Adoption Oct. 2019 ➤ Submittal to U.S. EPA Nov. 2019 • Charles Busslinger participated in the South OC IRWM Project Review Ad Hoc Committee meeting on January 23, 2019. The committee reviewed the 13 projects submitted in response to the November 2018 Call for Projects for Prop 1 IRWM grant funding. \$2.33 million is available to South OC for this funding round with a 2nd round anticipated in 2022. Applicants are currently being afforded the opportunity to make changes to their applications based upon feedback from the Ad Hoc committee prior to final scoring. • Charles Busslinger and Karl Seckel participated in a January 24, 2019 meeting to review Dudek's hydraulic study of IRWD's system in regards to the South OC Emergency Service Program. See above for details. • Karl Seckel attended the OCBC Infrastructure Committee where Bill Hasencamp from MET provided an overview of the Colorado River Drought Contingency Plan issues. The presentation was extremely well received. • Karl Seckel and MWDOC Director Sat Tamaribuchi met with UCI Professor and Founder of the Center for Hydrometeorology and Remote Sensing, Soroosh Sorooshian, to discuss the work they have been doing on hydrology and runoff based on satellite data since 1983 (that is the year the satellite data had a good enough resolution to complete the work they do). They are involved in real-time global precipitation statistics for anywhere in the world based on the daily satellite data.
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MET ITEMS CRITICAL TO ORANGE COUNTY

MET's Water Supply Conditions	<p>The 2018-19 Water Year officially began October 1, 2018. Thus far, the Northern California accumulated precipitation (8-Station Index) is reporting 26.1 inches or 99% of normal as of January 29. In the month of January 2019, accumulated precipitation reached 13.2 inches, which is 4.2 inches above normal compared to the historical average (As of January 28th). The Northern Sierra Snow Water Equivalent was at 18.2 inches on January 28th, which was 108% of normal for that day.</p> <p>As of January 28th Lake Oroville storage is at 39% of total capacity and 60% of normal. As of January 28th San Luis Reservoir has a current volume of 85% of the reservoirs total capacity and is 109% of normal.</p> <p>The Department of Water Resources (DWR) in January increased the State Water Project (SWP) "Table A" allocation to 15%. This allocation provides Metropolitan with approximately 286,725 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 January 28, 2019, snowpack measured at 105% 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 57% chance of a shortage on the Colorado River in 2020, increasing to 68% in 2021.</p> <p>With estimated total demands and losses of 1.76 million acre-feet (MAF) and with a 15% SWP Table A Allocation, Metropolitan is projecting that demands will exceed supply levels in CY 2019. Based on this, estimated total dry-year storage for Metropolitan at the end of CY 2019 will go down to 2.0 MAF.</p>
Colorado River Issues	<p><u>Drought Contingency Plan Development</u></p> <p>Commissioner Burman addressed the Colorado River Water Users Association Annual Conference in Las Vegas December 13-15 and described Reclamation's priorities for the Colorado River basin in 2019. In her remarks, Commissioner Burman noted that the Drought Contingency Plan will be the top priority for the upcoming year and that Reclamation is looking for the states to complete their work during that time.</p> <p>In describing the importance of finalizing work on the Drought Contingency Plan during the upcoming year, the Commissioner noted that the 2007 Shortage Guidelines (Guidelines), alone, are no longer enough to protect the system from the reservoir storage declines and worsening hydrology that have occurred since adoption of the Guidelines and pointed to Reclamation's modeling showing that implementation of both the Lower Basin Drought Contingency Plan and the Upper Basin Drought Contingency Plan together would provide important protection of the reservoirs and power production. The Commissioner urged the</p>

Colorado River Issues - continued	<p>states to resolve any outstanding intrastate issues and to reach final agreement on the drought contingency plans.</p> <p><u>Metropolitan Submits a Modified Water Order to the Bureau of Reclamation</u></p> <p>During December, Metropolitan submitted a Request for Revision to Approved Diversions for Calendar Year 2017 to Reclamation seeking approval to divert a total 685,000 acre-feet. Reclamation had approved the diversion of up to 632,676 acre feet of water earlier in 2017. Metropolitan submitted the modified order to:</p> <ul style="list-style-type: none"> • Enable Metropolitan to divert and store Imperial Irrigation District's (IID) Excess and Additional Excess Intentionally Created Surplus (ICS), consistent with Metropolitan and IID's storage agreement; • Include unused Coachella Canal Lining Project mitigation water that Reclamation had not included in its initial approved water order and exchange it with San Diego County Water Authority; and • Allow Metropolitan to divert water not needed by Coachella Valley Water District consistent the 1989 Approval Agreement. <p>Earlier this year, Metropolitan received approval to store up to 390,000 acre-feet of ICS in Lake Mead.</p> <p><u>Minute 319 Water Exchange Completed</u></p> <p>Reclamation sent notice on December 14, 2017 that the United States International Boundary and Water Commission received notification from Mexico that Mexico has provided the United States a total quantity of 124,000 acre-feet in satisfaction of Section III.1 of Minute 319. Pursuant to Minute 319 and the implementing agreements, a portion of this conserved water is converted into Binational ICS. Binational ICS is water that was conserved in Mexico, and the conservation was paid for by Metropolitan, IID, Central Arizona Project and Southern Nevada Water Authority (Local Funding Agencies). Each of the Local Funding Agencies will be credited with the amount of Binational ICS agreed to in the Interim Operating Agreement and Contributed Funds Agreements of 2012. Metropolitan's contributions as a Local Funding Agency entitled it to 47,500 acre-feet of Binational ICS, which will be shared equally with IID pursuant to the terms of a 2013 agreement between Metropolitan and IID regarding Binational ICS generated under Minute 319.</p>
Bay Delta/State Water Project Issues	<p><u>Science Activities</u></p> <p>Metropolitan staff continued participation in the Collaborative Science and Adaptive Management Program, including participation on the Collaborative Adaptive Management Team. December meetings focused on Delta smelt issues. Metropolitan staff participated in the Delta Smelt Scoping Team process to develop a decision support tool for the Delta Smelt Resiliency Strategy, and develop management questions that would guide development of a long-term monitoring program to inform management actions for Delta smelt. DWR is planning to implement two Delta Smelt Resiliency Strategy actions in 2018 – the Suisun Marsh Salinity Control Gate action and the North Delta food web action. These actions are hypothesized to improve habitat conditions and provide greater access to food resources. Staff is providing input to the monitoring plan for the Suisun Marsh Salinity Gates action</p>

Bay Delta/State Water Project Issues - continued	<p>and to the comprehensive U.S. Bureau of Reclamation Directed Outflow Project for 2018, which will include monitoring of Delta smelt habitat factors throughout the Spring to Fall 2018 period.</p> <p>On December 6, the California Department of Fish and Wildlife announced the selection of 39 projects to receive funding from its Water Quality, Supply and Infrastructure Improvement Act of 2014 (Proposition 1) Restoration Grant Programs. Seven projects were awarded funding in the scientific studies category. Staff assisted in the development and/or offered budgeted financial support for three of seven selected projects. These three projects are focused on the effects that pesticides have on juvenile salmonids that rear on floodplains; juvenile salmon distribution, abundance, and growth in restored Delta marsh habitats; and the impacts that export operations have on juvenile salmon survival, entrainment, and predation mortality.</p> <p><u>Delta Flood Emergency Management Plan</u></p> <p>DWR is currently testing a revised Emergency Response Tool (ERT) model that has been disaggregated so that various channel closure, pathway or other response scenarios can be simulated independent of the full Delta regional analysis. Testing has been conducted with the California Civil Air Patrol to characterize emergency conditions on the ground, and simulate response scenarios using ERT modeling capabilities.</p> <p>Sheet pile with up to 120 feet installed length, consisting of large pipe pile and intermediate sheet pile between the pipe segments, is expected to be delivered to the Stockton stockpile site by the second quarter 2019. This piling would be capable of closing the deepest levee breaches and would be a redundant measure to rock closures in emergency conditions. With the pile delivery, stockpiles for purposes of emergency response should be almost complete. DWR plans to stockpile additional rock, bringing the total to more than 400,000 tons or enough to close three major breaches. In addition to stockpiled materials, the stockpile sites include four loading and offloading sites for rock, sheet pile, and other materials.</p>
MET's Ocean Desalination Policy and Potential Participation in the Huntington Beach Ocean (Poseidon) Desalination Projects	<p><u>Poseidon Huntington Beach</u></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</p>

MET's Ocean Desalination Policy and Potential Participation in the Huntington Beach Ocean (Poseidon) Desalination Projects - continued	<p>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 three to five months. Assuming approval, Poseidon would then seek a permit from the California Coastal Commission in 2019.</p>
Use of East Orange County Feeder No. 2 for Conveyance of Groundwater and/or Poseidon Water	<p><u>Use of East Orange County Feeder No. 2 for Conveyance of Groundwater and/or Poseidon Water</u></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="706 1633 1117 1921">  </div>

South Orange County Projects	<p><u>Doheny Desal Project</u></p> <p>South Coast WD 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'. Applications are currently being reviewed.</p> <p>South Coast staff and consultants are in the process of responding to comments submitted regarding the EIR for the project. South Coast WD anticipates adopting the response to comments in Spring 2019.</p> <p><u>SMWD Trampas Canyon Recycled Water Reservoir</u></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"> 1) Trampas Canyon Dam (Dam) 2) Conveyance facilities to transport recycled water into and out of the Reservoir (Pipelines) 3) Trampas Canyon Pump Station (Pump Station) <p>The construction of the facilities is being completed in three phases:</p> <ol style="list-style-type: none"> 1) Preconstruction/Site Preparation for the Dam and Pump Station Construction 2) Dam and Pipelines 3) Pump Station <p><u>PROJECT STATUS</u></p> <p><u>Preconstruction/Site Preparation</u></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&T facilities was completed in May 2018, which was the final remaining activity for this phase.</p> <p><u>Dam and Pipelines</u></p> <p>The Construction Contract was awarded in December 2017 and is approximately 37% complete.</p> <p><u>Pump Station</u></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 3-4 months ahead of the Reservoir and Dam completion.</p> <p><u>San Juan Watershed Project</u></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"> • Steelhead trout migration including the provisions of fish passages
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South Orange County Projects - continued	<ul style="list-style-type: none"> • Impacts on San Juan Creek Lagoon • Aesthetics and impacts of the various structures that may be required as part of the project on the surrounding neighborhoods • Sediment transport <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 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><u>Other Information on South County Projects:</u></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 kseckel@mwdoc.com.</p>
<h2>ENGINEERING & PLANNING</h2>	
Orange County Reliability Study	<p>Spin off work from the Reliability Study to further analyze the Strand Ranch Extraordinary Water Supply program is now in progress.</p>
South Orange County Emergency Service Program	<p>Dudek continues to assist MWDOC and IRWD to determine if the existing IRWD South Orange County Interconnection capacity for providing emergency water to South Orange County can be expanded and/or extended beyond its current time horizon of 2030. Staff from MWDOC, IRWD, OCWD and Dudek met on January 24, 2019 to review the hydraulic modeling of the IRWD system. Dudek is currently incorporating comments into the technical memorandum and the next step is to share the information with the SOC agencies in February.</p>
Strand Ranch Project	<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>
MET Evaluation of Regional Storage Portfolio (ERSP)	<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"> 1. Updating emergency criteria, 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

MET Evaluation of Regional Storage Portfolio (ERSP) - continued	<p>provides an envelope of alternatives for MET's emergency storage that could provide reliability during the outage period.</p> <p>3. Proposed periodic re-evaluation of emergency storage volume to coincide with completion of each new IRP (every 5 years).</p> <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"> A. Recognition that an outage on the SWP could exceed previous estimates of six months (now one to two years), and 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. <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>
EMERGENCY PREPAREDNESS	
Coordination with WEROC Member Agencies	<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 Soto is working with the participating agencies and the consultant to address the revisions and re-submit the plan to CalOES and FEMA on February 1, 2019.</p> <p>Kelly Hubbard presented to the South Orange County Wastewater Authority (SOCWA) Board on Thursday, January 10 regarding Emergency Fuel Planning. She provided information on what planning has occurred at the state, regional and county level, as well as recommendations on what all local agencies should do for emergency fuel planning and supply.</p> <p>Kelly presented the Draft WEROC Budget to the three Cities and OCWD. She presents the draft numbers annually, along with a summary of projects expected to be completed this fiscal year and expectations for the next fiscal year. It's an opportunity for the funding agencies to ask questions about the budget and suggest any needed programming support. Kelly and Karl Seckel will meet with</p>

Coordination with WEROC Member Agencies - continued	the other two WEROC funding agencies (Orange County Sanitation District and SOCWA) separately next month.
Training and Programs	Francisco attended the Design Network for Emergency Management workshop at Chapman University. The organizers are graphic artists who have merged emergency management concepts into design in order to develop visually effective emergency information. Workshop topics included Visual Thinking/Visual Language, Iconography, Cognition and Emergency Information, and Technology and User Interface. WEROC is exploring the possibility to work with the organizers to develop visually effective and informative water emergency communication signs.
Coordination with the County of Orange	<p>Kelly attended the January OCEMO meeting at the Operational Area EOC. Director Donna Boston from the Emergency Management Division (EMD) provided an overview of the Emergency Management Division projects and goals for 2019. Other presentation topics included OA Managers Report, Grant Updates, CalOES report, and Sub-committee updates.</p> <p>Kelly attended the Countywide exercise final planning meeting at the City of Newport Beach Emergency Operations Center. The meeting focused on finalizing the details for the January 30th exercise.</p> <p>Francisco attended the Emergency Alert System (EAS) Quarterly Meeting at the Orange County Transportation Authority in the City of Orange. Topics included last quarter EAS activations, EAS plan updates, the integration of BLU Alert Codes, and reports from each of the EAS members.</p> <p>Francisco participated in various conference calls for the possible activation of the Holy Fire Debris Flow Plan and the Canyon 2 Debris Flow Plan due to the rain event from January 14-16. 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. There were no significant impacts to water utilities.</p>
EOC Readiness	<p>Kelly provided the WEROC EOC Logistics Section Training. Training topics included Roles and Responsibilities, Mutual Aid, Resource Request Process, and general discussion.</p> <p>Francisco & Kelly provided training to the EOC Director (Rob Hunter) and Plans & Intelligence Section Chief (Joe Berg). Training topics included Exercise Overview, Roles and Responsibilities, review of the exercise Situational Summary and Action Plan, and general discussion items.</p> <p>Janine Schunk, Francisco and Kelly have spent several days at the South EOC preparing the facility for the January 30 exercise. Due to the nature of the scenario preparation for this exercise includes pre-developing some messaging, forms, and content on the whiteboards and within WebEOC. This is a great</p>

EOC Readiness - continued	<p>learning tool in itself, as staff continues to refine our processes and procedures throughout the preparation process.</p> <p>Janine successfully participated in the OA and MET Radio Test and WebEOC tests for the month. Janine facilitated the monthly test of the WEROC Radio System.</p> <p>Janine met with an AT&T technician at the South EOC to repair internet connections and to evaluate our bandwidth needs.</p>
Coordination with Outside Agencies	<p>Kelly attended the California Public Utilities Commission (PUC) Hearing titled, "Workshop on Impacts from De-Energization: Focus on First Responders and Local Government" in Calabasas. This was one of two workshops held in the state by the PUC to hear from the local agencies on their concerns with impacts from Public Safety Power Shutoff plans. The Public Safety Power Shutoff (PSPS) Plans give power utilities the ability to proactively shut off power in high fire risk areas when extreme weather conditions present a clear and imminent threat to power lines. The concern with this planning is potential impacts to emergency notification systems, critical infrastructure, vulnerable populations, and water services. Staff has written a letter to the PUC outlining water utility concerns and recommendations. We are asking for all OC water and wastewater utilities to sign onto the letter. It will be mailed to the PUC by the end of the month.</p>
<h2 style="text-align: center;">WATER USE EFFICIENCY</h2>	
Water Loss Control Workgroup	<p>On January 8, MWDOC hosted the Water Loss Control Workgroup meeting. Twenty-seven water loss control staff from 19 agencies attended the meeting. The meeting included discussions on:</p> <ul style="list-style-type: none"> • Water Loss Control Updates <ul style="list-style-type: none"> ○ Shared Services Business Plan ○ Water Systems Optimization's Recommendations and Scoping for 2019 ○ Upcoming State Water Resources Control Board (SWRCB) Meetings ○ Leak Detection Equipment Training • Pressure Logging and Analysis • Group Discussions <ul style="list-style-type: none"> ○ Feedback on the last three years - What is working and what is not? ○ Suggestions for the future <p>The next meeting is scheduled for March 12th and will be hosted by MWDOC.</p>

California Landscape Contractors Association (CLCA) Orange County Chapter Kickoff Meeting	<p>On January 9, Rachel Davis attended a kickoff meeting hosted by the Orange County Chapter of the CLCA in Costa Mesa. Approximately 40 landscape professionals attended. Rachel provided information on the Qualified Water Efficient Landscaper trainings currently scheduled.</p>
Metropolitan Water District of Southern California (MET) Water Use Efficiency Workgroup	<p>On January 17, Beth Fahl attended Metropolitan's Water Use Efficiency Workgroup meeting. Approximately 30 member agencies participated in the meeting. Agenda items included:</p> <ul style="list-style-type: none"> • December Metropolitan Board Presentation <ul style="list-style-type: none"> ○ Approval of Pilot Disadvantaged Communities Program • January Metropolitan Board Presentation <ul style="list-style-type: none"> ○ Conservation Update ○ Proposed Actions to Increase Activity in the Landscape Transformation Program • Metropolitan Program Updates <ul style="list-style-type: none"> ○ Inspection RFP ○ Large Landscape Survey RFP ○ California Friendly Landscape Classes RFP ○ Upcoming Model Water Efficient Landscape Ordinance Workshops ○ Saturation Study Update • Member Agency Round-Table/Updates <p>The next workgroup meeting is scheduled for February 21st at Metropolitan.</p>
Neutral Output Discharge Elimination System (NO-DES) Demonstration at South Coast Water District (SCWD)	<p>On January 23, Joe Berg attended a NO-DES distribution system flushing demonstration hosted by SCWD. Ohm Kongtang, Principal at Reliable Water Solutions, performed the flushing demonstration at the southern end of the Joint Regional Water Supply System. SCWD operates the pipeline and is looking for improved ways to maintain water quality with reduced flows since the shutdown of the San Onofre Nuclear Generation Station. SCWD staff is conducting a pre and post flushing water quality analysis that should be completed in March.</p>
Storm water General Permittee Meetings	<p>On January 24 and January 28, Rachel D. attended North and South Orange County General Permittee meetings and spoke about MWDOC's water use efficiency programs and their overlapping interests with storm water programs. Flyers for the Qualified Water Efficient Landscaper (QWEL) training and outdoor rebate programs were distributed.</p>

State Water Resources Control Board (SWRCB) Workshop	On February 1, Joe participated in a SWRCB workshop in Sacramento. The focus of the workshop was on the initial staff proposal for a volumetric water loss standard called for in Senate Bill 555. Another workshop focusing on the lifecycle cost analysis will be held in May or June 2019, and the formal rulemaking process will begin in June 2019.
Qualified Water Efficient Landscaper (QWEL) Training	On February 4, Rachel D. and Jonathan Meier attended the QWEL training at Santa Margarita Water District. The training was sponsored and organized by MWDOC, and there were 29 professional landscapers and water professionals in attendance. This class was the first in a series of six sessions.
California Irrigation Institute's 57th Annual Conference	On February 4 and 5, Rachel Waite attended the California Irrigation Institute's 57 th Annual Conference in Sacramento, CA. Topics discussed included sustainable water management, urban water use efficiency, and legislation AB 1668 and SB 606.
Leak Detection Equipment Training	On February 5 and 6, MWDOC sponsored Leak Detection Equipment Training, which was hosted by the South Coast Water District at their Dana Hills Tennis Center. Twenty-two water agency staff representing seven agencies attended the training. The two-day training included both classroom and hands-on training for use of the equipment. The fourth and final training is scheduled for February 27 and 28 and will be hosted by Moulton Niguel Water District.
Southern California Association of Governments (SCAG) Aerial Mapping Meeting	On February 6, Steve Hedges and Rachel W. attended an Aerial Imagery meeting hosted by OC Public Works and organized by SCAG as an initiative to obtain imagery for stakeholders throughout the county. Eleven agencies, cities, and organizations were in attendance, and the next meeting is scheduled tentatively for mid-March.
Orange County Water Use Efficiency Coordinators Workgroup	<p>On February 7, Joe, Steve, Beth, Rachel D., and Rachel W. hosted the Orange County Water Use Efficiency Coordinators Workgroup meeting at MWDOC. Approximately 23 agencies participated in the meeting. Highlights on the agenda included:</p> <ul style="list-style-type: none"> • MWDOC Updates • Agency Roundtable/Problem Solving • Public Affairs/Marketing <ul style="list-style-type: none"> ○ Water Policy Dinner ○ WUE Marketing ○ National Mayor's Challenge ○ Water Awareness Poster Contest ○ MWDOC Social Media ○ Girl Scouts Program ○ Be The Voice 4 Water Video Contest

Orange County Water Use Efficiency Coordinators Workgroup - continued	<ul style="list-style-type: none"> ○ Inspection Trips ○ PAW Meeting ● OC Public Works – Overwatering is Out Campaign and Public Education Update ● Metropolitan Update <ul style="list-style-type: none"> ○ Regional Program for Premium High Efficiency Toilets in Pre-1994 Multi-Family Properties ○ Metropolitan Landscape Transformation Program Proposed Changes ○ California Friendly Landscape Training Program RFP Results ○ Large Landscape Survey Request for Proposals ● Water Use Efficiency Programs Update <ul style="list-style-type: none"> ○ Proposition 1 Grant Funding Applications ○ U.S. Bureau of Reclamation Funding Opportunities ○ OC-Qualified Water Efficient Landscaper Training <ul style="list-style-type: none"> ▪ Upcoming Classes ▪ Marketing ▪ MWDOC QWEL Webpage ○ MWDOC MET-Funded/Member Agency Administered Program Submittals ● CalWEP Update ● Future Agenda Items <p>The next meeting is scheduled for March 7th at MWDOC.</p>
<h2 style="margin: 0;">PUBLIC/GOVERNMENT AFFAIRS</h2>	
Member Agency Relations	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> ● Prepared Materials including presentation for ACC-OC New Elected Official Orientation ● Prepared Media and Tool Kits for Poster Slogan Contest, Wyland Mayor's Challenge, Water Use Efficiency and Emergency Management. <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> ● Organized and hosted a working group on SB 998 (water shutoffs) implementation
Community Relations	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> ● Entries open for 2019 Water Awareness Poster Contest ● Created and sent January eCurrents Newsletter ● Submitted four award entries for the California Association of Public Information Officers annual awards ● Worked with the Wyland Foundation to complete promotional flyer for the upcoming annual competition in April <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> ● Attended the Southern California Water Coalition Quarterly Lunch

Education	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Observed 1st and 2nd visit at San Juan Capistrano Serra High School • Met with Inside the Outdoors and Metropolitan Water District of Southern CA on the Voice4thePlanet video contest promotions • Provided Inside the Outdoors with updated agency content for the High School program presentations • Provided information to the City of Orange regarding the Elementary School program targets • Sent updated schedule and attendance numbers to member agencies for the elementary school program • Secured sponsors for the Orange County prize category for Voice4Planet video contest • Provided El Toro Water District with post-clinic survey results for the Water Resources and Conservation Patch Program and certificate of recognition • Coordinated and hosted Girl Scouts Patch Program Clinic on January 26 at City of San Clemente's Water Reclamation Plant • Created and sent the January 26 clinic attendees a post-clinic survey • Continues to coordinate and respond to inquiries for the upcoming Girl Scout Patch Program clinics • Participated in the Metropolitan Water District of Southern CA Education Coordinator's meeting • Sent Moulton Niguel Water District information regarding upcoming visits to Laguna Hills and Mission Viejo high schools • Sent Santa Margarita Water District information regarding upcoming visits to Mission Viejo high schools • Sent the City of Buena Park information regarding upcoming visits to Buena Park High School
Media Relations	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Worked with Consultants to produce PSA promoting Wyland Mayor's OC Challenge • Discussed potential partnership, participation and promotion of Xtreme Home Water Makeover with NBC/ Water Zone/Toro <p>Coordinated and booked 30 minute radio segment on KSBR</p>
Staff Training and Development	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Participated in WEROC Orange Crush Emergency Exercise <p>Governmental Affairs Staff :</p> <ul style="list-style-type: none"> • Participated in WEROC Orange Crush Emergency Exercise
Special Projects	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> • Prepared First Draft of Department Budget for FY 19/20. • Sent invitations and confirmations to guests of Director Dick for his upcoming inspection trip February 22-23.

Special Projects - continued	<ul style="list-style-type: none"> Currently working on itineraries, trip logistics, guest and Director requirements for the following inspection trips: <ul style="list-style-type: none"> April 12, Director McKenney Infrastructure April 26-27, Director Dick CRA <p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> Staffed Director Ackerman's Colorado River Aqueduct tour Attended the WACO Planning Committee Meeting Sent out invitations various speakers on behalf of WACO Planning Staffed the ISDOC Quarterly Luncheon with Christina Hernandez
Water Policy Dinner	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> Continues to coordinate venue, guests, honorees, presentations, and promotion of the February 21st Water Policy Dinner. Sent the first and second invite to database contacts Working with hotel on event logistics
Legislative Affairs	<p>Governmental Affairs Staff:</p> <ul style="list-style-type: none"> Reviewed the Governor's budget and sent follow-up information to the Board and member agencies Participated in ACWA's water tax alternative legislation working group meeting Participated in ACWA's working group meeting on the California Office of Environmental Health Hazard Assessment's Human Right to Water Framework Report Attended the ACWA Federal Affairs Committee meeting Along with Mesa Water District, met with Assemblywoman Cottie-Petrie Norris Met with district staff at the Office of Assemblyman Tyler Diep Participated in Met's member agency legislative call Attended ACWA's state legislative committee meeting Met with Lana Haddad and Albert Napoli at Metropolitan to discuss and coordinate legislative events and visits Participated in calls with EMWD, WMWD and IEUA coordinating our upcoming co-hosted congressional briefing lunch in Washington D.C. Attended the Assembly Joint Informational Hearing on Safe and Affordable Drinking Water Met with staff from the following legislative offices: <ul style="list-style-type: none"> Assemblyman Philip Chen (Assembly Environmental Safety and Toxic Materials Committee) Assemblyman Ash Kalra (Assembly Water, Parks and Wildlife Committee) Assemblyman Marc Levine (Assembly Water, Parks and Wildlife Committee) Assemblyman Rudy Salas (Assembly Water, Parks and Wildlife Committee) Senator Andreas Borgeas (Senate Natural Resources and Water Committee)

Legislative Affairs - continued	- Assemblyman Todd Gloria (Assembly Water, Parks and Wildlife Committee)
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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