

REGULAR MEETING  
OF THE BOARD OF DIRECTORS  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
18700 Ward Street, Board Room, Fountain Valley, California  
April 18, 2018, 8:30 a.m.

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**AGENDA**

**PLEDGE OF ALLEGIANCE**

**ROLL CALL**

**PUBLIC COMMENTS/PARTICIPATION**

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

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

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

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

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

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

**NEXT RESOLUTION NO. 2068**

**CONSENT CALENDAR (Items 1 to 7)**

(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. March 7, 2018 Workshop Board Meeting
- b. March 21, 2018 Regular Board Meeting

*Recommendation: Approve as presented.*

**2. COMMITTEE MEETING REPORTS**

- a. Planning & Operations Committee Meeting: March 5, 2018
- b. Administration & Finance Committee Meeting: March 14, 2018
- c. Public Affairs & Legislation Committee Meeting: March 19, 2018
- d. Executive Committee Meeting: March 22, 2018

*Recommendation: Receive and file as presented.*



**3. TREASURER'S REPORTS**

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

*Recommendation: Ratify and approve as presented.*

- c. Summary of Cash and Investment and Portfolio Master Summary Report (Cash and Investment report) as of February 28, 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 February 28, 2018

*Recommendation: Receive and file as presented.*

**5. AWARD OF CONSULTANT CONTRACT FOR THE SOC INTERCONNECTION STUDY**

*Recommendation: Authorize the General Manager to enter into a contract with Dudek on a time and materials basis not to exceed \$244,250 to work with IRWD, MWDOC, and the SOC Agencies on the potential for expansion or extension of the existing Emergency Services Agreement for the SOC Interconnection.*

**6. WATER LOSS AUDIT VALIDATION RESEARCH**

*Recommendation: Authorize the General Manager to enter into a professional services agreement with Water Systems Optimization, Inc. to provide independent water loss audit report validation services for member agencies, using budgeted research funds of \$52,000.*

**7. DISTRICT BENCHMARK COMPENSATION AND BENEFITS STUDY**

*Recommendation: (1) Approve the proposed pay structure which includes title, classification and FLSA status changes and a 3.62% pay structure adjustment to the salary ranges only, effective July 1, 2018; and (2) Approve revisions to the District's policy regarding Compensation and Benefits Surveys and Pay Structure Adjustments, as presented.*

– End Consent Calendar –



**ACTION ITEMS****8-1 WEROC EMERGENCY OPERATIONS PLAN RESOLUTION RES. NO. \_\_\_\_\_**

*Recommendation:* Adopt Resolution approving the revised WEROC Emergency Operations Plan.

**8-2 APPROVAL OF STRUCTURAL SEISMIC IMPROVEMENTS TO THE MWDOC ADMINISTRATION BUILDING AND STAFF DIRECTION FOR IMPLEMENTATION**

*Recommendation:* Committee recommended at least moving forward with the Life Safety (3-C) option of \$300,000, however indicated that the full Board consider moving forward with the Damage Control (2-B) option of \$500,000. The Committee also discussed the options of rebuilding the current structure (\$5.8-7.2 million) or new construction at a relocation site (\$6-12.5 million) and suggested the Board discuss these options as well.

**8-3 ADOPT BUDGET FOR FISCAL YEAR 2018-19****RES. NO. \_\_\_\_\_**

*Recommendation:* Adopt resolution approving the budget for fiscal year 2018-19, which includes a General Fund Budget of \$9,654,208, a Water Purchases Budget of \$204,099,094, a Water Use Efficiency Budget of \$2,972,135, a WEROC budget of \$489,160, for a total Budget of \$217,214,597.

**8-4 PROPOSED MWDOC WATER RATE RESOLUTION FOR FISCAL YEAR 2018-19  
RES. NO. \_\_\_\_\_**

*Recommendation:* (1) Increase the MWDOC Retail Meter Charge from \$11.90 to \$12.25 per meter, and the Groundwater Customer Charge from \$468,565 to \$499,012, effective July 1, 2018; and (2) Adopt the Water Rate Resolution setting forth rates and charges to be effective July 1, 2018 and January 1, 2019 as identified in the Water Rate Resolution for Fiscal Year 2018-19.

**8-5 WATER UCI INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH CENTER**

*Recommendation:* Consider financial participation in the Water UCI Industry-University Cooperative Research Center.

**8-6 AB 2241 (RUBIO) – THE OPEN AND TRANSPARENT WATER DATA ACT**

*Recommendation:* Adopt a support position on AB 2241 (Rubio).



**8-7 AB 2543 (EGGMAN) – STATE AGENCIES: INFRASTRUCTURE PROJECT BUDGET AND SCHEDULE**

*Recommendation: Adopt an oppose position on AB 2543 (Eggman).*

**8-8 RECOMMENDATION FOR MWDOC SCHOOL PROGRAM GRADES 1-6 FIRST EXTENSION OF AGREEMENT FOR FISCAL YEAR 2018-19**

*Recommendation: Authorize the General Manager to enter into a First Extension of Agreement with Discovery Science Center (DSC) for a one-year renewal term to implement the Water Education School Program Grades 1-6 for fiscal year 2018-19.*

**8-9 RECOMMENDATION FOR MWDOC SCHOOL PROGRAM GRADES 9-12 FIRST EXTENSION OF AGREEMENT FOR FISCAL YEAR 2018-19**

*Recommendation: Authorize the General Manager to enter into a First Extension of Agreement with Inside the Outdoors (ITO) for a one-year renewal term to implement the Water Education School Program Grades 9-12 for fiscal year 2018-19.*

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

**9. GENERAL MANAGER'S REPORT, APRIL 2018 (ORAL AND WRITTEN)**

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

**10. MWDOC GENERAL INFORMATION ITEMS**

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

*Recommendation: Receive and file as presented.*

**ADJOURNMENT**

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



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

March 7, 2018

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

**MWDOC DIRECTORS**

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

**MWDOC STAFF**

Robert Hunter, General Manager  
Karl Seckel, Assistant General Manager (absent)  
Joe Byrne, Legal Counsel  
Maribeth Goldsby, Board Secretary  
Harvey De La Torre, Associate General Mgr.  
Melissa Baum-Haley, Sr. Water Resource Analyst  
Damon Micalizzi, Dir. Of Public Affairs  
Chris Lingad, Water Resources Analyst  
Charles Busslinger, Principal Engineer

\*Also MWDOC MET Directors

**OTHER MWDOC MET DIRECTORS**

Larry McKenney  
Linda Ackerman (absent)

**OTHERS PRESENT**

Gary Breaux  
Mark Monin  
Jose Vergara  
Doug Reinhart  
Paul Weghorst  
Jim Atkinson  
Paul Shoenberger  
Don Froelich  
John Kennedy  
Dennis Erdman  
Al Nederhood  
Brooke Jones  
Ed Means  
Michael Thomas

Metropolitan Water District of So. Cal.  
El Toro Water District  
El Toro Water District  
Irvine Ranch Water District  
Irvine Ranch Water District  
Mesa Water  
Mesa Water  
Moulton Niguel Water District  
Orange County Water District  
South Coast Water District  
Yorba Linda Water District  
Yorba Linda Water District  
Means Consulting  
San Diego County Water Authority

**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.

**PUBLIC PARTICIPATION/PUBLIC COMMENTS**

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

No comments were received.

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

Director McKenney highlighted activities involving the MET Water Planning & Stewardship, and Conservation and Local Resources Committees. He also noted that the California WaterFix continues to be a main topic of discussion, that the Finance & Insurance Committee held a series of budget workshops, that the water rates public hearing is scheduled for March 13, 2018, and that MET is in the process of evaluating its conservation program funding. Mr. McKenney advised that MET is currently mapping out a series of seismic retrofitting over the next several years and will begin with the Weymouth Plant.

Director Dick highlighted MET's California WaterFix activities, the conservation funding, and an update on the Ethics Report, noting that currently Gerald Riss is the Acting Ethics Officer. Mr. Dick also updated the Board on legal issues with San Diego County Water Authority, and financing options/issues for the two-tunnel California WaterFix.

Director Barbre concurred with both reports (above), but stated the most important issue is support for the two-tunnel approach for the California WaterFix and his belief that MET should consider financing the full project.

**METROPOLITAN'S PROPOSED BIENNIAL BUDGET AND RATES FOR FISCAL YEARS 2018/19 AND 2019/20; PRESENTATION BY METROPOLITAN STAFF**

MET's Chief Financial Officer, Gary Breaux, updated the Board on the biennial and rates process (and its objectives), including an overview of the overall rate increases since 2011, underlying assumptions, full service costs and charges, revenue and expenditure trends, and the ten-year financial forecast. He advised that the Finance & Insurance Committee would hold its third (and final) workshop on March 12, with a public hearing on rates on March 13, with anticipated final Board approval in April.

Considerable discussion ensued following the presentation, with specific emphasis on the State Water Contract forecast and costs, the State Water Resources Control Board's efficiency standards, projected water sales, the Local Resources Program (and potential for stranded assets), financing/bond rates, WIFIA loans/rates, the treatment surcharge, operations & maintenance costs.



It was suggested that a future workshop topic be the turf rebate program.

The Board thanked Mr. Breaux for his presentation and received and filed the report.

### **UPDATE ON THE CALIFORNIA WATERFIX**

Associate General Manager Harvey De La Torre highlighted Governor Brown's announcement of a "staged approach" for the California WaterFix, which would consist of an initial Phase 1 (6,000 cfs project) comprised of one tunnel, one intermediate forebay, two intakes, and one pumping station, which would be followed by Stage 2 (a second tunnel, third intake and second pumping station to yield the full 9,000 cfs). Discussion ensued regarding the staged approach and how it would impact the overall project. Mr. De La Torre noted that the MET Board will consider the staged approach in April. The Board received and filed the report as presented.

### **WATER SUPPLY CONDITIONS UPDATE**

It was stated that the Water Supply Report was included in the packet; the Board received and filed the report.

#### **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 February MET Board Meetings
- b. Review Items of significance for the Upcoming MET Board and Committee Agendas

The Board received and filed the report as presented.

### **ADJOURNMENT**

There being no further business to come before the Board, the meeting adjourned at 10:04 a.m.

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Maribeth Goldsby  
Board Secretary



**MINUTES OF THE REGULAR MEETING  
OF THE BOARD OF DIRECTORS  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
March 21, 2018**

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

**MWDOC DIRECTORS**

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

**STAFF**

Robert Hunter, General Manager  
Karl Seckel, Assistant General Manager  
Alisha Winterswyk, Legal Counsel  
Maribeth Goldsby, Board Secretary  
Harvey De La Torre, Associate General Manager  
Melissa Baum-Haley, Sr. Water Resources Analyst  
Damon Micalizzi, Director of Public Affairs  
Joe Berg, Director of Water Use Efficiency  
Cathy Harris, Admin. Services Manager  
Chris Lingad, Water Resources Analyst  
Pat Meszaros, Sr. Executive Assistant

**ALSO PRESENT**

Larry McKenney  
Doug Davert  
Doug Reinhart  
Jim Fisler  
John Kennedy  
Don Chadd  
Brooke Jones

MWDOC MET Director  
East Orange County Water District  
Irvine Ranch Water District  
Mesa Water  
Orange County Water District  
Trabuco Canyon 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 comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were received.

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

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



**CONSENT CALENDAR**

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

President Barbre advised that minor revisions were made to Item No. 1(a) (Minutes from the 2/7/18 Workshop Board meeting) and were included in this action. He also advised that he would not be attending the National Water Resources Association Federal Water Issues conference in April (Item No. 8) as originally thought.

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

**MINUTES**

The following minutes were approved.

February 7, 2018 Workshop Board Meeting (as revised)  
February 21, 2018 Regular Board Meeting  
February 10, 2018 Special Board Meeting

**COMMITTEE MEETING REPORTS**

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

Planning & Operations Committee Meeting: February 5, 2018  
Administration & Finance Committee Meeting: February 14, 2018  
Public Affairs & Legislation Committee Meeting: February 20, 2018  
Executive Committee Meeting: February 22, 2018

**TREASURER'S REPORTS**

The following items were ratified and approved as presented.

MWDOC Revenue/Cash Receipt Register as of February 28, 2018  
MWDOC Disbursement Registers (February/March)

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 January 31, 2018  
  
PARS Monthly Statement (OPEB Trust)  
  
Water Use Efficiency Projects Cash Flow



**FINANCIAL REPORT**

The following items were received and filed as presented.

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

Quarterly Budget Report

**ORANGE COUNTY QUALIFIED WATER EFFICIENT LANDSCAPER TRAINING PROGRAM**

The Board authorized a one-time payment of \$10,000 to become a Professional Certifying Organization through the Sonoma-Marín Saving Water Partnership, and authorized the General Manager to enter into a professional services agreement with Blue Watchdog Conservation, Inc. in an amount not to exceed \$40,000 for program coordination and classroom instruction.

**SOUTHERN CALIFORNIA WATER COALITION WATERFIX OUTREACH – PHASE 2**

The Board authorized a bridge funding contribution to the Southern California Water Coalition WaterFix Outreach-Phase 2 of \$10,000 to help cover costs over the next several months during fiscal year 2017-18, and asked staff to include an additional \$30,000 in funding towards future WaterFix outreach in the 2018-19 budget.

**ATTENDANCE AT THE NATIONAL WATER RESOURCES ASSOCIATION (NWRA) FEDERAL WATER ISSUES CONFERENCE, APRIL 9-11, 2018, WASHINGTON, DC**

The Board authorized attendance at the NWRA Federal Water Issues Conference to be held April 9-11, 2018 in Washington, DC.

**ASSOCIATION OF CALIFORNIA WATER AGENCIES (ACWA) – “NO DRINKING WATER TAX” EDUCATION AND OUTREACH CAMPAIGN**

The Board authorized a contribution of \$5,000 to ACWA’s statewide outreach campaign.

**GRANT TRACKING AND ACQUISITION SERVICES**

Upon MOTION by Director Finnegan, seconded by Director Thomas, and carried (5-1), the Board approved the following Consent Calendar item:

The Board authorized the General Manager to enter into a 3-year professional services contract with Soto Resources to provide grant tracking, writing (upon request) and acquisition. The award would be not to exceed \$20,000 in fiscal year 2017-2018, and not to exceed \$36,000 in fiscal year 2018-2019, and not to exceed \$36,000 in fiscal year 2019-2020; total authorization of this contract is \$92,000 over three years. Directors Dick, Finnegan, Yoo Schneider, Thomas, and Tamaribuchi voted in favor; Director Barbre voted no and Director Osborne was absent

**END CONSENT CALENDAR**



**ACTION CALENDAR****APPOINTMENT TO THE SANTIAGO AQUEDUCT COMMISSION**

Upon MOTION by Director Yoo Schneider, seconded by Director Finnegan, and carried (6-0), the Board adopted RESOLUTION NO. 2066 approving the appointment of Jeffery M. Thomas as Representative, and Karl Seckel as Alternate to the Santiago Aqueduct Commission, by the following roll call vote:

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

**AB 2283 (HOLDEN) – INCOME TAXES; TURF REMOVAL WATER CONSERVATION PROGRAM**

Upon MOTION by Director Dick, seconded by Director Finnegan, and carried (6-0), the Board adopted a support position on AB 2283 (Holden). Directors Barbre, Dick, Finnegan, Yoo Schneider, Tamaribuchi & Thomas voted in favor; Director Osborne was absent.

**ELECTION OF OC LAFCO SPECIAL DISTRICT MEMBER AND ALTERNATE**

President Barbre advised that the item dealing with the nominations, candidates, and voting in the election of OC LAFCO Special District Member and Alternate was before the Board for consideration. He encouraged any candidates to address the Board.

Director Doug Davert (East Orange County Water District) advised that he is seeking a seat on the OC LAFCO board/commission. He outlined his qualifications and asked the Board to both nominate him for this position and support his candidacy.

Director Jim Fisler (Mesa Water) stated that he is seeking re-election for the Alternate seat on the OC LAFCO board/commission. He also reviewed his qualifications and requested the Board's support in his candidacy.

Following discussion regarding the LAFCO process, etc., Director Dick noted he would support the committee recommendation.

Upon MOTION by Director Thomas, seconded by Director Dick, and carried (6-0), the Board nominated Doug Davert as OC LAFCO Special District Member, and Jim Fisler as OC LAFCO Special District Alternate, authorized President Barbre (or alternate Joan Finnegan) to cast the District's ballot in the election, and directed staff to submit the appropriate forms to OC LAFCO by the deadlines outlined. Directors Barbre, Dick, Finnegan, Yoo Schneider, Tamaribuchi & Thomas voted in favor; Director Osborne was absent.



**AUTHORIZE ATTENDANCE AT THE P3 WATER SUMMIT, SAN DIEGO, APRIL 3-4, 2018**

Upon MOTION by Director Thomas, seconded by Director Finnegan, and carried (6-0), the Board approved attendance at the P3 Water Summit to be held April 3-4, 2018 in San Diego. Directors Barbre, Dick, Finnegan, Yoo Schneider, Tamaribuchi & Thomas voted in favor; Director Osborne was absent

**EMPLOYEE SERVICE AWARDS**

President Barbre, along with General Manager Hunter and Assistant General Manager Karl Seckel, acknowledged, showed a brief presentation and presented flowers to retiring employee, Pat Meszaros.

**INFORMATION CALENDAR****GENERAL MANAGER'S REPORT, MARCH 2018**

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

General Manager Hunter highlighted the Elected Officials Forum to be held April 5, 2018 at 6:00 pm, and the Water Policy dinner scheduled for April 19, 2018.

In response to an inquiry by Director Barbre, Mr. Seckel advised that the internal policy has been changed so that in the future all agencies will be notified of an AMP shutdown (no matter where it is).

President Barbre then requested an update on the upcoming LAFCO Municipal Services Review at an upcoming Committee meeting.

Discussion was held regarding an OCCOG event held in Anaheim this month. It was recommended that OCCOG inform MWDOC's representative to OCCOG on any water related issues, and ask whether MWDOC or a MWDOC MET Director are available to speak.

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 Public Affairs & Legislation, and Executive Committee meetings, the Workshop Board meeting, the Utility Management Conference, the ACWA DC conference, the ACC-OC conference in Sacramento, a meeting with



Denah Hoard (OC Ethics Officer), the Women in Water event, the OCBC legislative conference in Sacramento, the Southern California News Group, and the Santa Margarita Water District Strategic Planning meeting.

Director Thomas noted his attendance at the MWDOC Planning & Operations, Administration & Finance, and the Public Affairs & Legislation, Committee meetings, the Board meeting, the OC Water Summit planning meeting, a meeting with representatives from Santa Margarita Water District and Karl Seckel, the Santiago Aqueduct Commission meeting, the Ethics Training, and the South Orange County Economic Coalition meeting.

Director Tamaribuchi stated that he attended all of the regularly scheduled MWDOC meetings (Planning & Operations, Administration & Finance, Public Affairs & Legislation, and Executive Committee meetings, along with the Workshop and Regular Board meetings), as well as the ACWA DC conference, the UCI Water Quality seminar, and a conference call with MET staff regarding the Delta restoration.

Director Finnegan advised that she attended the Planning & Operations, Administration & Finance, Public Affairs & Legislation, and Executive Committee meetings, as well as the Workshop and Regular Board meetings, the ISDOC Executive Committee meeting, and the Ethics Training. She highlighted the upcoming ISDOC quarterly luncheon and encouraged all to attend.

Director Dick reported on attending the following meetings: the Planning & Operations, Administration & Finance, Public Affairs & Legislation, and Executive Committee meetings, the Workshop Board meeting, a meeting with Garry Brown, a meeting with Sat Tamaribuchi, the Pre-MET Executive Committee meeting, the MET Executive Committee meeting, the WACO meeting, a MET Business outreach event, the MET Caucus, the MET Committee and Board meetings, and the WACO Planning Committee meeting.

Director Barbre reported on attending the following meetings in his capacity as MET Director: a meeting with Scott Maloni (Poseidon), the MWDOC MET Directors' strategy luncheon, the fourth Tuesday Committee day, a State Water Project inspection trip, the MWDOC MET Director caucus meeting, the MET Board and Committee meetings, and the MET Caucus (Inland Empire). He reported on attending the following meetings in his capacity as a MWDOC Director: the Planning & Operations, Administration & Finance, Public Affairs & Legislation, and Executive Committee meetings, the Workshop Board meeting, the ACWA DC conference, and two meetings of the Ad Hoc Committee regarding the Water Summit.

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

No new items were requested.

## **ADJOURNMENT**

There being no further business to come before the Board, President Barbre adjourned the meeting at 9:02 a.m.



Minutes

March 21, 2018

Respectfully submitted,

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Maribeth Goldsby, Secretary



MINUTES OF THE MEETING OF THE  
BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
Jointly with the  
**PLANNING & OPERATIONS COMMITTEE**  
March 5, 2018 – 8:30 am to 9:40 am  
MWDOC Conference Room 101

**P&O Committee:**

Director Wayne Osborne (absent)  
Director Sat Tamaribuchi  
Director Yoo Schneider

**Staff:**

Karl Seckel, Harvey De La Torre, Joe Berg  
Pat Meszaros, Matt Conway, Chris Lingad,  
Charles Busslinger, Kevin Hostert, Heather Baez,  
Francisco Soto, Melissa Baum Haley,  
Damon Micalizzi

**Also Present:**

Director Jeff Thomas  
Director Brett Barbre  
Director Larry Dick  
Director Joan Finnegan  
Linda Ackerman, MWDOC MET Director  
Don Froelich, Moulton Niguel Water District  
Jose Vergara, El Toro Water District

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Director Tamaribuchi called the meeting to order at 8:30 a.m. In the absence of Director Osborne, Director Dick sat on the Committee.

**PUBLIC COMMENTS**

No comments were received.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

No items were presented.

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

No items were distributed.

**ACTION ITEMS**

**SOUTHERN CALIFORNIA WATER COALITION WATERFIX OUTREACH –  
PHASE 2**

Mr. Charley Wilson, Executive Director of the Southern California Water Coalition (SCWC) gave a presentation on past and upcoming activities related to the Coalition's efforts promoting the California WaterFix. He also discussed funding for the second phase of outreach.



Mr. Wilson stated that SCWC researched, performed detailed polling and message groups, conducted interviews, and provided outreach and communication regarding the WaterFix. He stated that overall, it was a very aggressive media outreach. SCWC focused on what clean drinking water means to families. Most folks approved of the California WaterFix after they became aware of it. Mr. Wilson noted that the pump image cartoon, which represents modernizing and upgrading of the water systems, really resonated with people, regardless of the audience. When the “trades” and union groups got involved and asked how they could help, they were very influential in the LA area. As a result of SCWC’s outreach campaign, they had a reach of over a million people with engagements on social media of 3 million total impressions. After MET’s vote on the WaterFix in October, Mr. Wilson stated that the question was what will everyone else do. SCWC is in the process of seeking funding to get us to the next vote: whether it will be a one tunnel option or two, and will provide additional coverage through the April Board meeting.

Mr. Wilson stated that the request today is for \$10,000 “bridge” funding. SCWC’s total budget for bridge funding is \$100,000. Based on the final project, SCWC will decide if more funding is needed.

Upon MOTION by Director Barbre, seconded by Director Dick, and carried (3-0), the Committee recommended the Board authorize a bridge funding contribution to the Southern California Water Coalition WaterFix Outreach-Phase 2 of \$10,000 to help cover costs over the next several months during fiscal year 2017-18, and include an additional \$30,000 in funding towards future WaterFix outreach in the 2018-19 budget. Directors Yoo Schneider, Dick and Barbre all voted in favor.

### **ORANGE COUNTY QUALIFIED WATER EFFICIENT LANDSCAPER TRAINING PROGRAM**

Mr. Joe Berg stated that in 2016-17, staff convened a Project Advisory Committee (PAC) of member agencies to review existing landscape water use efficiency programs and evaluate new or missing program opportunities. The PAC identified maintenance contractor training as a missed opportunity. A single commercial landscape maintenance contractor manages dozens of properties containing hundreds to thousands of acres of urban landscapes.

Discussion ensued on whether or not we should charge for this certification; with Directors Dick and Tamaribuchi of the opinion that we should. Director Tamaribuchi noted that homeowner associations and companies could include in their contracts that you must have a certain number of QWEL certified employees.

Upon MOTION by Director Barbre, seconded by Director Dick, and carried (3-0), the Committee recommended authorizing a one-time payment of \$10,000 to become a Professional Certifying Organization through the Sonoma-Marín Saving Water Partnership, and the General Manager to enter into a professional services agreement with Blue Watchdog Conservation, Inc. in an amount not to exceed \$40,000 for program coordination and classroom instruction at the March 21, 2018 Board meeting. Directors Yoo Schneider, Dick and Barbre all voted in favor.

Director Barbre left the meeting at 9:20 am.



**INFORMATION ITEMS****UPDATE RE EMERGENCY PLANNING FOR SOUTH ORANGE COUNTY AGENCIES**

In order to keep the Committee apprised of current efforts, Mr. Seckel presented three slides, 13—16, that were revised from a previous PowerPoint presentation to South Coast Water District on OCWD/SOC Emergency Supplies. He stated that as part of our reliability study, a Phase II of the Emergency Services Program agreement with IRWD was included in the discussion. Also, Moulton Niguel Water District approached OCWD for consideration of a storage account in the Orange County groundwater basin. Mr. Seckel continues to advocate for the Emergency Services Program. At OCWD's February 14 committee meeting, OCWD staff and the Producers agreed not to go forward with the MNWD proposal but rather evaluate capacity of the basin; value of the basin; storage accounts for Producers before any outside agencies; and whether capacity exists for others and under what terms. The study should take about four months to complete.

Director Dick inquired how "a water storage account" could be advantageous for the City of Orange, for example. Mr. Seckel responded that this basin operates as a socialized basin – based on your demand, determines how much you pump out of the basin. The City of Orange may want to manage such a storage account differently than OCWD.

OCWD has requested that we work towards termination of the conjunctive use account with MET. They feel it's been fully utilized and they prefer early termination to free up storage for other types of programs. OCWD has also requested that they be able to convey local water in the EOCF#2. MWDOC has greater than a 50% ownership in that pipeline.

Mr. Seckel spent some time reviewing various demand scenarios of the South County agencies on Slide 15 and System Emergency Recovery Needs for SOC agencies under two separate scenarios on Slide 16.

MWDOC has issued an RFP to consultants to help evaluate the ability of the IRWD system via the existing emergency interconnection to provide emergency supplies to the SOC agencies. This effort will determine whether the system can be expanded or extended further out into the future in meeting the needs of SOC. The study is expected to take 6 months, at which time we'd bring the award to the P&O Committee for consideration. Workshops with the SOC agencies will continue as part of the study.

**STATUS REPORTS**

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

The 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 9:40 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**

March 14, 2018 – 8:30 a.m. to 9:40 a.m.

MWDOC Conference Room 101

**Committee Members:**

Director Jeff Thomas, Chair (8:35 am)

Director Joan Finnegan

Director Larry Dick

**Staff:**

Robert Hunter, Hilary Chumpitazi,

Karl Seckel, Katie Davanaugh,

Joe Berg, Harvey De La Torre,

Damon Micalizzi, Tiffany Baca

Ex Officio Member: Director Barbre

**Also Present:**

Director Sat Tamaribuchi

Director Megan Yoo Schneider (8:35 am)

Director Brett Barbre

MWDOC MET Director Linda Ackerman

Marwan Khalifa, Mesa Water

Neely Shahbakhti, El Toro Water District

Mark Monin, El Toro Water District

Dan Ferons, Santa Margarita Water

Jose Vergara, El Toro Water District

Doug Reinhart, Irvine Ranch Water District

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Director Dick called the meeting to order at 8:30 a.m. In the absence of Director Thomas, Director Barbre sat on the Committee.

**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 advised that a budget presentation (Item 6, 2<sup>nd</sup> Draft of the FY 2018-19 Budget) was distributed and posted to the District's website.

**PROPOSED BOARD CONSENT CALENDAR ITEMS**

**TREASURER'S REPORT**

- a. Revenue/Cash Receipt Report – February 2018
- b. Disbursement Approval Report for the month of March 2018
- c. Disbursement Ratification Report for the month of February 2018
- d. GM Approved Disbursement Report for the month of February 2018
- e. Water Use Efficiency Projects Cash Flow – February 28, 2018



- f. Consolidated Summary of Cash and Investment – January 2017
- g. OPEB Trust Fund monthly statement

Upon MOTION by Director Finnegan, seconded by Director Barbre and carried (3-0), the Committee recommended the Treasurer's Report for approval at the March 21, 2018 Board meeting. Directors Barbre, Finnegan and Dick all voted in favor.

### **FINANCIAL REPORT**

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

Upon MOTION by Director Finnegan, seconded by Director Barbre and carried (3-0), the Committee recommended the Financial Report for approval at the March 21, 2018 Board meeting. Directors Barbre, Finnegan and Dick all voted in favor.

### **ACTION ITEMS**

#### **GRANT TRACKING AND ACQUISITION SERVICES**

Upon MOTION by Director Finnegan, seconded by Director Dick and carried (3-0), the Committee recommended approval of a 3-year professional services contract with Soto Resources to provide grant tracking and acquisition services at the March 21, 2018 Board meeting. The award would not exceed \$20,000 in fiscal year 2017-2018, not to exceed \$36,000 in fiscal year 2018-2019, and not exceed \$36,000 in fiscal year 2019-2020. Directors Barbre, Finnegan and Dick all voted in favor.

#### **ATTENDANCE AT THE NATIONAL WATER RESOURCES ASSOCIATION (NWRA) FEDERAL WATER ISSUES CONFERENCE, APRIL 9-11, 2018, WASHINGTON, DC**

(8:35 Director Thomas arrived and chaired the Committee)

Upon MOTION by Director Dick, seconded by Director Thomas and carried (3-0), the Committee recommended authorizing attendance at the NWRA Federal Water Issues Conference to be held April 9-11, 2018 in Washington, DC at the March 21, 2018 Board meeting. Directors Thomas, Finnegan and Dick all voted in favor.

#### **ASSOCIATION OF CALIFORNIA WATER AGENCIS (ACWA) – “NO DRINKING WATER TAX” EDUCATION AND OUTREACH CAMPAIGN**

Upon MOTION by Director Dick, seconded by Director Thomas and carried (3-0), the Committee recommended authorizing \$5,000 (or other amount determined by the Board) to contribute to ACWA's statewide outreach campaign re: “No Drinking Water Tax” at the March 21, 2018 Board meeting. Directors Thomas, Finnegan and Dick all voted in favor.

### **DISCUSSION ITEM**

#### **SECOND DRAFT OF THE 2018-19 BUDGET**



Mr. Hunter noted that this will be the last Committee review of the budget prior to the April Elected Official's meeting and that any changes should be acknowledged today so that the changes can be incorporated into the budget, as it is anticipated to be approved at the April Board meeting.

Mr. Hunter provided a presentation on the 2<sup>nd</sup> draft of the FY 2018-19 budget, reviewing the budget schedule, categories in the unfunded reserves balances, core expenses by line item, changes between the 1<sup>st</sup> and 2<sup>nd</sup> draft, MET key budget assumptions as well as proposed MET rates and charges.

Discussion was held on whether it would be possible to set the OPEB reserve account as a restricted account so that funds continue to be allocated towards the CalPERS unfunded liability. It was noted that actuarial services will be conducted later in 2018 to review the current liability and that changes could be looked at after that report is complete.

Considerable discussion was held on the value of educational programs, from elementary school level up to college level career events. Additionally, extensive discussion was held on the following items and whether they should be included (added) to the 2018-19 2<sup>nd</sup> draft budget, as noted:

Do not include:

- (1) Middle School Water Education Program (\$35-45k)
- (2) One-Day College Education/Career Event (\$5k)
- (3) Participation in UCI Water Research Center (\$30-50k)

Include:

- (4) Southern California Water Coalition WaterFix Outreach Program (\$30k)
- (5) District Participation Costs (Exhibit D) – add AMWA
- (6) Registration & Travel Costs (Exhibits E and F) (Add \$5,000)

Director Tamaribuchi requested that the AMWA membership, previously removed from the 2018-19 budget at the February Administrative & Finance meeting, be included in the budget, and Director Thomas concurred. Discussion ensued on the value of AMWA membership with Directors Dick and Thomas expressing support; Director Finnegan abstained. It was noted that additional discussion could be held at the March Board meeting regarding AMWA membership, if necessary.

### **COMPENSATION AND BENEFITS BENCHMARK STUDY**

Mr. Hunter reported that the study is not yet complete and is anticipated to be completed prior to completion of the budget process. Mr. Hunter and Mrs. Harris will review the preliminary report which is expected to be completed in the next week or so.



**INFORMATION ITEMS**

**DEPARTMENT ACTIVITIES REPORTS**

- a. Administration
- b. Finance and Information Technology

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

The informational reports were received and filed.

**OTHER ITEMS**

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

No information was presented.

**ADJOURNMENT**

There being no further business to be brought before the Committee, the meeting adjourned at 9:40 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**

March 19, 2018 - 8:30 a.m. to 10:15 a.m.

MWDOC Conference Room 101

**Committee:**

Director Dick, Chairman  
Director Jeff Thomas  
Director Sat Tamaribuchi

**Staff:**

Harvey De La Torre, Heather Baez,  
Katie Davanaugh, Damon Micalizzi,  
Melissa Baum-Haley, Bryce Roberto,  
Kevin Hostert, Sarah Wilson,  
Bryce Roberto, Tiffany Baca,  
Charles Busslinger, Traci Muldoon

**Also Present:**

Director Brett Barbre  
Director Joan Finnegan  
Director Megan Yoo Schneider (8:45)  
Linda Ackerman, MWDOC MET Director  
Dick Ackerman, Ackerman Consulting  
Syrus Devers, BBK  
John Lewis, Lewis Consulting  
Jim Barker (via teleconference)  
Stacy Taylor, Mesa Water  
Paul Jones, Eastern Municipal Water District

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

**PUBLIC PARTICIPATION**

No items were presented.

**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 presented.

**PRESENTATION**

**PRESENTATION BY PAUL JONES REGARDING EASTERN MUNICIPAL WATER  
DISTRICT'S LEGISLATION**

Paul Jones provided a presentation on AB 2050 (Caballero), Small System Water Authority Formation, which was co-sponsored by Eastern Municipal Water District and the California Municipal Utilities Association. Over 300 systems within the State of California serve



contaminated water or are unable to provide reliable water service due to unreliable infrastructure/operations. The bill proposes to merge multiple, non-compliant water systems (that are close in proximity) into larger and more robust systems that can operate together in a more cost effective manner. The newly formed special district would have better financing opportunities due to a larger customer base, as well as greater access to grants, municipal bonds or other funding mechanisms which are historically used by larger public agencies. The newly created special districts would also be held to public agency accountability standards, which would ensure funds are used appropriately to develop necessary infrastructure to treat contamination issues so that safe and affordable water is delivered to customers.

Mr. Jones urged the District to support AB 2050.

## **DISCUSSION ITEMS**

### **LEGISLATIVE ACTIVITIES**

#### **a. Federal Legislative Report (Barker)**

Mr. James Barker joined the meeting via teleconference and reported the Omnibus bill is anticipated to be released today (3/19/18). Gun control, DACA, “dreamers” and other issues, are items of controversy that have been included in discussions surrounding the bill. Mr. Barker reviewed HR 3387 and Director Barbre noted the successful MWDOC legislative luncheon recently held in Washington DC.

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

Mr. Syrus Devers reviewed SB 623 (Monning) as listed in his written staff report, noting that a trailer bill is anticipated to be released which will raise interest and more controversy closer to August.

Mr. Devers briefly reviewed SB 2050, SB 998 and SB 606, as listed in the staff report. He then noted that AB 1876 (Frazier) was recently modified and MWDOC has already adopted an oppose position on that bill.

Mr. Devers recommended a support position on AB 2283 which is listed later on the MWDOC agenda.

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

Mr. Lewis reviewed the March 14<sup>th</sup> LAFCO meeting which was outlined in the staff report and noted that Commissioner Withers will not be seeking re-election. Mr. Lewis also reviewed the June 5, 2018 state-wide primary election update, reviewing candidates and open seats.

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

Mr. Ackerman reported on new high tech snow measurement devices that are on the forefront of technology to aid with more accurately measuring snow pack, and while



expensive, are highly accurate. The margin of error on the new equipment is approximately 3% which is markedly more reliable than the current methods used today.

**e. MWDOC Legislative Matrix**

**f. Metropolitan Legislative Matrix**

The matrices were received and filed without discussion.

**SOUTHERN CALIFORNIA WATER ISSUES CONGRESSIONAL DELEGATION  
BRIEFING LUNCHEON**

The item was received and filed without discussion.

**ACTION ITEMS**

**AB 2283 (HOLDEN) – INCOME TAXES: TURF REMOVAL WATER  
CONSERVATION PROGRAM**

Upon MOTION by Director Tamaribuchi, seconded by Director Thomas, and carried (3-0), the Committee recommended the Board adopt a support position on AB 2283 (Holden) at the March 21, 2018 Board meeting. Directors Dick, Tamaribuchi and Thomas voted in favor.

**ELECTION OF OC LAFCO SPECIAL DISTRICT MEMBER AND ALTERNATE**

Upon MOTION by Director Tamaribuchi, seconded by Director Thomas, and carried (3-0), the Committee recommended the Board authorize, at the March 21, 2018 Board meeting, President Barbre or alternate (Director Finnegan) to vote in the LAFCO appointment process. Directors Dick, Tamaribuchi and Thomas voted in favor.

**AUTHORIZE ATTENDANCE AT THE P3 WATER SUMMIT, SAN DIEGO,  
APRIL 3-4, 2018**

Upon MOTION by Director Thomas, seconded by Director Tamaribuchi, and carried (3-0), the Committee recommended that the at the March 21, 2018 Board meeting, the Board authorize attendance at the P3 Water Summit to be held on April 3-4, 2018 in San Diego. Directors Dick, Tamaribuchi and Thomas voted in favor. It was noted that Director Yoo Schneider plans on attending the event.

**INFORMATION ITEMS**

**WEBSITE AND SOCIAL MEDIA ANALYTICS UPDATE**

Director Yoo Schneider thanked staff for their recent social media efforts and requested than staff and/or consultant provide a full staff report at the next PAL meeting. The Committee was in concurrence.



**WYLAND MAYOR'S CHALLENGE POCKET PARK- PROJECT UPDATE**

The staff report was received and filed.

**APRIL 19, 2018 WATER POLICY DINNER**

The staff report was received and filed.

**UPDATE ON 2018 OC WATER SUMMIT (JUNE 1, 2018)**

The staff report was received and filed.

**EDUCATION PROGRAM UPDATE**

Director Dick requested that the winners of the video contest be uploaded to the District's website with Ms. Baca responding that staff would do so.

**PUBLIC AFFAIRS ACTIVITIES REPORT**

The staff report was received and filed.

**OTHER ITEMS**

**REVIEW ISSUES RELATED TO LEGISLATION, OUTREACH, PUBLIC  
INFORMATION ISSUES, AND MET**

Newest staff Public Affairs Assistant, Traci Muldoon, was introduced.

**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  
**EXECUTIVE COMMITTEE**  
March 22, 2018, 8:30 a.m. to 9:36 a.m.  
Conference Room 102

**Committee:**

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

**Staff:**

R. Hunter, M. Goldsby

**Also Present:**

Director Tamaribuchi  
Director Dick

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At 8:30 a.m., President Barbre called the meeting to order.

**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. Planning & Operations Committee meeting

No new items were added to the agenda.

- b. Workshop Board meeting

No new items were added to the agenda.

- c. Elected Officials Forum

President Barbre suggested the Board members present the topics (rather than staff); the Committee concurred. Discussion ensued regarding the potential topics and it was



determined that the following topics be presented: (1) California WaterFix (L. Dick); (2) MET Budget (B. Barbre); (3) MWDOC Budget (J. Thomas); (4) State Legislative Issues (S. Tamaribuchi); and (4) MWDOC School Program (M. Yoo Schneider). It was noted that staff would work with each of the Directors on their presentation material.

d. Administration & Finance Committee

No new information was added to the agenda.

e. Public Affairs & Legislation Committee

The Committee suggested the Website and Social Media Analytics update be moved from “discussion” to “information” and that a more in depth presentation/discussion be held in May.

Discussion ensued regarding LAFCO and its role and purpose; the Committee suggested further discussion on LAFCO be held at a future date.

f. Executive Committee

No new items were added to the agenda.

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

Mr. Hunter highlighted the upcoming Elected Officials Forum and Water Policy dinner. Discussion ensued regarding a meeting later in the month with the Ad Hoc Committee on Desalination.

## **MEMBER AGENCY RELATIONS**

Discussion ensued regarding Orange County Water District (OCWD)/MET water purchases, and MWDOC’s water rates (and how they compare to other MET agencies). Staff was asked to prepare an outline of on how to quantify the comparative rates of MET member agencies for the Board.

## **GENERAL MANAGER’S REPORTS**

No new information was presented.

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

## **ADJOURNMENT**

There being no further business to be brought before the Committee, the meeting adjourned at 9:50 a.m.



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

**WATER REVENUES**

<b>Date</b>	<b>From</b>	<b>Description</b>	<b>Amount</b>
03/02/18	City of La Palma	January 2018 Water deliveries	4,038.60
03/02/18	City of Huntington Beach	January 2018 Water deliveries	312,782.90
03/02/18	City of Brea	January 2018 Water deliveries	90,201.61
03/05/18	City of Fountain Valley	January 2018 Water deliveries	224,647.07
03/05/18	City of La Habra	January 2018 Water deliveries	2,661.82
03/05/18	City of Garden Grove	January 2018 Water deliveries	299,567.55
03/07/18	Serrano Water District	January 2018 Water deliveries	11,165.67
03/07/18	Trabuco Canyon Water District	January 2018 Water deliveries	137,975.53
03/09/18	South Coast Water District	January 2018 Water deliveries	390,897.68
03/09/18	City of Buena Park	January 2018 Water deliveries	152,174.35
03/09/18	City of San Clemente	January 2018 Water deliveries	509,289.47
03/12/18	Santa Margarita Water District	January 2018 Water deliveries	1,516,842.03
03/12/18	El Toro Water District	January 2018 Water deliveries	363,420.64
03/13/18	Mesa Water	January 2018 Water deliveries	114,817.56
03/14/18	Laguna Beach County Water District	January 2018 Water deliveries	91,657.39
03/14/18	City of San Juan Capistrano	January 2018 Water deliveries	310,622.35
03/15/18	East Orange County Water District	January 2018 Water deliveries	248,987.83
03/15/18	Orange County Water District	January 2018 Water deliveries	34,413.93
03/15/18	Irvine Ranch Water District	January 2018 Water deliveries	635,307.61
03/15/18	Moulton Niguel Water District	January 2018 Water deliveries	1,846,765.70
03/15/18	Yorba Linda Water District	January 2018 Water deliveries	621,089.04
03/15/18	Golden State Water Company	January 2018 Water deliveries	138,901.29
03/23/18	City of Brea	February 2018 Water deliveries	89,288.11
03/26/18	City of Newport Beach	February 2018 Water deliveries	27,783.02
03/29/18	City of La Habra	February 2018 Water deliveries	2,661.82
03/29/18	Serrano Water District	February 2018 Water deliveries	11,165.67
03/30/18	City of Huntington Beach	February 2018 Water deliveries	169,507.00

TOTAL REVENUES **\$ 8,358,633.24**



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

**MISCELLANEOUS REVENUES**

<b>Date</b>	<b>From</b>	<b>Description</b>	<b>Amount</b>
03/15/18	Serrano WD	4/19/18 Water Policy dinner	400.00
03/19/18	Rutan & Tucker, LLP	4/19/18 Water Policy dinner	80.00
03/30/18	Paypal	4/19/18 Water Policy dinner	3,684.70
03/12/18	Rancho Water	6/1/18 OC Water Summit	390.00
03/30/18	Paypal	6/1/18 OC Water Summit	2,687.57
03/30/18	Paypal	ISDOC Registrations	446.75
03/02/18	Keith Lyon	March 2018 Retiree Health insurance	278.59
03/02/18	Stan Sprague	March 2018 Retiree Health insurance	243.00
03/29/18	Stan Sprague	April 2018 Retiree Health insurance	243.00
03/30/18	Keith Lyon	April 2018 Retiree Health insurance	278.59
03/02/18	2 Checks	Movie tickets	119.00
03/29/18	Pat Meszaros	Movie tickets	40.50
03/05/18	VOYA	Refund for excess pension contribution	64.00
03/12/18	El Toro Water District	Overpayment of February 2018 Water deliveries	200.00
03/07/18	Trabuco Canyon Water District	December 2017 Smartimer rebate program	39.53
03/09/18	Mesa Water	January 2018 Smartimer rebate program	139.00
03/19/18	Trabuco Canyon Water District	January 2018 Smartimer rebate program	63.99
03/20/18	Irvine Ranch Water District	January 2018 Smartimer rebate program	809.71
03/23/18	City of Buena Park	January 2018 Smartimer rebate program	19.51
03/09/18	City of Buena Park	December 2017 Turf Removal rebate program	562.65
03/09/18	City of Orange	January 2018 Turf Removal rebate program	111.00
03/15/18	City of Westminster	January 2018 Turf Removal rebate program	222.00
03/19/18	City of Newport Beach	January 2018 Turf Removal rebate program	111.00
03/19/18	El Toro Water District	January 2018 Turf Removal rebate program	383.00
03/20/18	Irvine Ranch Water District	January 2018 Turf Removal rebate program	10,701.31
03/29/18	City of La Habra	January 2018 Turf Removal rebate program	111.00
03/19/18	Moulton Niguel Water District	January 2018 Smartimer and Turf Removal rebate program	13,299.15
03/23/18	City of San Clemente	January 2018 Smartimer and Turf Removal rebate program	2,760.00
03/19/18	Trabuco Canyon Water District	Dec 17-Jan 18 So Cal Watersmart rebate program	400.00
03/05/18	Irvine Ranch Water District	January 2018 So Cal Watersmart rebate program	27,139.61
03/15/18	Laguna Beach County Water District	January 2018 So Cal Watersmart rebate program	105.00
03/23/18	City of San Clemente	January 2018 So Cal Watersmart rebate program	875.00
03/05/18	Irvine Ranch Water District	January 2018 Water Savings Incentive program	1,800.00
03/21/18	Department of Water Resources	Jul-Sep 2017 Comprehensive Landscape WUE	6,020.37
03/22/18	Orange County Water District	Sep - Oct 2017 SAWPA Drought Response program	37,158.30
03/23/18	Department of Water Resources	Jul-Sep 2017 Strategic Turf Removal and Design Assistance	25,886.18
03/02/18	City of Fullerton	Jul-Dec 2017 School Billing	3,680.27
03/12/18	City of Santa Ana	Jul-Dec 2017 School Billing	24,121.38
03/29/18	City of Garden Grove	Addition to Choice School Program FY 17-18	930.93
03/05/18	El Toro Water District	Water Loss Control technical assistance - WSO, Inc	11,932.00
03/09/18	City of Fountain Valley	Water Loss Control technical assistance - WSO, Inc	33,732.00
03/30/18	Yorba Linda Water District	Water Loss Control technical assistance - WSO, Inc	11,932.00

TOTAL MISCELLANEOUS REVENUES **\$ 224,201.59**

**TOTAL REVENUES \$ 8,582,834.83**



Robert J. Hunter, General Manager



Hilary Chumpitazi, Treasurer



**Municipal Water District of Orange County  
Disbursement Approval Report  
For the month of April 2018**

<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
<b>Core Expenditures:</b>		
	<b>ALTA FoodCraft</b>	
51805741	3/19/18 Coffee & tea supplies	323.04
	*** Total ***	323.04
	<b>Best Best and Krieger LLP</b>	
55401-FEB18	February 2018 Legal services	9,889.23
816130	February 2018 State legislative advocacy services	7,785.98
	*** Total ***	17,675.21
	<b>California Water Efficiency Partnership</b>	
MD-2018-168	2018 Annual membership	11,365.84
	*** Total ***	11,365.84
	<b>CDM Smith</b>	
90042401	2/1/18-3/10/18 Engineering services for O.C. Water Reliability Investigation	2,612.50
	*** Total ***	2,612.50
	<b>Hunter T. Cook</b>	
FEB-APR2018	February-April 2018 Retiree medical premium	1,505.52
	*** Total ***	1,505.52
	<b>CSU Fullerton ASC</b>	
AR167717	FY 17/18 3rd Quarter Center for Demographic Research support	10,950.64
	*** Total ***	10,950.64
	<b>El Toro Water District</b>	
3131	2018 WEROC S. EOC Site annual lease	1,000.00
	*** Total ***	1,000.00
	<b>Finley &amp; Cook PLLC</b>	
SI0026300	6/5/18-6/4/19 Jet Reports annual maintenance & enhancements	1,397.00
SI0026289	5/22/18-9/4/19 Serenic annual maintenance & enhancement for Navision software	22,014.10
	*** Total ***	23,411.10
	<b>Fry's Electronics</b>	
22359832	3/23/17 Computer components	114.15
22372703	4/4/18 Computer supplies	43.48
	*** Total ***	157.63
	<b>HashtagPinpoint Corporation</b>	
1145	March 2018 Social media consultation and services	9,500.00
	*** Total ***	9,500.00



**Municipal Water District of Orange County  
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<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b><i>IDS Group</i></b>	
17S020.03-2	11/24/17-3/14/18 Structural engineering services for MWDOC building	4,831.49
	*** Total ***	4,831.49
	<b><i>Independent Special Dist. of OC</i></b>	
032918	3/29/18 Meeting registration for Directors Dick and Finnegan	34.00
032918PAYPAL	February-March 2018 PayPal receipts for 3/29/18 meeting	446.75
	*** Total ***	480.75
	<b><i>Inland Empire Utilities Agency</i></b>	
1800003657	25% Share of 2/28/18 DC Briefing luncheon costs	742.50
	*** Total ***	742.50
	<b><i>James C. Barker, P.C.</i></b>	
105-0318	March 2018 Federal legislative advocacy services	8,000.00
	*** Total ***	8,000.00
	<b><i>Jill Promotions</i></b>	
10181	2 Polo shirts with MWDOC logo (Reimbursed by Director Dick)	78.75
10188	44 Name badges for Directors and Staff	484.34
	*** Total ***	563.09
	<b><i>Lawnscape Systems, Inc.</i></b>	
393746	3/24/18 Gardening service for atrium	295.00
	*** Total ***	295.00
	<b><i>Phil Letrong</i></b>	
JAN-MAR2018	January-March 2018 Retiree medical premium	402.00
	*** Total ***	402.00
	<b><i>Lewis Consulting Group, LLC</i></b>	
2018-120	March 2018 Consulting services	4,312.50
	*** Total ***	4,312.50
	<b><i>Keith Lyon</i></b>	
JAN-MAR2018	January-March 2018 Retiree medical premium	402.00
	*** Total ***	402.00
	<b><i>Edward G. Means III</i></b>	
MWDOC-1057	March 2018 MET issues and guidance to Engineering staff	2,136.99
	*** Total ***	2,136.99
	<b><i>Norco Delivery Services</i></b>	
713267	3/30/18 Delivery charges for Board packets	169.36
	*** Total ***	169.36



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<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b>Office Solutions</b>	
I-01329961	3/7/18 Office supplies	139.05
I-01330138	3/7/18 Office supplies	41.03
I-01330867	Sit/stand monitor & keyboard set-up for M. Conway	593.66
I-01335265	3/15/18 Office supplies	379.05
I-01335540	3/16/18 Office supplies	156.34
I-01340663	1,500 #10 Regular envelopes	449.15
	*** Total ***	1,758.28
	<b>Orange County Fast Print, Inc.</b>	
56015	Business cards for T. Muldoon	58.88
	*** Total ***	58.88
	<b>Orange County Water District</b>	
18740	February 2018 50% share of WACO expense	217.50
18743	February 2018 Postage, shared office & maintenance expense	9,275.43
18801	March 2018 50% share of WACO expense	217.50
	*** Total ***	9,710.43
	<b>Patricia Kennedy Inc.</b>	
21769	April 2018 Plant maintenance	214.00
	*** Total ***	214.00
	<b>Petty Cash</b>	
MAR2018	March 2018 Petty Cash reimbursement	265.39
	*** Total ***	265.39
	<b>Judy Pfister</b>	
JAN-MAR2018	January-March 2018 Retiree medical premium	354.00
	*** Total ***	354.00
	<b>Ralph Andersen &amp; Associates</b>	
INV-01105	December 2017 Services for Classification and Compensation study	6,000.00
INV-01137	January 2018 Services for Classification and Compensation study	9,500.00
INV-01180	February 2018 Services for Classification and Compensation study	7,500.00
	*** Total ***	23,000.00
	<b>Staples Advantage</b>	
8049044307	3/10/18 Office supplies	83.39
	*** Total ***	83.39
	<b>Top Hat Productions</b>	
93770	2/22/18 Lunch for Managers' meeting	617.41
93832	3/16/18 Food for Women in Water breakfast	591.28
	*** Total ***	1,208.69



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<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
	<b><i>U. S. HealthWorks Medical Group</i></b>	
3282492-CA	Pre-employment exam	187.00
	*** Total ***	187.00
	<b><i>Union Bank, N.A.</i></b>	
1084720	December 2017-February 2018 Custodial Bank fees	625.00
	*** Total ***	625.00
	<b><i>Water Systems Optimization, Inc.</i></b>	
1274	February 2018 Water Loss Control program	2,214.80
1287	March 2018 Water Loss Control program	7,394.77
	*** Total ***	9,609.57
	<b><i>Pauline D. Wennerstrom</i></b>	
APR-JUN2018	April-June 2018 Retiree medical premium	339.00
	*** Total ***	339.00
	<b><i>Western Regional IPMA</i></b>	
171835	Job posting for Executive Assistant position	175.00
	*** Total ***	175.00
	<b><i>Yorba Linda Water District</i></b>	
031518	3/15/18 Strategic and Tactical Communication training	50.00
	*** Total ***	50.00
	<b><i>Total Core Expenditures</i></b>	<hr/> 148,475.79
<b><i>Choice Expenditures:</i></b>		
	<b><i>Office Solutions</i></b>	
I-01345075	20 Binders for Water Use Efficiency department	282.75
	*** Total ***	282.75
	<b><i>Orange County Water District</i></b>	
18743	February 2018 Postage for Water Use Efficiency rebate programs	111.28
	*** Total ***	111.28
	<b><i>Top Hat Productions</i></b>	
93823	3/13/18 Lunch for Water Loss Control Workgroup meeting	504.54
	*** Total ***	504.54
	<b><i>Total Choice Expenditures</i></b>	<hr/> 898.57



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<i>Invoice#</i>	<i>Vendor / Description</i>	<i>Amount to Pay</i>
<b>Other Funds Expenditures:</b>		
	<b><i>EcoTech Services, Inc.</i></b>	
1124	2/26/18-3/25/18 One-on-One design assistance for Landscape Design program	5,400.00
1125	2/26/18-3/25/18 Backyard area measurements for Turf Program	75.00
	*** Total ***	5,475.00
	<b><i>The Martinet Group, LLC</i></b>	
2018-03-01	3/7/18 Disaster Finance consulting	787.50
	*** Total ***	787.50
	<b><i>Mega Maids Cleaning Service</i></b>	
9348	February 2018 WEROC S. EOC cleaning services	95.00
	*** Total ***	95.00
	<b><i>Michael Baker International</i></b>	
1007037	1/29/18-2/25/18 Orange County Regional Water & Wastewater Multijurisdictional Hazard Mitigation Plan update	5,820.00
	*** Total ***	5,820.00
	<b><i>Office Solutions</i></b>	
I-01339496	3/22/18 Office supplies for WEROC	81.33
	*** Total ***	81.33
	<b><i>Petty Cash</i></b>	
MAR2018	March 2018 Petty Cash reimbursement	17.00
	*** Total ***	17.00
	<b><i>Water Systems Optimization, Inc.</i></b>	
1274	February 2018 Water Loss Control program	22,744.04
1287	March 2018 Water Loss Control program	9,715.00
	*** Total ***	32,459.04
	<b><i>Total Other Funds Expenditures</i></b>	<hr/> 44,734.87
	<b><i>Total Expenditures</i></b>	<hr/> <hr/> 194,109.23



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<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>Core Disbursements:</b>				
<b>137754</b>	<b>3/7/18</b>	<b>SPECTB</b>	<b>Spectrum Business</b>	
		0375210022018	March 2018 Telephone and internet expense	1,098.15
			***Total ***	1,098.15
<b>137756</b>	<b>3/7/18</b>	<b>VERIZO</b>	<b>Verizon Wireless</b>	
		9802275023	February 2018 4G Mobile broadband unlimited service	114.03
			***Total ***	114.03
<b>137768</b>	<b>3/15/18</b>	<b>HOMED1</b>	<b>Home Depot Credit Services</b>	
		7785-FEB2018	6 Lights for atrium	258.41
			***Total ***	258.41
<b>137769</b>	<b>3/15/18</b>	<b>IRONMO</b>	<b>Iron Mountain</b>	
		PWR4699	March 2018 Archived document storage fees	195.29
			***Total ***	195.29
<b>137770</b>	<b>3/15/18</b>	<b>SNOWM</b>	<b>Mary Snow</b>	
		022318	Storage box for patio furniture cushions	163.10
			***Total ***	163.10
<b>137778</b>	<b>3/15/18</b>	<b>SPECTB</b>	<b>Spectrum Business</b>	
		0343564030118	March 2018 Telephone expense for 3 analog fax lines	107.20
			***Total ***	107.20
<b>137779</b>	<b>3/15/18</b>	<b>STAPLC</b>	<b>Staples Credit Plan</b>	
		4362-MAR18	2/22/18 Office supplies	62.45
			***Total ***	62.45
<b>137780</b>	<b>3/15/18</b>	<b>WAITER</b>	<b>Rachel Waite</b>	
		022818	February 2018 Business expense	17.50
			***Total ***	17.50
<b>ACH003073</b>	<b>3/15/18</b>	<b>BARBRE</b>	<b>Brett Barbre</b>	
		022618	February 2018 Business expense	204.92
			***Total ***	204.92
<b>ACH003074</b>	<b>3/15/18</b>	<b>BERGJO</b>	<b>Joseph Berg</b>	
		022818	February 2018 Business expense	510.72
			***Total ***	510.72
		<b>BUSSLI</b>	<b>Charles Busslinger</b>	
<b>ACH003077</b>	<b>3/15/18</b>	013118	January 2018 Business expense	59.78
<b>ACH003078</b>	<b>3/15/18</b>	022818	January-February 2018 Business expense	876.66
			***Total ***	936.44



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<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>ACH003079</b>	<b>3/15/18</b>	<b>CHUMPI</b> 022818	<b>Hilary Chumpitazi</b> February 2018 Business expense ***Total ***	54.24 54.24
<b>ACH003080</b>	<b>3/15/18</b>	<b>CONWAY</b> 022718	<b>Matthew Conway</b> February 2018 Business expense ***Total ***	28.56 28.56
<b>ACH003081</b>	<b>3/15/18</b>	<b>DICKEX</b> 022818	<b>Larry Dick</b> February 2018 Business expense ***Total ***	161.35 161.35
<b>ACH003085</b>	<b>3/15/18</b>	<b>FINNEG</b> 022818	<b>Joan Finnegan</b> February 2018 Business expense ***Total ***	120.67 120.67
<b>ACH003086</b>	<b>3/15/18</b>	<b>HARRIS</b> 022818	<b>Cathleen M. Harris</b> February 2018 Business expense ***Total ***	125.38 125.38
<b>ACH003090</b>	<b>3/15/18</b>	<b>RICOHMA</b> 5052632492	<b>Ricoh USA, Inc.</b> December 2017-February 2018 Reproduction costs ***Total ***	1,311.08 1,311.08
<b>ACH003105</b>	<b>3/15/18</b>	<b>SECKEL</b> 022818	<b>Karl Seckel</b> January-February 2018 Business expense ***Total ***	128.53 128.53
<b>ACH003106</b>	<b>3/15/18</b>	<b>TAMARI</b> 022818	<b>Satoru Tamaribuchi</b> February 2018 Business expense ***Total ***	274.80 274.80
<b>ACH003108</b>	<b>3/15/18</b>	<b>THOMAS</b> 022818	<b>Jeffery Thomas</b> February 2018 Business expense ***Total ***	143.88 143.88
<b>EFT-180326</b>	<b>3/26/18</b>	<b>WAGEWO</b> INV552797	<b>Wageworks</b> February 2018 Cafeteria plan administration ***Total ***	185.25 185.25
<b>137825</b>	<b>3/30/18</b>	<b>USBANK</b> 4140/5443-FEB18	<b>U.S. Bank</b> Cal Card charges 1/23/18-2/22/18 ***Total *** (See attached sheet for details)	25,233.89 25,233.89
<b>ACH003109</b>	<b>3/30/18</b>	<b>ACKEEX</b> 022818	<b>Linda Ackerman</b> February 2018 Business expense ***Total ***	76.30 76.30



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<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>ACH003110</b>	<b>3/30/18</b>	<b>BAUMHA 013018</b>	<b>Melissa Baum-Haley</b> January 2018 Business expense	45.66
			***Total ***	45.66
<b>ACH003111</b>	<b>3/30/18</b>	<b>LINGAD 030818</b>	<b>Christopher S. Lingad</b> February-March 2018 Business expense	103.02
			***Total ***	103.02
<b>ACH003112</b>	<b>3/30/18</b>	<b>DELATO 031618</b>	<b>Harvey De La Torre</b> March 2018 Business expense	69.93
			***Total ***	69.93
<b>ACH003118</b>	<b>3/30/18</b>	<b>ROBERT 022818</b>	<b>Bryce Roberto</b> February 2018 Business expense	40.32
			***Total ***	40.32
<b>Total Core Disbursements</b>				<b>31,771.07</b>

**Choice Disbursements:**

<b>137825</b>	<b>3/30/18</b>	<b>USBANK 4140-FEB18</b>	<b>U.S. Bank</b> 1/22/18-2/22/18 Cal Card charges	207.49
			***Total ***	207.49
			(See attached sheet for details)	
<b>Total Choice Disbursements</b>				<b>207.49</b>

**Other Funds Disbursements:**

<b>137755</b>	<b>3/7/18</b>	<b>DRIPPR S2D1-R-SM-21083-13079</b>	<b>Spray to Drip Program</b> M. Finlayson (Re-issue)	350.00
			***Total ***	350.00
<b>137756</b>	<b>3/7/18</b>	<b>VERIZO 9802275023</b>	<b>Verizon Wireless</b> February 2018 4G Mobile broadband unlimited service	55.51
			***Total ***	55.51
<b>137757</b>	<b>3/15/18</b>	<b>NEWPOR 9442</b>	<b>City of Newport Beach</b> January 2018 Credit for "In-Lieu" water deliveries	344,360.08
			***Total ***	344,360.08
<b>137758</b>	<b>3/15/18</b>	<b>ORANGE 9444</b>	<b>City of Orange</b> January 2018 Credit for "In-Lieu" water deliveries	95,903.12
			***Total ***	95,903.12



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<b>Check #</b>	<b>Date</b>	<b>Vendor # Invoice/CM #</b>	<b>Name / Description</b>	<b>Net Amount</b>
<b>137759</b>	<b>3/15/18</b>	<b>SEALBE 9447</b>	<b>City of Seal Beach</b> January 2018 Credit for "In-Lieu"" water deliveries ***Total ***	128,227.03 128,227.03
<b>137760</b>	<b>3/15/18</b>	<b>ATTCALN 000010987139</b>	<b>AT&amp;T</b> February 2018 WEROC N. EOC telephone expense ***Total ***	104.23 104.23
<b>137761</b>	<b>3/15/18</b>	<b>ATTEOC 0532-FEB18</b>	<b>AT&amp;T</b> February 2018 WEROC N. EOC dedicated phone line ***Total ***	69.74 69.74
<b>137762</b>	<b>3/15/18</b>	<b>ATTUVEOC 8599-MAR18</b>	<b>AT&amp;T</b> March 2018 WEROC N. EOC U-verse internet service ***Total ***	60.00 60.00
<b>137776</b>	<b>3/15/18</b>	<b>SCHUNK 022818</b>	<b>Janine Schunk</b> February 2018 Business expense ***Total ***	40.88 40.88
<b>ACH003074</b>	<b>3/15/18</b>	<b>BERGJO 022818</b>	<b>Joseph Berg</b> February 2018 Business expense ***Total ***	4.50 4.50
<b>ACH003087</b>	<b>3/15/18</b>	<b>HUBBAR 013118</b>	<b>Kelly Hubbard</b> January 2018 Business expense	119.37
<b>ACH003088</b>	<b>3/15/18</b>	<b>022818</b>	February 2018 Business expense ***Total ***	155.18 274.55
<b>137781</b>	<b>3/23/18</b>	<b>DRIPPR S2D1-R-BREA-22230-13094</b>	<b>Spray to Drip Program</b> M. Chung	175.00
<b>137782</b>	<b>3/23/18</b>	<b>S2D1-R-IRWD-13428-13100</b>	H. Elali ***Total ***	525.00 700.00
<b>137783</b>	<b>3/23/18</b>	<b>TURFRP TR11-R-MESA-17881-</b>	<b>Turf Removal Program</b> P. Johnson	1,027.00
<b>137784</b>	<b>3/23/18</b>	<b>TR11-R-SM-20965-20884</b>	A. Garcia	363.00
<b>137785</b>	<b>3/23/18</b>	<b>TR11-R-IRWD-21000-20914</b>	P. Rios	698.00
<b>137786</b>	<b>3/23/18</b>	<b>TR11-R-IRWD-21006-20919</b>	C. Kim	754.00
<b>137787</b>	<b>3/23/18</b>	<b>TR11-R-TUST-21010-20923</b>	T. Do	1,233.00
<b>137788</b>	<b>3/23/18</b>	<b>TR11-R-TC-21020-20933</b>	S. LaFlash	664.00
<b>137789</b>	<b>3/23/18</b>	<b>TR11-R-SC-21080-20996</b>	M. Jessop	1,874.67
<b>137790</b>	<b>3/23/18</b>	<b>TR11-R-SC-21151-21065</b>	K. Shimkus	2,110.00
<b>137791</b>	<b>3/23/18</b>	<b>TR11-R-SOCO-21181-21093</b>	N. Clark	1,979.00
<b>137792</b>	<b>3/23/18</b>	<b>TR11-R-IRWD-22209-22126</b>	P. Yeong	684.00
<b>137793</b>	<b>3/23/18</b>	<b>TR11-R-BREA-22221-22137</b>	A. Luarca	1,325.00
<b>137794</b>	<b>3/23/18</b>	<b>TR11-R-HB-22226-22142</b>	A. Ballard	465.00
<b>137795</b>	<b>3/23/18</b>	<b>TR11-R-IRWD-22246-22159</b>	N. Lamming	386.00
<b>137796</b>	<b>3/23/18</b>	<b>TR11-R-SM-23254-23167</b>	J. Patton	2,000.00



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137797	3/23/18	TR11-R-SM-23255-23168	V. Callet	264.00
137798	3/23/18	TR11-R-HB-23258-23170	R. Rodriguez	686.00
137799	3/23/18	TR11-R-MNT-23263-23176	S. Waller	754.00
137800	3/23/18	TR11-R-IRWD-23280-23190	K. Von Seldeneck	1,672.00
137801	3/23/18	TR11-R-MESA-23290-	T. DeTemple	662.00
137802	3/23/18	TR11-R-SC-23307-23216	S. Griesbach	656.00
137803	3/23/18	TR11-R-SM-23311-23220	M. Schriver	923.00
137804	3/23/18	TR11-R-MNT-23314-23225	A. Fiorelli	716.00
137805	3/23/18	TR11-R-MESA-23291-	S. Schneider	1,451.00
137806	3/23/18	TR11-R-SM-23329-23238	T. Rozema	363.00
137807	3/23/18	TR11-R-MNT-23372-23275	M. Gadhavi	1,408.00
137808	3/23/18	TR11-R-SC-23378-23281	J. Rees	2,868.00
137809	3/23/18	TR11-R-IRWD-23391-23296	R. Kendziorski	1,030.00
137810	3/23/18	TR11-R-O-23404-23307	T. Watson	1,882.00
137811	3/23/18	TR11-R-IRWD-23406-23309	G. Wondra	1,190.00
137812	3/23/18	TR11-R-O-24413-24317	N. Zimmerman	697.00
137813	3/23/18	TR11-R-MNT-24434-24335	R. Lorge	708.00
137814	3/23/18	TR11-R-IRWD-25442-25345	S. Aiyar	1,318.00
137815	3/23/18	TR11-R-WEST-25460-25380	P. Bass	351.00
137816	3/23/18	TR11-R-SWD-25470-25389	A. Kabiri	555.00
			***Total ***	35,716.67
<b>WIRE-180328</b>	<b>3/28/18</b>	<b>METWAT</b>	<b>Metropolitan Water District</b>	
		9270	January 2018 Water deliveries	7,688,135.51
			***Total ***	7,688,135.51
<b>137818</b>	<b>3/30/18</b>	<b>ATTCALN</b>	<b>AT&amp;T</b>	
		000010987138	February 2018 WEROC S. EOC telephone expense	615.36
			***Total ***	615.36
<b>137819</b>	<b>3/30/18</b>	<b>ATTEOC</b>	<b>AT&amp;T</b>	
		0532-MAR2018	March 2018 WEROC N. EOC dedicated phone line	70.21
			***Total ***	70.21
<b>137820</b>	<b>3/30/18</b>	<b>CATALI</b>	<b>Catalina Island Conservancy</b>	
		0015337	March 2018 WEROC radio repeater site lease	1,804.20
			***Total ***	1,804.20
<b>137822</b>	<b>3/30/18</b>	<b>RWOSRP</b>	<b>Recycled Water Program</b>	
		RTF4008	Recycled Water On-Site Retrofit program- TICAD Holdings LLC (Rancho Santa Margarita)	6,841.25
			***Total ***	6,841.25
<b>137823</b>	<b>3/30/18</b>	<b>SANTI1</b>	<b>Santiago Aqueduct Commission</b>	
		JAN2018	January 2018 SAC Pipeline operation surcharge	3,537.24
			***Total ***	3,537.24



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137825	3/30/18	USBANK 4140-FEB18	U.S. Bank 2/19/18-3/20/18 Cal Card charges ***Total *** (See attached sheet for details)	550.33 550.33
ACH003119	3/30/18	SANTAM JAN2018	Santa Margarita Water District January 2018 SCP Pipeline operation surcharge ***Total ***	20,624.31 20,624.31
<b>Total Other Funds Disbursements</b>				<u>8,328,044.72</u>
<b>Total Disbursements</b>				<u><u>8,360,023.28</u></u>

  
Robert J. Hunter, General Manager

  
Hilary Chumpitazi, Treasurer



**Cal Card Statement Detail**  
**Statement Date: February 22, 2018**  
**Payment Date: March 30, 2018**

Date	Description	Amount
<b><u>K. Seckel Card</u></b>		
01/22/18	UPS delivery charges for Board packets on Jan. 12, 2018 and Local Government Commission on Jan. 19, 2018	62.85
01/23/18	International Association of Emergency Managers membership renewal for F. Soto	190.00
01/23/18	Lunch for MET Directors' meeting	196.50
01/23/18	LinkedIn job post for Public Affairs Assistant position	300.00
01/23/18	Carpet cleaning for MWDOC office	800.00
01/23/18	ACWA DC conference in Washington, DC from Feb. 27-Mar. 1, 2018 - Airfare change for Director Barbre	600.00 <span style="border: 1px solid black; padding: 0 2px;">1</span>
01/24/18	Urban Water Institute Water conference in Palm Springs, CA from Feb. 7-9, 2018 - Registration for D. Micalizzi	475.00
01/24/18	12/24/17-1/23/18 Web hosting service for MWDOC website	15.65
01/24/18	California Society of Municipal Finance Officers 2018 membership renewal for H. Chumpitazi	110.00
01/24/18	Legislative activities in Sacramento, CA on Jan. 31-Feb. 1, 2018 - Airfare for H. Baez	475.96
01/24/18	Legislative activities in Sacramento, CA on Feb. 9, 2018 - Airfare for H. Baez	381.96
01/25/18	Governor's Office Water Use Efficiency meeting in Sacramento, CA on Jan. 31, 2018 - Airfare for J. Berg	372.97
01/25/18	2 Legislative directories	42.53
01/26/18	Urban Water Institute Water conference in Palm Springs, CA from Feb. 7-9, 2018 - Accommodations deposit for D. Micalizzi	182.41
01/26/18	2 Medical trauma first aid kits	320.34
01/27/18	MET Inspection trip from Jan. 26-28, 2018 - Accommodations on Jan. 25, 2018 for legislative guest A. Eisenberger	247.24
01/27/18	MET Inspection trip from Jan. 26-28, 2018 - Accommodations on Jan. 25, 2018 for legislative guest I. Foley	247.24
01/27/18	MET Inspection trip from Jan. 26-28, 2018 - Accommodations on Jan. 25, 2018 for legislative guest J. Roxburgh	247.24
01/28/18	MET Inspection trip from Jan. 26-28, 2018 - Accommodations on Jan. 28, 2018 for legislative guest I. Foley	127.05
01/28/18	MET Inspection trip from Jan. 26-28, 2018 - Accommodations on Jan. 28, 2018 for legislative guest J. Roxburgh	127.05
01/29/18	UPS Delivery charges for Local Government Commission on Jan. 19, 2018	25.28
01/29/18	MET Inspection trip from Jan. 26-28, 2018 - Accommodations on Jan. 28, 2018 for legislative guest A. Eisenberger	127.05
01/29/18	California Association of Public Information Officials membership for D. Micalizzi	225.00
01/29/18	California Association of Public Information Officials membership for T. Baca	225.00
01/30/18	ACWA DC conference in Washington, DC from Feb. 27-Mar. 1, 2018 - Registration for M. Baum-Haley	690.00
01/30/18	ACWA DC conference in Washington, DC from Feb. 26-Mar. 1, 2018 - Airfare for H. Baez	907.07



**Cal Card Statement Detail**  
**Statement Date: February 22, 2018**  
**Payment Date: March 30, 2018**

Date	Description	Amount
01/31/18	Urban Water Institute Water conference in Palm Springs, CA from Feb. 8-9, 2018 - Accommodations M. Baum-Haley	245.57
01/31/18	ACWA DC conference in Washington, DC from Feb. 26-Mar. 1, 2018 - Airfare for M. Baum-Haley	897.08
02/01/18	LinkedIn job post for Public Affairs Assistant position	338.90
02/01/18	Legislative activities in Sacramento, CA on Jan. 31-Feb. 1, 2018 - Accommodations for H. Baez	229.30
02/02/18	Computer supplies	31.98
02/02/18	Laptop computer for M. Baum-Haley	1,418.74
02/03/18	TrainHr Getting Organized with Outlook webinar	295.00
02/05/18	Photography supplies for Public Affairs department	156.48
02/06/18	ACWA DC conference in Washington, DC from Feb. 26-Mar. 1, 2018 - Airfare for Director Yoo Schneider	910.88
02/07/18	South Orange County Regional Chamber of Commerce 2018 Economic Report Preview in San Clemente, CA on Feb. 23, 2018 - Registration for Director Thomas	60.00
02/08/18	3 Year domain name renewal for csans.net	57.51
02/09/18	Food for staff development meeting	30.98
02/09/18	Data recovery software	69.95
02/10/18	Urban Water Institute Water conference in Palm Springs, CA from Feb. 7-9, 2018 - Accommodations for Director Yoo Schneider	182.41
02/10/18	Urban Water Institute Water conference in Palm Springs, CA from Feb. 7-9, 2018 - Accommodations for D. Micalizzi	222.12
02/10/18	Urban Water Institute Water conference in Palm Springs, CA from Feb. 8-9, 2018 - Accommodations for Director Tamaribuchi	38.60
02/12/18	Computer supplies	37.66
02/12/18	California Water Efficiency Partnership Launch Celebration and Dinner in Sacramento, CA on Mar. 7, 2018 - Registration for J. Berg	75.00
02/12/18	ACWA Spring conference in Sacramento, CA from May 8-11, 2018 - Registration for H. Baez	699.00
02/12/18	ACWA Spring conference in Sacramento, CA from May 8-11, 2018 - Registration for Director M. Yoo Schneider	699.00
02/12/18	ACWA Spring conference in Sacramento, CA from May 8-11, 2018 - Registration for M. Baum-Haley	699.00
02/12/18	UPS delivery charges for Board packets on Feb. 9, 2018	7.35
02/13/18	Parking permit tags with new logo	781.53
02/13/18	2 Year SSL renewal for csans.net	149.98
02/13/18	State Water Resource Control Board hearing in Sacramento, CA on Feb. 20, 2018 - Airfare for J. Berg	381.96 <span style="border: 1px solid black; padding: 0 2px;">2</span>
02/19/18	UPS delivery charges for Board packets on Feb. 9, 2018 and Eastern Municipal Water District on Feb. 15, 2018	125.31
02/20/18	Hauling fee for removal and disposal of 6 filing cabinets	720.00
02/20/18	Monthly fee for Hulu television streaming service for WEROC	39.99
02/20/18	Food for staff development meeting	56.28
02/20/18	California Society of Municipal Finance Officers meeting in Orange, CA on Mar. 8, 2018 - Registration for H. Chumpitazi	30.00



**Cal Card Statement Detail**  
**Statement Date: February 22, 2018**  
**Payment Date: March 30, 2018**

<b>Date</b>	<b>Description</b>	<b>Amount</b>
02/21/18	California Association of Public Information Officials Excellence in Public Information Awards application fee	175.00
<b>Total</b>		<b><u>\$ 17,583.95</u></b>

- 1 Director Barbre to reimburse MWDOC \$600.00
- 2 Trip canceled airfare credit is available for future use

**R. Hunter Card**

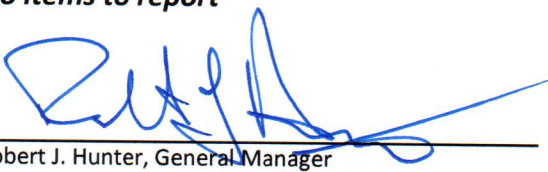
1/23/18-2/22/18	Meals for R. Hunter's meetings	\$ 245.31
01/23/18	Grand Jury meeting in Santa Ana, CA on 1/23/18 - Parking for R. Hunter	10.00
02/09/18	Patio furniture for atrium	5,646.10
02/17/18	2/10/18 Room rental and catering for off-site Special Board meeting	1,711.35
02/20/18	Association of Metropolitan Water Agencies Water Policy conference In Washington, DC from Mar. 18-21, 2018 - Registration for R. Hunter	795.00
		<b><u>\$ 8,407.76</u></b>



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

<i>Check #</i>	<i>Date</i>	<i>Vendor # Invoice/CM #</i>	<i>Name / Description</i>	<i>Net Amount</i>
<b>Core Disbursements:</b>				
<b>Total Core Disbursements</b>				<hr/> -
<b>Choice Disbursements:</b>				
<b>Total Choice Disbursements</b>				<hr/> -
<b>Other Funds Disbursements:</b>				
<b>Total Other Funds Disbursements</b>				<hr/> -
<b>Total Disbursements</b>				<hr/> <hr/> -

**No items to report**

  
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**  
February 28, 2018

Street Address:  
18700 Ward Street  
Fountain Valley, California 92708

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

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

Brett R. Barbre  
President

Joan C. Finnegan  
Vice President

Larry D. Dick  
Director

Wayne S. Osborne  
Director

Megan Yoo Schneider  
Director

Sat Tamaribuchi  
Director

Jeffery M. Thomas  
Director

Robert J. Hunter  
General Manager

**MEMBER AGENCIES**

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

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

Fund	Book Value	% of Portfolio
<b>Designated Reserves</b>		
General Operations	\$3,156,569	23.08%
Grant & Project Cash Flow	1,500,000	10.97%
Election Expense	304,000	2.22%
Building Repair	350,407	2.56%
OPEB	209,006	1.53%
<b>Total Designated Reserves</b>	<b>5,519,982</b>	<b>40.36%</b>
<b>General Fund</b>	<b>6,130,467</b>	<b>44.83%</b>
<b>Water Fund</b>	<b>1,159,310</b>	<b>8.48%</b>
<b>Conservation Fund</b>	<b>490,950</b>	<b>3.59%</b>
<b>Desalination Feasibility Study Fund</b>	<b>(145,165)</b>	<b>(1.06%)</b>
<b>WEROC Fund</b>	<b>490,368</b>	<b>3.59%</b>
<b>Trustee Activities</b>	<b>28,553</b>	<b>0.21%</b>
<b>Total</b>	<b>\$13,674,465</b>	<b>100.00%</b>

The funds are invested as follows:

Term of Investment	% of Portfolio	Book Value	Market Value
Cash	1.75%	\$238,985	\$238,985
Short-term investment			
• LAIF	46.88%	\$6,411,219	\$6,411,219
• OCIP	28.67%	3,920,654	3,920,654
Long-term investment			
• Corporate Bond	8.44%	1,153,607	1,129,079
• Certificates of Deposit	14.26%	1,950,000	1,942,078
<b>Total</b>	<b>100.00%</b>	<b>\$13,674,465</b>	<b>\$13,642,015</b>

The average number of days to maturity/call as of February 28, 2018 equaled 189 and the average yield to maturity is 1.565%. During the month, the District's average daily balance was \$41,278,596.71. 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 February 2018.

The (\$32,450) difference between the book value and the market value on February 28, 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 February 28, 2018

2/28/2018	Par Value	Market Value	Book Value	% of Portfolio	Days to Mat/Call	YTM @ Cost
Negotiable Certificate Of Deposit	1,950,000.00	1,942,078.50	1,950,000.00	14.52	672	2.075
Corporate Bond	1,150,000.00	1,129,078.50	1,153,606.72	8.56	1,061	2.290
Local Agency Investment Funds	6,411,218.93	6,411,218.93	6,411,218.93	47.73	1	1.404
Orange County Investment Pool	3,920,654.50	3,920,654.50	3,920,654.50	29.19	1	1.363
<b>Total Investments</b>	<b>13,431,873.43</b>	<b>13,403,030.43</b>	<b>13,435,480.15</b>	<b>100.00</b>	<b>189</b>	<b>1.565</b>
<b>Cash</b>						
Cash	238,984.93	238,984.93	238,984.93		1	0.00
<b>Total Cash and Investments</b>	<b>13,670,858.36</b>	<b>13,642,015.36</b>	<b>13,674,465.08</b>		<b>189</b>	<b>1.565</b>

Total Earnings	Month Ending February	Fiscal Year to Date
Current Year	41,878.45	217,685.51
Average Daily Balance	41,278,596.71	
Effective Rate of Return	1.565%	

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

4-3-18

Hilary Chumpitazi, Treasurer

Date

4/3/2018



## February 28, 2018

Issuer	CUSIP/Ticker	Schedule Payment Date	Par Value	Market Value	Book Value	Coupon Rate	Time to Maturity @ Cost	Days to Call/Maturity	Maturity Date
Negotiable Certificate Of Deposit									
Bardays Bank	06740KKY2	9/27/2017	250,000.00	245,230.00	250,000.00	2.250	2.250	1,672	9/27/2022
Capital One Bank	140420TY6	8/5/2015	250,000.00	249,967.50	250,000.00	1.700	1.700	159	8/6/2018
Capital One Natl Assn	14042E6C9	9/2/2015	250,000.00	249,680.00	250,000.00	1.950	1.950	552	9/3/2019
Comenity Capital	20033AUX2	7/25/2017	200,000.00	196,606.00	200,000.00	2.000	2.000	1,234	7/16/2021
Discover Bank	2546712Y5	7/23/2014	250,000.00	249,957.50	250,000.00	1.600	1.600	145	7/23/2018
HSBC Bank	40434AK65	1/21/2016	250,000.00	250,680.00	250,000.00	2.250	2.534	143	1/21/2021
Morgan Stanley Bank	61747MJ36	2/1/2018	250,000.00	250,192.50	250,000.00	2.500	2.500	1,069	2/1/2021
Synchrony Bank	87164XBY1	7/25/2014	250,000.00	249,765.00	250,000.00	2.050	2.050	517	7/30/2019
Sub Total			1,950,000.00	1,942,078.50	1,950,000.00	2.038	2.075	672	
Corporate Bond									
JP Morgan Chase	48625HKA7	11/2/2015	500,000.00	495,270.00	500,883.80	2.250	2.152	663	1/23/2020
National Rural Util Coop	63743FE51	7/27/2017	200,000.00	192,498.00	200,000.00	2.500	2.500	1,598	7/15/2022
Wells Fargo	94974BGR5	1/13/2016	250,000.00	246,942.50	250,912.55	2.550	2.409	1,013	12/7/2020
Westpac Banking Corp	961214DQ3	7/25/2017	200,000.00	194,368.00	201,810.37	2.500	2.278	1,581	6/28/2022
Sub Total			1,150,000.00	1,129,078.50	1,153,606.72	2.402	2.290	1,061	
Total Investments			3,100,000.00	3,071,157.00	3,103,606.72	2.173	2.155	817	
Total Earnings			Month Ending February		Fiscal Year To Date				
Current Year			5,011.16		40,567.82				

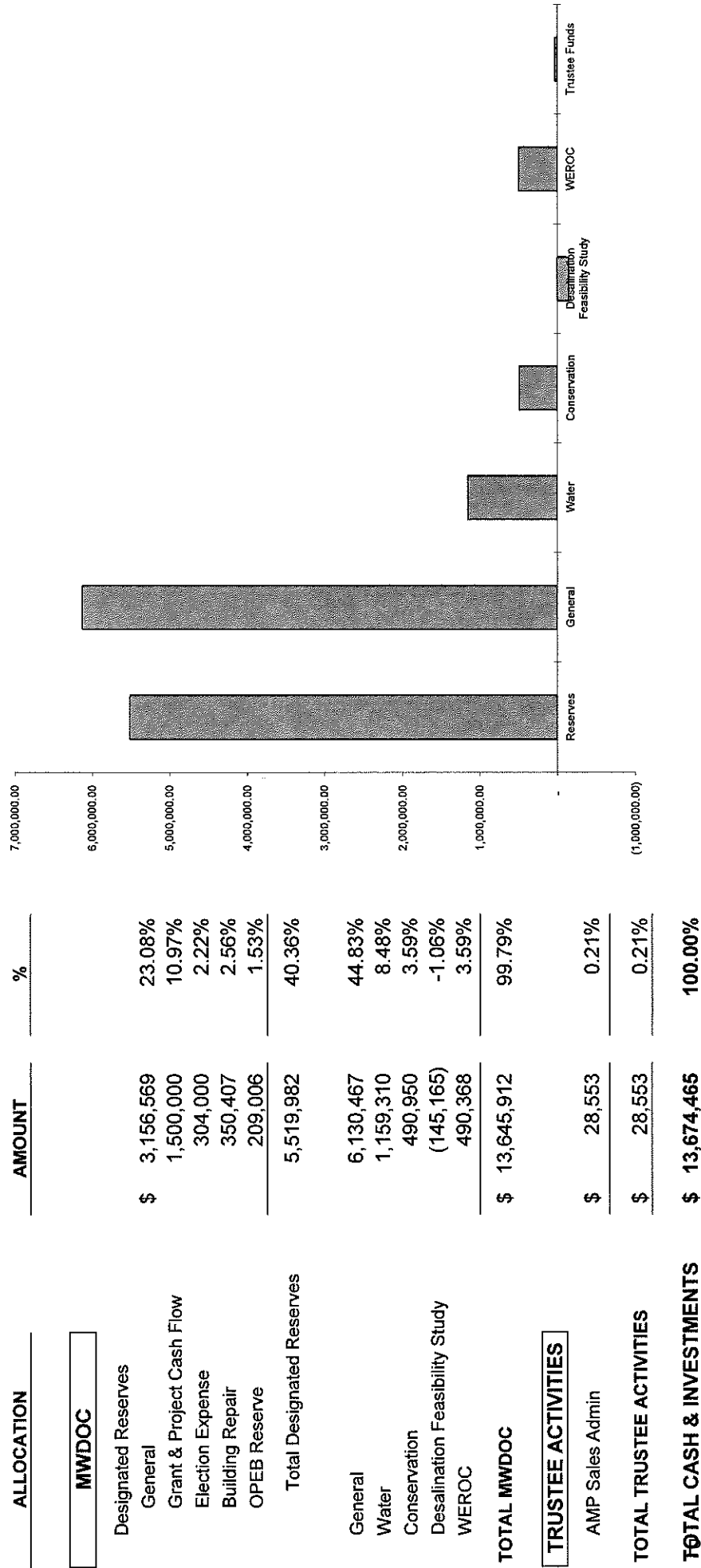


**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**Portfolio Management**  
**Short-Term Portfolio Details - Cash and Investments**  
**February 28, 2018**

Investments	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
<b>Local Agency Investment Funds</b>									
LAIF LGIP	LAIF	6/30/2010	6,411,218.93	6,411,218.93	6,411,218.93	1.404	1.404	1	N/A
<b>Sub Total</b>			<b>6,411,218.93</b>	<b>6,411,218.93</b>	<b>6,411,218.93</b>	<b>1.404</b>	<b>1.404</b>	<b>1</b>	
<b>Orange County Investment Pool</b>									
County of Orange LGIP	OCIP	6/29/2005	3,920,654.50	3,920,654.50	3,920,654.50	1.363	1.363	1	N/A
<b>Sub Total</b>			<b>3,920,654.50</b>	<b>3,920,654.50</b>	<b>3,920,654.50</b>	<b>1.363</b>	<b>1.363</b>	<b>1</b>	
<b>Total Investments</b>			<b>10,331,873.43</b>	<b>10,331,873.43</b>	<b>10,331,873.43</b>	<b>1.388</b>	<b>1.388</b>		
<b>Cash</b>									
Bank of America Cash	CASH0547	7/1/2010	238,484.93	238,484.93	238,484.93	0.000	0.000	1	N/A
Petty Cash Cash	CASH	7/1/2010	500.00	500.00	500.00	0.000	0.000	1	N/A
<b>Total Cash</b>			<b>238,984.93</b>	<b>238,984.93</b>	<b>238,984.93</b>	<b>0.000</b>	<b>0.000</b>	<b>1</b>	
<b>Total Cash and Investments</b>			<b>10,570,858.36</b>	<b>10,570,858.36</b>	<b>10,570,858.36</b>	<b>1.388</b>	<b>1.388</b>	<b>1</b>	
<b>Total Earnings</b>									
Current Year		Month Ending February	36,867.29	Fiscal Year To Date	177,117.69				



**Municipal Water District of Orange County  
Cash and Investments at February 28, 2018**





**MUNICIPAL WATER DIST OF ORANGE COUNTY**  
**PARS OPEB Trust Program****Account Report for the Period**  
**2/1/2018 to 2/28/2018**Rob Hunter  
General Manager  
Municipal Water Dist of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708**Account Summary**

Source	Beginning Balance as of 2/1/2018	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 2/28/2018
OPEB	\$2,124,345.77	\$0.00	-\$52,390.94	\$1,023.40	\$0.00	\$0.00	\$2,070,931.43
<b>Totals</b>	<b>\$2,124,345.77</b>	<b>\$0.00</b>	<b>-\$52,390.94</b>	<b>\$1,023.40</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$2,070,931.43</b>

**Investment Selection****Moderate HighMark PLUS****Investment Objective**

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**

1-Month	3-Months	1-Year	Annualized Return			Plan's Inception Date
			3-Years	5-Years	10-Years	
-2.47%	0.74%	9.55%	5.50%	6.85%	-	10/26/2011

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



**Municipal Water District of Orange County  
WATER USE EFFICIENCY PROJECTS**  
*Cash Flow as of 3/31/18*

	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	TOTALS
<b>Cash - Beginning Balance</b>	<b>\$ (72,844.08)</b>	<b>\$ (133,020.86)</b>	<b>\$ (151,184.71)</b>	<b>\$ (326,302.43)</b>	<b>\$ 801,456.49</b>	<b>\$ 865,340.16</b>	<b>\$ 776,036.09</b>	<b>\$ 482,751.99</b>	<b>\$ 490,949.46</b>	<b>\$ 521,323.39</b>	<b>\$ 521,323.39</b>	<b>\$ 521,323.39</b>	
<b>REVENUES:</b>													
BUREC					200,757.65	333.00	5,407.70		582.16				\$ 206,165.35
City of Buena Park		222.00		111.00									1,248.16
City of Fountain Valley	333.00	444.00	424.05				111.00	428.00					2,184.05
City of Garden Grove		888.00	222.00	444.00		222.00							1,776.00
City of Huntington Beach	264.00	379.00	427.19			9.86		127.86					1,207.91
City of La Habra		555.00		111.00					111.00				777.00
City of San Clemente	1,304.96	233.00	6,460.97	6,044.00	3,419.79		2,027.22	7,701.86	3,635.00				30,826.80
City of Newport Beach	406.31	222.00			222.00		111.00	131.51	111.00				1,203.82
City of Orange	444.00	555.00	333.00		555.00	111.00	111.00	444.00	111.00				2,664.00
City of Westminster		888.00	333.00	444.00	444.00		444.00	111.00	222.00				2,886.00
County of Orange				1,096,511.49									1,096,511.49
Department of Water Resources		1,444.63	15,468.35	9,716.20		35,676.91			31,906.55				94,212.64
El Toro Water District	3,093.98	50.00	1,137.96	1,000.00	2,630.00	1,350.77	60.00	1,299.00	383.00				11,004.71
Irvine Ranch Water District	38,717.96	129,174.28	12,348.45	184,823.79	37,097.77		17,218.24	150,722.61	40,450.63				610,553.73
Laguna Beach County Water District	85.00	90.00		110.00	30.00			150.00	105.00				570.00
Mesa Water District		500.00					130.22	67.86	139.00				837.08
Metropolitan Water District		25,735.53											25,735.53
Moulton Niguel Water District	37,634.08	3,800.00	14,408.25	38,738.51	27,516.79	31,071.51	14,842.29	57,847.16	13,299.15				239,157.74
Orange County Water District		5,510.86	776.06	32,475.75			12,383.25		37,158.30				88,304.22
Santa Margarita Water District	57.32	197.95		924.98	85.00			60.00	503.52				1,828.77
Traabuco Canyon Water District	201.00	39.00	219.99	400.00			75.00						934.99
<b>Miscellaneous Revenues</b>													
Miscellaneous				810.82									810.82
Interest Revenue	417.16						1,619.81						2,036.97
<b>Total Revenues</b>	<b>82,958.77</b>	<b>170,928.25</b>	<b>52,559.27</b>	<b>1,372,887.54</b>	<b>272,673.00</b>	<b>69,082.05</b>	<b>54,540.73</b>	<b>219,090.86</b>	<b>128,717.31</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$ 2,423,437.78</b>
<b>EXPENDITURES:</b>													
Budget Based Tiered Rates, Raffleis		59,356.00		7,271.08		1,893.75		637.50					69,158.33
Delorenzo International		5,050.50							850.00				5,050.50
Droplet					13,500.00	10,500.00	2,775.00	7,800.00	3,600.00				850.00
Ecoltech	900.00	10,275.00	6,750.00	13,500.00									69,600.00
Golden State Water Company	80.00				46,172.00								80.00
City of Huntington Beach					13,676.40								46,172.00
Laguna Beach CWD	480.00				26,485.72								14,156.40
Metropolitan Water District	29,129.40	17,627.75	118,745.58	70,931.38	26,485.72	27,322.22	236,289.40	134,233.87	39,537.35				682,674.92
Mission RCD			33,812.14	17,041.96		17,525.35	14,817.40	32,507.37	11,098.11				144,430.08
Recycled Water On Site Retrofit program					9,997.00		689.00	4,423.25	6,841.25				21,950.50
Spray to Drip program			1,155.58	525.00	34,530.53	750.00	2,288.57	875.00	700.00				40,824.68
Turf Removal	60,861.15	96,782.85	63,442.87	135,566.22	64,427.68	97,458.78	30,416.40		35,716.67				675,638.08
Vu Ho, Inc			500.00										500.00
Western National Property Management	51,300.00												51,300.00
<b>Miscellaneous Expenses</b>													
Interest Expense				292.98		2,936.02							292.98
Salaries & Benefit	130.00		3,270.82										6,336.84
<b>Total Expenditures</b>	<b>143,135.55</b>	<b>189,092.10</b>	<b>227,676.99</b>	<b>245,128.62</b>	<b>208,789.33</b>	<b>158,386.12</b>	<b>347,824.83</b>	<b>210,893.39</b>	<b>98,343.38</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$ 1,829,270.31</b>
<b>Cash - Ending Balance</b>	<b>\$ (133,020.86)</b>	<b>\$ (151,184.71)</b>	<b>\$ (326,302.43)</b>	<b>\$ 801,456.49</b>	<b>\$ 865,340.16</b>	<b>\$ 776,036.09</b>	<b>\$ 482,751.99</b>	<b>\$ 490,949.46</b>	<b>\$ 521,323.39</b>	<b>\$ 521,323.39</b>	<b>\$ 521,323.39</b>	<b>\$ 521,323.39</b>	



**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
**COMBINED FINANCIAL STATEMENTS**  
**AND**  
**BUDGET COMPARATIVE**  
**JULY 1, 2017 THRU FEBRUARY 28, 2018**



**Municipal Water District of Orange County  
Combined Balance Sheet  
As of February 28, 2018**

<b><u>ASSETS</u></b>	<b>Amount</b>
Cash in Bank	238,984.93
Investments	13,435,480.15
Accounts Receivable	14,153,227.06
Accounts Receivable - Other	106,183.16
Accrued Interest Receivable	69,993.45
Prepays/Deposits	213,017.60
Leasehold Improvements	3,695,600.68
Furniture, Fixtures & Equipment	457,309.71
Less: Accum Depreciation	(2,795,662.16)
Net OPEB Asset	483,546.00
	<hr/>
<b>TOTAL ASSETS</b>	<b>\$30,057,680.58</b>
	<hr/>
<b><u>LIABILITIES AND FUND BALANCES</u></b>	
<b>Liabilities</b>	
Accounts Payable	13,991,294.42
Accounts Payable - Other	835.05
Accrued Salaries and Benefits Payable	446,890.71
Other Liabilities	146,539.04
Unearned Revenue	1,714,185.93
Total Liabilities	16,299,745.15
	<hr/>
<b>Fund Balances</b>	
Restricted Fund Balances	
Water Fund - T2C	978,317.72
Total Restricted Fund Balances	978,317.72
	<hr/>
Unrestricted Fund Balances	
OPEB Related Asset Fund	483,546.00
Designated Reserves	
General Operations	3,156,569.42
Grant & Project Cash Flow	1,500,000.00
Election Expense	304,000.00
Building Repair	350,407.45
OPEB	209,006.00
Total Designated Reserves	5,519,982.87
	<hr/>
GENERAL FUND	2,403,689.97
WEROC Capital	281,657.00
WEROC	144,717.31
Total Unrestricted Fund Balances	8,833,593.15
	<hr/>
Excess Revenue over Expenditures	
Operating Fund	4,354,267.70
Other Funds	(408,243.14)
Total Fund Balance	13,757,935.43
	<hr/>
<b>TOTAL LIABILITIES AND FUND BALANCES</b>	<b>\$30,057,680.58</b>
	<hr/>



**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July 2017 thru February 2018**

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<b><u>REVENUES</u></b>						
Retail Connection Charge	0.00	7,435,834.00	7,435,834.00	100.00%	0.00	0.00
Ground Water Customer Charge	0.00	468,565.00	468,565.00	100.00%	0.00	0.00
Water rate revenues	0.00	7,904,399.00	7,904,399.00	100.00%	0.00	0.00
Interest Revenue	40,355.57	207,397.92	150,000.00	138.27%	0.00	(57,397.92)
Subtotal	40,355.57	8,111,796.92	8,054,399.00	100.71%	0.00	(57,397.92)
Choice Programs	0.00	1,094,900.87	1,176,618.00	93.05%	0.00	81,717.13
Miscellaneous Income	1,521.00	3,490.94	3,000.00	116.36%	0.00	(490.94)
School Contracts	13,403.78	66,869.79	70,000.00	95.53%	0.00	3,130.21
Transfer-In From Reserve	0.00	0.00	138,470.00	0.00%	0.00	138,470.00
Subtotal	14,924.78	1,165,261.60	1,388,088.00	83.95%	0.00	222,826.40
<b>TOTAL REVENUES</b>	<b>55,280.35</b>	<b>9,277,058.52</b>	<b>9,442,487.00</b>	<b>98.25%</b>	<b>0.00</b>	<b>165,428.48</b>



**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**General Fund**  
**From July 2017 thru February 2018**

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
<b><u>EXPENSES</u></b>						
Salaries & Wages	251,886.04	2,182,707.28	3,571,210.00	61.12%	0.00	1,388,502.72
Salaries & Wages - Grant Recovery	0.00	(4,699.45)	(23,279.00)	20.19%	0.00	(18,579.55)
Salaries & Wages - Recovery	0.00	(436.80)	0.00	0.00%	0.00	436.80
Director's Compensation	19,007.36	142,329.81	243,197.00	58.52%	0.00	100,867.19
MWD Representation	11,582.61	81,969.74	138,969.00	58.98%	0.00	56,999.26
Employee Benefits	79,853.94	641,658.14	1,056,766.00	60.72%	0.00	415,107.86
Employee Benefits - Grant Recovery	0.00	(1,117.39)	0.00	0.00%	0.00	1,117.39
Employee Benefits - Recovery	0.00	(83.20)	0.00	0.00%	0.00	83.20
Director's Benefits	8,340.05	57,472.90	81,728.00	70.32%	0.00	24,255.10
Health Insurance for Retirees	3,466.79	34,455.70	59,554.00	57.86%	0.00	25,098.30
Training Expense	2,128.00	4,917.00	10,000.00	49.17%	0.00	5,083.00
Tuition Reimbursement	0.00	0.00	5,000.00	0.00%	0.00	5,000.00
Temporary Help Expense	0.00	4,775.18	5,000.00	95.50%	0.00	224.82
Personnel Expenses	376,264.79	3,143,948.91	5,148,145.00	61.07%	0.00	2,004,196.09
Engineering Expense	1,386.99	90,656.14	360,000.00	25.18%	108,909.56	160,434.30
Legal Expense	9,889.23	103,747.16	250,000.00	41.50%	146,252.84	0.00
Audit Expense	0.00	19,000.00	40,000.00	47.50%	0.00	21,000.00
Professional Services	118,656.22	530,915.72	1,539,809.00	34.48%	465,879.76	543,013.52
Professional Fees	129,932.44	744,319.02	2,189,809.00	33.99%	721,042.16	724,447.82
Conference-Staff	3,463.00	14,586.46	38,945.00	37.45%	0.00	24,358.54
Conference-Directors	759.00	10,804.00	23,700.00	45.59%	0.00	12,896.00
Travel & Accom.-Staff	5,752.50	27,816.68	95,600.00	29.10%	0.00	67,783.32
Travel & Accom.-Directors	1,671.91	12,374.42	49,850.00	24.82%	0.00	37,475.58
Travel & Conference	11,646.41	65,581.56	208,095.00	31.52%	0.00	142,513.44
Membership/Sponsorship	1,220.00	128,399.35	142,102.00	90.36%	0.00	13,702.65
CDR Support	0.00	21,901.28	48,803.00	44.88%	21,901.29	5,000.43
Dues & Memberships	1,220.00	150,300.63	190,905.00	78.73%	21,901.29	18,703.08
Business Expense	377.66	3,344.34	5,200.00	64.31%	0.00	1,855.66
Maintenance Office	9,102.06	67,005.34	123,500.00	54.26%	57,029.66	(535.00)
Building Repair & Maintenance	1,901.94	18,529.95	11,000.00	168.45%	12,081.46	(19,611.41)
Storage Rental & Equipment Lease	195.29	1,560.37	8,400.00	18.58%	3,439.63	3,400.00
Office Supplies	3,226.60	14,336.41	35,580.00	40.29%	1,878.08	19,365.51
Postage/Mail Delivery	1,029.92	6,681.28	10,500.00	63.63%	1,375.99	2,442.73
Subscriptions & Books	288.35	1,073.25	1,500.00	71.55%	0.00	426.75
Reproduction Expense	1,755.63	7,017.49	27,275.00	25.73%	598.63	19,658.88
Maintenance-Computers	72.44	3,115.17	10,000.00	31.15%	1,324.78	5,560.05
Software Purchase	69.95	13,424.13	44,260.00	30.33%	0.00	30,835.87
Software Support	1,424.66	26,326.71	48,894.00	53.84%	0.00	22,567.29
Computers and Equipment	1,418.74	16,457.48	33,050.00	49.80%	0.00	16,592.52
Automotive Expense	1,573.58	11,445.03	16,400.00	69.79%	0.00	4,954.97
Toll Road Charges	61.66	532.18	1,000.00	53.22%	0.00	467.82
Insurance Expense	9,138.13	72,263.43	110,250.00	65.55%	0.00	37,986.57
Utilities - Telephone	1,480.31	11,146.40	21,300.00	52.33%	0.00	10,153.60
Bank Fees	1,657.55	6,768.50	11,000.00	61.53%	0.00	4,231.50
Miscellaneous Expense	6,576.89	56,163.29	119,650.00	46.94%	0.00	63,486.71
MWDOC's Contrb. to WEROC	14,934.75	401,135.00	460,874.00	87.04%	0.00	59,739.00
Depreciation Expense	794.41	6,355.25	0.00	0.00%	0.00	(6,355.25)
Other Expenses	57,080.52	744,681.00	1,099,633.00	67.72%	77,728.23	277,223.77
Building Expense	3,300.00	54,176.51	356,400.00	15.20%	27,402.00	274,821.49
Capital Acquisition	5,646.10	19,783.19	249,500.00	7.93%	0.00	229,716.81
TOTAL EXPENSES	585,090.26	4,922,790.82	9,442,487.00	52.13%	848,073.68	3,671,622.50
<b>NET INCOME (LOSS)</b>	<b>(529,809.91)</b>	<b>4,354,267.70</b>	<b>0.00</b>			



**Municipal Water District of Orange County**  
**Revenues and Expenditures Budget Comparative Report**  
**Water Fund**  
**From July 2017 thru February 2018**

	Month to Date	Year to Date	Annual Budget	% Used	Budget Remaining
<b><u>WATER REVENUES</u></b>					
Water Sales	31,312.20	146,950,056.70	154,733,881.00	94.97%	7,783,824.30
Readiness to Serve Charge	908,514.76	6,997,544.60	10,397,278.00	67.30%	3,399,733.40
Capacity Charge CCF	321,247.50	2,414,895.00	3,544,800.00	68.13%	1,129,905.00
SCP/SAC Pipeline Surcharge	22,921.57	227,694.09	423,000.00	53.83%	195,305.91
Interest	953.92	7,371.40	9,400.00	78.42%	2,028.60
<b>TOTAL WATER REVENUES</b>	<b>1,284,949.95</b>	<b>156,597,561.79</b>	<b>169,108,359.00</b>	<b>92.60%</b>	<b>12,510,797.21</b>
<b><u>WATER PURCHASES</u></b>					
Water Sales	31,312.20	146,950,056.70	154,733,881.00	94.97%	7,783,824.30
Readiness to Serve Charge	908,514.76	6,997,544.60	10,397,278.00	67.30%	3,399,733.40
Capacity Charge CCF	321,247.50	2,414,895.00	3,544,800.00	68.13%	1,129,905.00
SCP/SAC Pipeline Surcharge	22,921.57	227,694.09	423,000.00	53.83%	195,305.91
<b>TOTAL WATER PURCHASES</b>	<b>1,283,996.03</b>	<b>156,590,190.39</b>	<b>169,098,959.00</b>	<b>92.60%</b>	<b>12,508,768.61</b>
<b>EXCESS OF REVENUE OVER EXPENDITURES</b>	<b>953.92</b>	<b>7,371.40</b>	<b>9,400.00</b>		



**Municipal Water District of Orange County**  
**WUE Revenues and Expenditures (Actuals vs Budget)**  
**From July 2017 thru February 2018**

	Year to Date Actual	Annual Budget	% Used
<b>Spray To Drip Conversion</b>			
Revenues	59,105.74	257,371.00	22.97%
Expenses	59,946.45	257,371.00	23.29%
Excess of Revenues over Expenditures	(840.71)	0.00	
<b>Member Agency Administered Passthru</b>			
Revenues	0.00	7,200.00	0.00%
Expenses	0.00	7,200.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
<b>ULFT Rebate Program</b>			
Revenues	19,618.25	95,000.00	20.65%
Expenses	19,618.25	95,000.00	20.65%
Excess of Revenues over Expenditures	0.00	0.00	
<b>HECW Rebate Program</b>			
Revenues	234,362.85	340,000.00	68.93%
Expenses	234,391.12	340,000.00	68.94%
Excess of Revenues over Expenditures	(28.27)	0.00	
<b>CII Rebate Program</b>			
Revenues	188,870.00	345,000.00	54.74%
Expenses	188,870.00	345,000.00	54.74%
Excess of Revenues over Expenditures	0.00	0.00	
<b>Turf Removal Program</b>			
Revenues	231,859.82	2,552,302.00	9.08%
Expenses	646,586.78	2,552,302.00	25.33%
Excess of Revenues over Expenditures	(414,726.96)	0.00	
<b>Comprehensive Landscape (CLWUE)</b>			
Revenues	43,736.13	520,000.00	8.41%
Expenses	191,604.15	520,000.00	36.85%
Excess of Revenues over Expenditures	(147,868.02)	0.00	
<b>CII, Large Landscape, Performance (OWOW)</b>			
Revenues	0.00	62,722.00	0.00%
Expenses	9,407.00	62,722.00	15.00%
Excess of Revenues over Expenditures	(9,407.00)	0.00	
<b>WUE Projects</b>			
Revenues	777,552.79	4,179,595.00	18.60%
Expenses	1,350,423.75	4,179,595.00	32.31%
Excess of Revenues over Expenditures	(572,870.96)	0.00	
<b>WEROC</b>			
Revenues	584,066.82	640,933.00	91.13%
Expenses	249,707.63	640,933.00	38.96%
Excess of Revenues over Expenditures	334,359.19	0.00	





**CONSENT CALENDAR ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert Hunter, General Manager

Staff Contact: Karl Seckel

**SUBJECT:** **Award of Consultant Contract for the SOC Interconnection Study**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to enter into a contract with Dudek on a time and materials basis not to exceed \$244,250 to work with IRWD, MWDOC and the SOC Agencies on the potential for expansion or extension of the existing Emergency Services Agreement for the SOC Interconnection.

**COMMITTEE RECOMMENDATION**

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Committee concurred with staff recommendation.

**SUMMARY**

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The amount of capacity IRWD has committed to provide under the existing Emergency Services Agreement varies by the time of year and diminishes over time, dropping to zero by 2030. MWDOC, IRWD and the SOC agencies are interested in understanding if the capacity can be expanded or extended over a longer period of time, which is the purpose of the study. Overall the commitment to the work is a shared responsibility between MWDOC, IRWD and the South Orange County (SOC) agencies. The work process is almost identical to the 2006 Study of the SOC Interconnection whereby MWDOC funded the consultant's time (Tetra Tech in 2006) but IRWD contributed their staff time towards the effort. The overall goal of the study is to work together to bring about regional solutions to emergency needs while providing mutual benefit.

MWDOC has \$80,000 funding available in this year's budget and sufficient funds in next year's budget to cover the remaining proposed expenses.

<b>Budgeted (Y/N): Y</b>	Budgeted amount: \$80,000 this year	Core ✓	Choice __
<b>Action item amount:</b>		Line item: Programs 21 & 23 - 7010	
<b>Fiscal Impact (explain if unbudgeted):</b> Remainder to come from next year's budget 21-7010			



## DETAILED REPORT

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Municipal Water District of Orange County (MWDOC) has been working with its agencies on water supply and water system (emergency) planning criteria for a number of years. Based on the previous work completed the criteria recommended for targeting emergency water needs is to plan for the Metropolitan Water District of Southern California (MET) system to be out of water for up to 60 days and the second criteria is that agencies should be planning on being without the electrical grid for a minimum of one week. Local agencies have the flexibility to adjust these criteria based on their own evaluation of the abilities of their local system. The overall purpose of studying the South County Interconnection is to evaluate the ability of Irvine Ranch Water District (IRWD) to supply emergency water to South Orange County (SOC) during emergency situations under various demand scenarios over time as demands build in IRWD.

The South County Interconnection Agreement, aka the 2006 Emergency Services Agreement, is an existing agreement that requires IRWD, to the best of its ability, to deliver potable water to the SOC agencies during times of MET outages. SOC agencies invested about \$25 million in 2008 and 2009 to provide the capability to move approximately 30 cubic feet per second (cfs) of capacity from the IRWD Zone 1 system through the IRWD system and into the Joint Transmission Main or the Aufdenkamp Transmission Main. The amount of capacity IRWD has committed to provide under the agreement varies by the time of year and diminishes over time, dropping to zero by 2030. MWDOC, IRWD and the SOC agencies are interested in understanding if the capacity can be expanded or extended over a longer period of time, which is the purpose of the study.

The study will examine constraints that can be identified that limit the ability of IRWD to supply emergency water to SOC and propose solutions to those constraints as part of the study findings. Furthermore, IRWD is looking to expand its groundwater resources capabilities by 12,500 AFY by the year 2025. The study will also examine the potential use of the East Orange County Feeder No. 2 (EOCF#2) as a potential conveyance method for conveying the groundwater to the IRWD service area and also to the SOC agencies.

The hydraulic model of the IRWD water system is complicated and large. It contains more than 45,000 pipes, 162 pumps, 39 tanks, and 36 valves each with settings and controls. Trouble shooting this model to generate useable and accurate results takes expert modeling skills combined with an in-depth understanding of IRWD's system operations to generate valid information. In this manner, the consultant selected and the IRWD engineering and operations staff will be working together to ensure a valid outcome.

It may appear that MWDOC is funding 100% of the costs of the study, but this is not the case. With respect to the study effort, the following should be noted:

1. Overall the commitment to the work is a shared responsibility, almost identical to the 2006 Study whereby MWDOC funded the consultant's time (Tetra Tech in 2006) but IRWD contributed their staff time towards the effort.
2. IRWD staff has already conducted portions of the analysis on their own time and drafted the initial scope of work. MWDOC contributed to the scope of work and the two agencies have worked together in seeking consultants to provide assistance. Any consultant hired need to have experience on IRWD's hydraulic model and will require assistance from IRWD staff.
3. The prior work done by IRWD was at the cost of their own staff time and consulting assistance to conduct initial runs to provide to the consultant MWDOC hires. The



main reason for doing this is that IRWD will be turning over their hydraulic model and driver files to the consultant and it should save our consultant time and result in a more robust outcome; the consultant has initial runs to calibrate to for QC purposes.

4. Since the water system is IRWD's, they will be providing the technical and operational support to MWDOC's consultant along the way. This is very staff intensive work. In addition, IRWD takes time to corroborate the consultant's hydraulic conclusions to make sure they will work. This is a high level of QC undertaken by IRWD.
5. IRWD staff, along with MWDOC staff will be involved in all meetings and report preparation in a collaborative manner.
6. IRWD staff will be providing to the consultant, concepts on where IRWD will seek to secure an additional groundwater production of 12,500 AF per year by 2025 (17 cfs or 27 mgd). This is additional work IRWD will be conducting at their cost but the movement of the additional groundwater will have the potential to enhance the SOC Interconnection capability.
7. The overall goal of the study is to work together to bring about regional solutions to emergency needs while providing mutual benefit. Sharing the cost efforts, as was done in the 2006 study funded by MWDOC, is what is being proposed. After the costs and concepts are outlined, it is still a decision by each agency whether or not to move forward with any projects.

MWDOC completed and issued the RFP to five pre-qualified consultants on Feb 23, 2018. Proposals were received from three consultants:

- Dudek
- Stantec
- West Yost

The proposals were reviewed and evaluated by IRWD staff and MWDOC staff. All three proposals fully met the requirements of the RFP and were all well prepared and similar in hours and expenses. Via the evaluation process it is recommended that the study contract be awarded to Dudek.

The schedule for the work is as follows:

- Recommendation to MWDOC P&O Committee Apr 2, 2018
- Notice of Award (MWDOC Board) Apr 18, 2018
- Notice to Proceed Apr 25, 2018
- Workshop #1 Jun 27, 2018
- Workshop #2 Aug 8, 2018
- DRAFT Report Sept 5, 2018
- Final Report Oct 17, 2018

MWDOC has \$80,000 in funding available in this year's budget and sufficient funds in next year's budget to cover the remaining projected expenses.





**CONSENT CALENDAR ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert Hunter  
General Manager

Staff Contact: Joe Berg  
Director of Water Use Efficiency

**SUBJECT: Water Loss Audit Validation Research**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to enter into a professional services agreement with Water Systems Optimization, Inc. to provide independent water loss audit report validation services for member agencies, using budgeted research funds of \$52,000.

**COMMITTEE RECOMMENDATION**

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Committee concurred with staff recommendation.

**SUMMARY**

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Staff is proposing to establish a MWD OC water loss audit validation process for 2018 to maintain the same independent validation consistency we have achieved in 2016 and 2017. Staff will share our results with the State Water Resources Control Board (Water Board), who is charged with establishing performance standards for the volume of water losses. MWD OC's research will help the Water Board develop a state-wide policy that is based on superior quality and consistently derived local data. Our observations will summarize the differences between MWD OC's three-years of consistent data versus the broader state-wide data set that is relying on two different validation approaches. This effort will benefit member agencies as a core research program within our existing Water Loss Control

<b>Budgeted (Y/N): Yes</b>	Budgeted amount: \$75,000	Core <u>  X  </u>	Choice <u>      </u>
<b>Action item amount: \$52,000</b>		Line item: 35-7040	
<b>Fiscal Impact (explain if unbudgeted):</b> This project is proposed to be funded with budgeted research funds.			



Technical Assistance Program in partnership with Water Systems Optimization, Inc. and utilizes budgeted MWDOC funds

## DETAILED REPORT

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Senate Bill 555 requires each urban retail water supplier, on or before October 1, 2017 and by October 1 of each year thereafter, to submit a completed and validated water loss audit report for the previous calendar or fiscal year, as prescribed by rules adopted by the Department of Water Resources (DWR). The bill also requires:

- DWR to post all validated water loss audit reports on its internet website in a manner that allows for comparisons across water suppliers and to make these reports available for public viewing.
- DWR to provide technical assistance to guide urban retail water suppliers' water loss detection programs.
- the Water 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.
- the Water Board to contribute up to \$400,000, using funds available for the 2016–17 fiscal year, toward procuring water loss audit report validation assistance for urban retail water suppliers (only 2017).

In response to this legislation, in October 2015 the MWDOC Board authorized staff to begin a Water Loss Control Technical Assistance Program for its member agencies. Water Systems Optimization, Inc. (WSO) was retained to assist agencies with water loss audit development and validation, component analysis of real losses, meter accuracy testing, and leak detection. Because of this, Orange County agencies are significantly ahead of all other agencies in the state with regard to knowledge and understanding of distribution system water loss. Orange County agencies have two consecutive validated water loss audit reports (2016 and 2017), while nearly all other agencies have just one validated water loss audit (2017).

What is a Water Audit Validation? According to the Water Research Foundation *Level 1 Water Audit Validation: Guidance Manual*, "water audit validation is the process of examining water audit inputs to improve the water audit's accuracy and document the uncertainty associated with the water audit data." Notably, WSO was the lead researcher on this Water Research Foundation report. Though water audit validation can be conducted at three distinct levels of rigor, all water audit validation efforts share two common goals. First, the water audit validation aims to identify and appropriately correct for inaccuracies in water audit data and application of methodology. Secondly, the water audit validation aims to evaluate and communicate the uncertainty inherent in the water audit data.

For 2017, the Water Board funded a state-wide Technical Assistance Program that provided water loss audit report validation for all urban water suppliers in the state, including agencies throughout Orange County. This process established the first state-wide validated water loss audit report dataset. The Technical Assistance Program is no longer available, as it was only offered for the first year of SB 555 requirements.

SB 555 charged DWR with providing technical assistance to guide urban retail water suppliers' water loss detection programs, including water loss audit report validation.



According to the DWR Guidelines, water loss audit reports must be validated by an independent individual that was not involved in compiling the audit report.

Beyond 2017, DWR has defined two paths individuals can take to become a water loss audit report validator:

1. Show proof of validating a minimum of ten water loss audit reports, or
2. Become a Certified Water Loss Audit Validator through the California-Nevada Chapter of the American Water Works Association (Cal-Nev AWWA) Water Audit Validator Certification Program.

Today, because water loss audit validation is so new, very few individuals/consultants have validated a minimum of ten water loss audit reports.

DWR selected Cal-Nev AWWA to develop the Water Audit Validator Certification Program due to its long term success in administering similar programs for backflow, cross connection treatment, and distribution certifications. The Cal-Nev AWWA has convened a Water Audit Validation Certification Committee. Joe Berg is an active member of this committee. This committee is nearing the end of the process of developing a Water Audit Validator Certification Program. This Water Audit Validator Certification Program is scheduled to begin in April 2018, though dates have not yet been published. The price of Certification training registration is anticipated to be approximately \$2,000 per person. Those who successfully complete the coursework and pass a test will be eligible to validate water loss audits and sign certification forms to be submitted with the water loss audit to DWR.

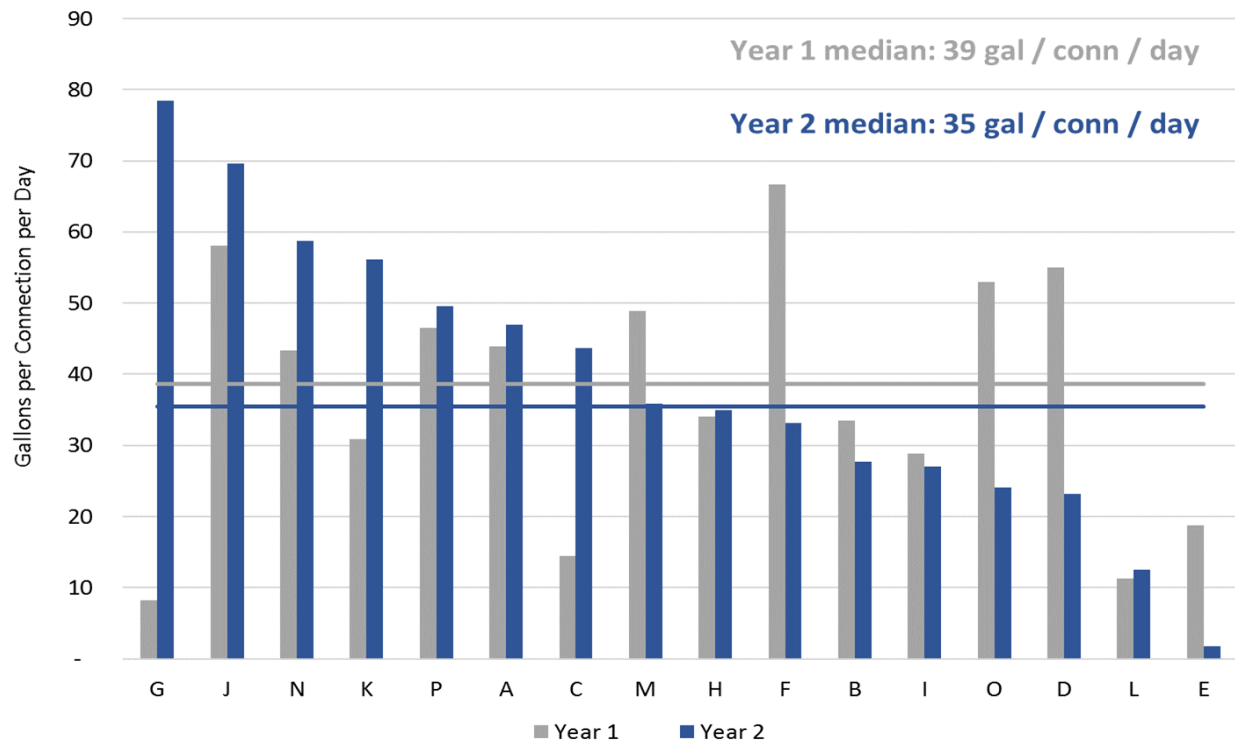
On March 9, 2018, Water Board staff began the stakeholder process of developing rules requiring urban retail water suppliers to meet performance standards for the volume of water loss. This was the first of four stakeholder meetings the Water Board plans to hold. At this meeting, Water Board staff revealed that 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 data set. Starting in 2018, all other validations will be done by a broader group of validators, including consultants and water agency staff who complete the Cal-Nev AWWA Water Audit Validator Certification. As a result, the variability of water balance validations will increase significantly from year to year and may result in the standard being set based upon poor quality data.

At the conclusion of the second year of MWDOC's Water Loss Control Technical Assistance Program, staff presented the water loss audit results to the Water Board staff who are leading the process to set the water loss volume standard by the July 1, 2020 deadline. A key takeaway for Water Board staff was the variability of data from Year 1 to Year 2. For example, in Figure 1, half of the agencies (G, N, K, C, F, O, D, and E) have significantly different results for Water Loss per Connection per Day between Year 1 and 2. These differences are driven by the data used to compile the Water Loss Audit. Each year



an agency compiles a water loss audit report, they identify data improvements to be made for the subsequent water loss audit report. Over time, questionable or suspicious data are improved, leading to water loss audit results that are more reliable and consistent from year to year.

Figure 1  
Water Loss per Connection per Day



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.

MWDOC's Water Loss Control Technical Assistance Program has positioned our staff and member agencies for success due to deeper knowledge of water loss and a consistent, independently-validated water loss audit data set. Staff is proposing to extend our water loss audit report validation for 2018 to all member agencies as a Core program using MWDOC budgeted research funds. This will allow Orange County's data to be validated consistently for a third consecutive year. The results of this three-year data set will be shared with Water Board staff with the intent to use this data to better inform the standards setting process.



Twenty-six of MWDOC's member agencies are considered urban water suppliers and are therefore required to have their water loss audit reports independently validated (EOCWD and Serrano do not serve 3,000 connections or 3,000 acre feet per year and are not subject to SB555). Staff discussed this research effort with WSO and negotiated a discounted fixed cost of \$2,000 per agency. The total cost for this research effort would be \$52,000<sup>1</sup>. 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 Boards standard setting process.

Staff recommends the Board of Directors authorize the General Manager to enter into a professional services agreement with Water Systems Optimization, Inc. to provide independent water loss audit report validation services for member agencies, using budgeted research funds of \$52,000. Staff recommends this research effort as it will provide Water Board staff with more consistent and extensive water loss audit data as they work to establish volumetric water loss standards for urban water suppliers.

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<sup>1</sup> MWDOC technical assistance program includes water loss audit validation by WSO at a fixed cost of \$2,500 per retail agency. In 2016, this cost was paid by some, but not all, retail agencies.





**CONSENT CALENDAR ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert J. Hunter, General Manager

**Staff Contacts:** Cathleen Harris, Administrative Services Manager  
**Katie Davanaugh, Senior Executive Assistant**

**SUBJECT: DISTRICT BENCHMARK COMPENSATION AND BENEFITS STUDY**

**STAFF RECOMMENDATION**

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It is recommended that the Board of Directors:

- 1) Approve the proposed pay structure which includes title, classification and FLSA status changes and a 3.62% pay structure adjustment to the salary ranges only, effective July 1, 2018.
- 2) Approve revisions to the District's policy regarding Compensation and Benefits Surveys and Pay Structure Adjustments, as presented.

**COMMITTEE RECOMMENDATION**

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Committee concurred with staff recommendation.

**DETAILED REPORT**

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In accordance with District policy, a comprehensive compensation and benefits survey shall be conducted every three years to evaluate market practices and job grading. The last survey was initiated in fall of 2014 and completed in May 2015.

In November of 2017, the District awarded a contract to Ralph Andersen & Associates to perform the Compensation and Benefits Study for completion in spring 2018. Ralph Andersen & Associates recently completed the District's 2018 benchmark study and will review its findings at the April 11<sup>th</sup> A&F Committee Meeting. The presentation is attached.

<b>Budgeted (Y/N): Y</b>	Budgeted amount: \$40,000	Core __X	Choice __
<b>Action item amount: NA</b>	Line item:		
<b>Fiscal Impact (explain if unbudgeted):</b>			



### Salary Ranges/Reclassifications/Title Changes/Exempt Status:

The survey results identified that overall, MWDOC's current ranges, compared to the median market range maximums, are near market. In an effort to maintain internal equity within the pay structure and stay competitive with the labor market, six out of 28 job classifications have been identified for reclassification.

The following outlines the recommended range adjustments:

Proposed* Classification Titles	Current Pay Grade	Current Range Max	Recommended Range	Recommended Range Max
Accountant	8	6,914	9	7,432
WEROC Emergency Coordinator*	8	6,914	9	7,432
Sr. Accountant	10	7,989	11	8,589
Public Affairs Supervisor	11	8,589	12	9,233
Sr. Executive Assistant to Board	12	9,233	13	9,925
Administrative Services Manager	16	12,330	17	13,255

In addition, based on organizational structure, reporting relationships, career progression and industry guidelines, four positions are being recommended for title changes and two positions (Office Specialist and Principal Water Resources Planner) are being removed from the pay structure.

The following outlines the proposed title changes:

Current Classification Title	Recommended Classification Title
WEROC Emergency Programs Coordinator	WEROC Emergency Coordinator
WUE Program Specialist	Sr. WUE Analyst
WUE Program Coordinator	WUE Analyst II
WUE Program Analyst	WUE Analyst I

### FLSA Exemptions

Consultant reviewed the Districts Exempt and Non-Exempt positions in accordance with the Fair Labor Standards Act and noted that some of the positions are considered to be in a gray area regarding FLSA exemption. They advised that it's never a problem to err on the conservative side and allocate a position as Non-Exempt even if you can allocate it as an Exempt position. It was noted that all of the District's existing Exempt positions are classified appropriately, but the following Non-Exempt positions could be allocated Exempt.

- Sr. Accountant
- Public Affairs Specialist
- Network Systems Engineer
- WUE Program Specialist



Based on its review, staff is recommending only the Network Systems Engineer and Sr. Executive Assistant to the Board be changed from Non-Exempt to Exempt status at this time.

### **2018/19 Merit Pool Budget**

A 4% salary merit pool plus 1% for employee share of the PERS contribution is included in the FY 2018/19 Budget. The proposed reclassifications and title changes will be implemented after July 1, 2018 and will not have an additional financial impact on the proposed budget.

Anticipating that the market will move in July 2018, staff is recommending a 3.62% pay structure adjustment to the salary ranges only, which will help to stay consistent with the market to avoid falling behind. The average CPI-U rate for Los Angeles-Long Beach-Anaheim for the period of February 2017 to February 2018 is 3.62%.

### **District Benefits:**

The District's health, retirement and leave benefits were reviewed and the findings determined that the District's benefits are competitive with the labor market, therefore no changes are recommended at this time.

### **District Policy Regarding Frequency of Compensation and Benefits Study**

The District's policy currently states that the District establishes its ranges by considering the mean (average) of the market place. Based on the study findings and ensuring that the District's policy is consistent with industry standards; staff is recommending that a revision to the policy be made stating that the salary ranges will be established based on the median of the marketplace. Using the median places positions at the 50<sup>th</sup> percentile, which is a common target for public agencies, is less susceptible to high/low data, and is a more stable and reliable indicator of the job market.

In addition, the A&F Committee inquired whether a comprehensive salary and benchmark study should be performed every four years instead of three years. Staff is recommending it remain every three years to stay competitive with the market and not fall behind.

Furthermore, staff is recommending the timing of the annual pay structure adjustment survey be changed to November in order to gather data for the annual budget process.

Staff is recommending the following changes to the section of the Personnel Manual regarding Compensation and Benefits Surveys and Pay Structure Adjustments:

The compensation philosophy guiding the District's decisions related to employee compensation and benefits is that of desiring to provide salary ranges and benefit practices that are competitive with market practices. In conducting compensation surveys, the District establishes its salary ranges by considering the median ~~mean (average)~~ of the marketplace. In administering benefits surveys, the District considers prevailing and emerging practices related to the District's labor market. This approach has been adopted in an effort to attract and retain the best available



staff and continue in its commitment to quality service to the District's member agencies.

Human Resources shall conduct a planned pay structure adjustment survey in ~~first calendar quarter~~ November of each year of the direct labor market agencies to determine the percentage adjustment to the Pay Structure ranges for the upcoming fiscal year to go into effect July 1.

A comprehensive compensation and benefits survey shall be conducted every three years to evaluate market practices and job grading. Human Resources may conduct interim market analyses for newly established or modified job classifications between the comprehensive annual reviews.

Staff is recommending the following for consideration:

- 1) Approve the proposed pay structure which includes title, classification and FLSA status changes and; a 3.62% pay structure adjustment effective July 1, 2018.
- 2) Approve revisions to the District's compensation policy regarding Compensation and Benefits Surveys and Pay Structure Adjustments, as presented.



# MWDOC Draft Compensation Survey Findings

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Ralph Andersen &  
Associates

April 11, 2018





# Why Surveys Are Done

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Compensation surveys are a necessary part of assessing and updating an organization's compensation plan.

- Anticipate and understand what labor market is doing
- Data-driven framework for allocating resources to wages and benefits
- Provide defensibility and public accountability employee compensation
- Optimize the District's ability to recruit and retain employees
- Processes such as fact-finding are data-driven

Public and Private employers both use market data to assess compensation; just a difference in accessibility and transparency of data.





# Survey Agencies

Survey agencies are a balance between the selection factors of:

- Nature of services
- Geographic proximity
- Size
- Economic similarity



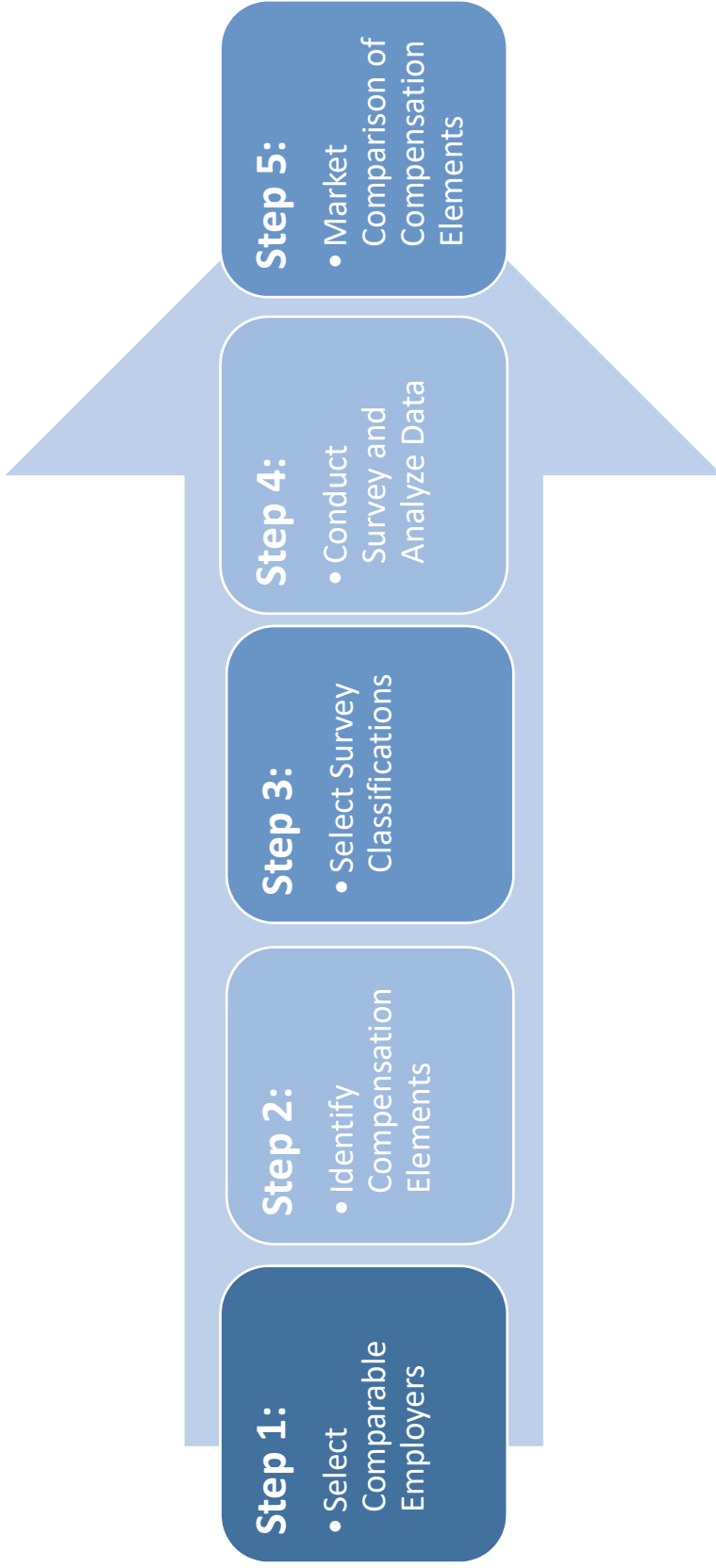
## CORE Survey Agencies:

Calleguas MWD	Orange County SD
Central Basin BMW	Orange County WD
Eastern MWD	San Diego Co WA
El Toro Water District	Santa Margarita WD
Inland Empire UA	South Coast WD
Irvine Ranch WD	Three Valleys MWD
Laguna Beach CWD	Walnut Valley WD
Las Virgenes MWD	West Basin MWD
Mesa WD	Western Municipal WD
Moulton Niguel WD	Yorba Linda WD
City of Brea	<b>Supplemental:</b>
City of Fountain Valley	Metropolitan Water District
City of San Clemente	County of Orange
City of Tustin	Orange County Fire Authority
	City of Anaheim
	City of Los Angeles





# Survey Process



Compensation survey data was collected by the project consultants and included the collection and analysis of the following:

- Organization charts, budgets, and position control documents
  - Job descriptions
  - Salary schedules
  - Benefits summaries
  - Follow-up information provided by each survey agency
- Survey job matches were determined by the project consultants and went beyond title comparisons.



# Matching Job Classifications

Matching job classifications relies on a number of source documents beyond comparisons of job descriptions.

- Job matches only occur if a position exists and is allocated in the budget (and staffed). Some agencies may have legacy job descriptions or titles in their salary schedules that are not used.
- Job matches are based on a review of major and essential job duties along with a comparison of qualifications. Significant differences can result in no comparable job being matched. Examples of differences include:
  - Mismatches in qualification requirements such as requiring specific certifications or a four-year degree
  - Different organization structures such as layers of supervisory and management and broader responsibilities
  - Position allocations that demonstrate working versus advanced levels
- Factors not considered in matching jobs:
  - Staffing, equipment, facility, and resource differences that don't impact required skills and abilities
  - Job functions performed within a broad classification that is used in many assignments
  - Job classifications performing the same duties but in a different department
  - Employee performance or unique qualifications that are beyond what is required





# Scope of Data Collection

The compensation survey included the collection and analysis of base salary and benefit data to understand how the District's total compensation compares with labor market practices. Elements included in the survey include:

- Base Salary
  - Range maximum (control point of range)
- Cash Benefits
  - Employer Paid Member Contribution (EPMC)
  - Longevity
  - Deferred Compensation
- Insurance benefits
  - Health
  - Dental
  - Vision
- Employer Retirement
  - Normal Cost Employer Contribution
  - Retirement Formula

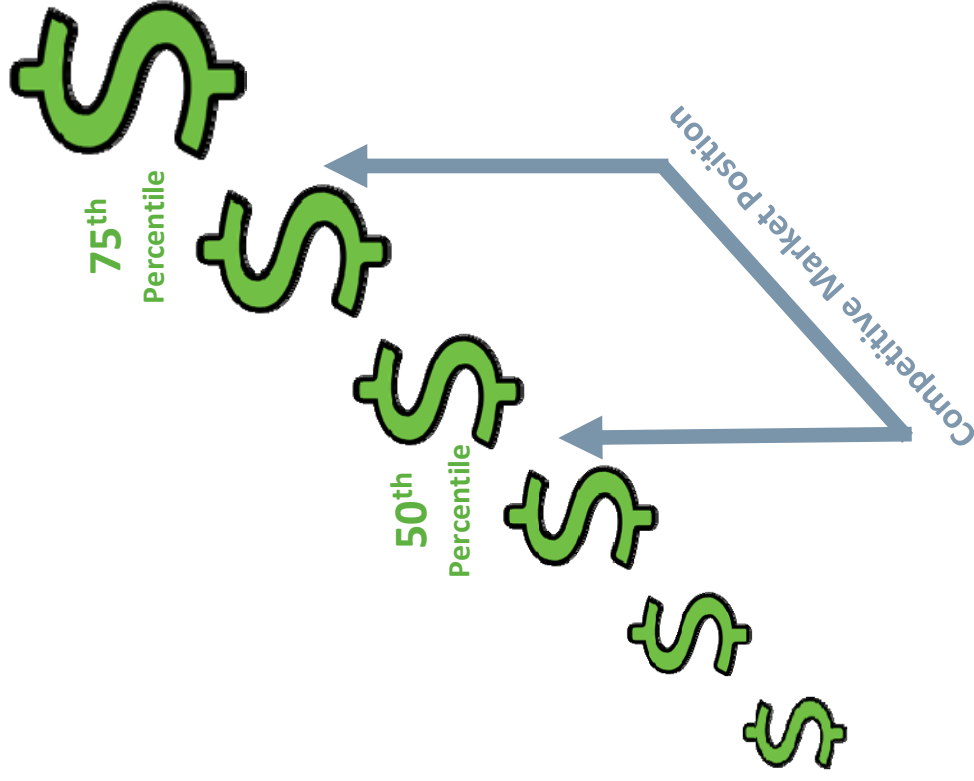
Employer retirement contributions may not be a relevant benefit comparison since differences in employer contribution rates may have little to do with the retirement benefits received.





# Market Position

- Establishes competitive position
- Historical practices is an important consideration; change in practice requires explanation
- \$ or % differences between percentiles depends on the array of data; can be very small if data is tightly arrayed
- Recruitment and retention goals

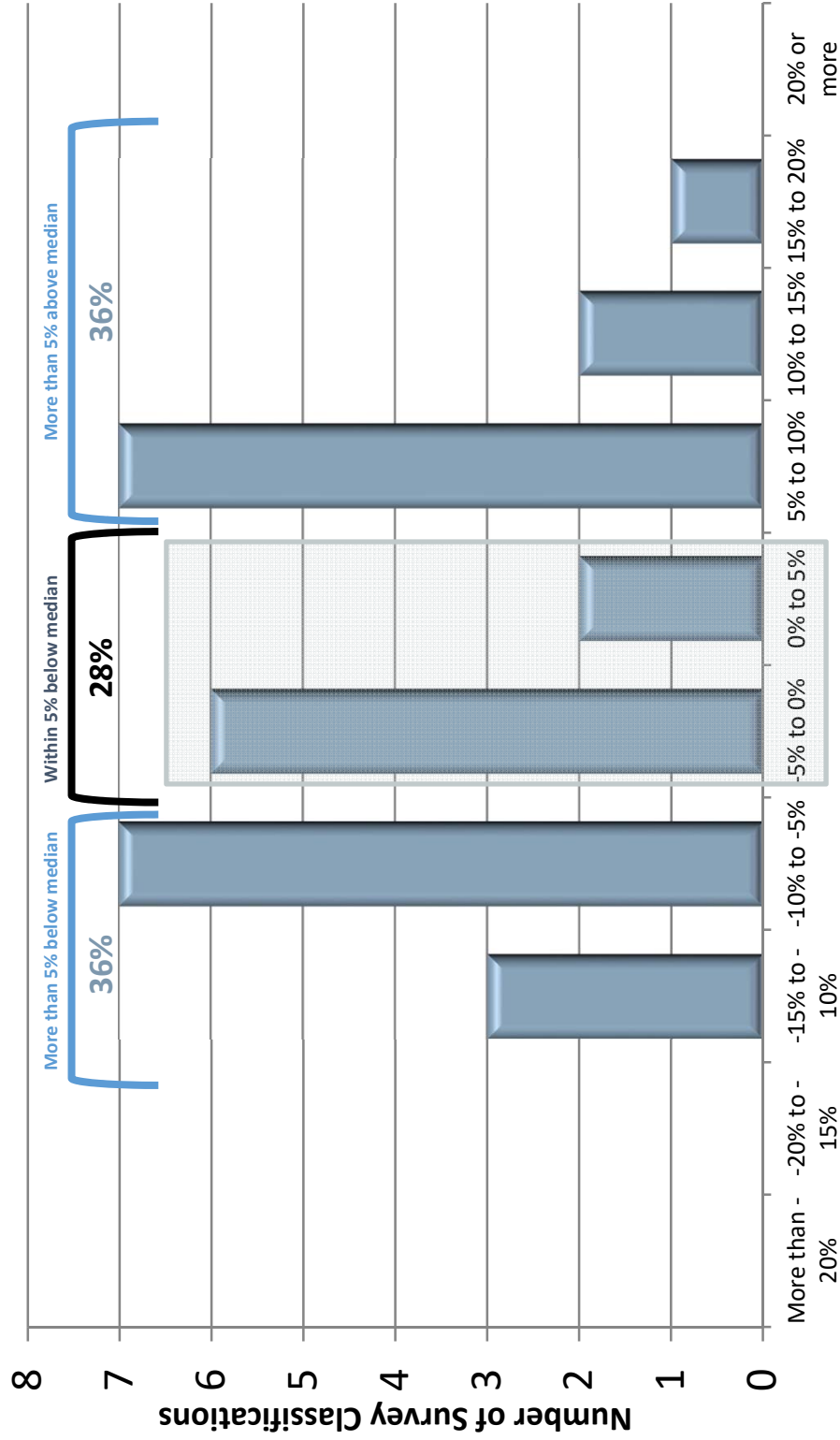






# Market Summary – All Jobs

## At Median on Average



Strongest trend of the survey jobs should be in shaded region

## Base Salary Relationship to Market Median





# Survey Findings

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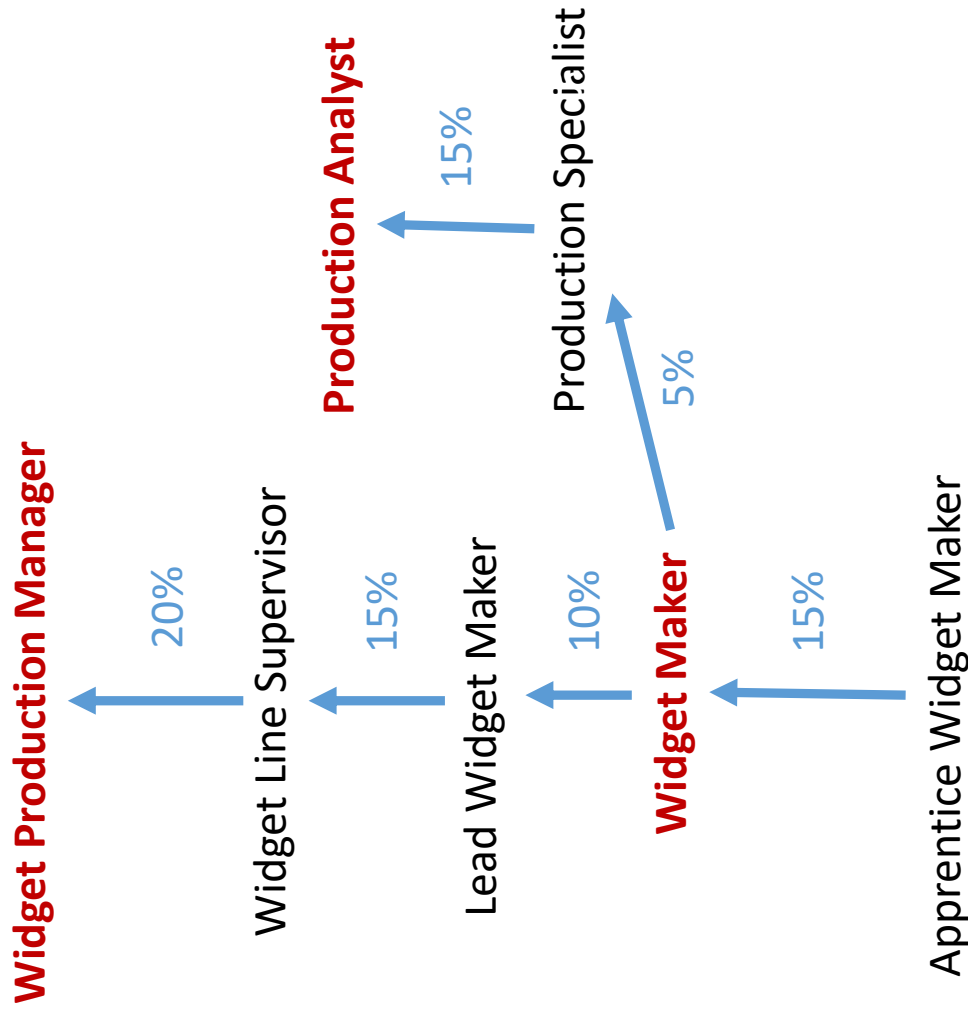
- While the overall survey results for all employee groups show a strong central trend (bell curve), there are jobs that are more than 5% below and 5% above market.
  - 36% of the survey jobs are more than 5% below the median (50<sup>th</sup> percentile)
  - 36% of the survey jobs are more than 5% above the median
  - 28% of the survey jobs are within 5% of the median
- On average, the District is at the market median and is at the 48<sup>th</sup> percentile
- Our analysis of the District's benefits found the following:
  - Overall the District's benefits are competitive with the labor market with less than a 0.5% variance when all benefits are analyzed
  - 11 agencies provide an employer paid deferred compensation benefit
  - 6 agencies still have Employer Paid Member Contribution (EPMC) for retirement
  - The District's insurance benefits are comparable to the market
  - The District's leave benefits are comparable to the market





# Benchmarking - Example

- Establish market benchmarks
  - Best job matches
  - High number of comparables
  - Best data statistically
- Analyze internal relationship
- Establish % differentials
- Result: salary range adjustments







# Salary Range Recommendations

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- Benchmark positions tied to market median
  - Not all jobs need market ties
  - Tied to control point
- Internal relationships
  - Assessment of differences and similarities in duties, role, responsibilities, qualifications, and resources
    - 5% difference between jobs when minor differences exist
    - 10% between classes in a series where moderate differences exist
    - 15% - 20% minimum over subordinates and between job classes with significant differences
- Adjustments to pay range, not employee salary
- Internal salary alignments for internal equity where important
  - Some market relationships may be ignored due to internal ties and better market benchmarks
- Adjusted to fit the District's salary table





# Classification Review

Analysis of District positions and job classifications based on:

- Assigned role, duties, and qualifications
- Organization structure, reporting relationships, and career progression
- Industry guidelines for titling and classification structures

Current Classification Title	Recommended Classification Title
WEROC Emergency Programs Coordinator	WEROC Emergency Coordinator
WUE Program Specialist	Sr. WUE Analyst
WUE Program Coordinator	WUE Analyst II
WUE Program Analyst	WUE Analyst I





# Salary Range Adjustments

- Adjustment based on median market data and consideration of internal relationships
- Market median deviation equal to or more than 7.5% below median based on the District's salary range structure
- The following job classifications require placement in a higher salary range:

Proposed* Classification Title	Current Pay Grade	Current Range Max	Recommended Pay Grade	Recommended Range Max
Accountant	8	6,914	9	7,432
WEROC Emergency Coordinator*	8	6,914	9	7,432
Sr. Accountant	10	7,989	11	8,589
Public Affairs Supervisor	11	8,589	12	9,233
Sr. Executive Assistant to Board	12	9,233	13	9,925
Administrative Services Manager	16	12,330	17	13,255





# Recommendations/Next Steps

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- Approve the proposed pay structure which includes title, classification and FLSA status changes and; a 3.62% pay structure adjustment effective July 1, 2018.
- 2) Approve revision to the District's compensation philosophy regarding Compensation and Benefits Surveys and Pay Structure Adjustments, as presented.



# MWDOC PAY STRUCTURE - EFFECTIVE JULY 2018 (3.62% COLA adjustment)

Pay Grade	Exempt / Non-Exempt	Job Classification		Range Minimum \$	25th Percentile \$	Range Midpoint \$	75th Percentile \$	Range Maximum \$
R1	NE	Office Assistant	annually	34,395	37,386	40,400	43,414	46,428
			monthly	2,866	3,116	3,367	3,618	3,869
			hourly	16.54	17.98	19.42	20.87	22.32
R2		Open	annually	41,251	44,863	48,475	52,087	55,700
			monthly	3,438	3,739	4,040	4,341	4,642
			hourly	19.83	21.57	23.30	25.04	26.78
R3	NE	Database Coordinator	annually	44,357	48,245	52,110	55,999	59,887
			monthly	3,696	4,020	4,343	4,667	4,991
			hourly	21.32	23.19	25.06	26.92	28.80
R4	NE	Accounting Technician	annually	47,693	51,857	56,022	60,209	64,373
			monthly	3,974	4,321	4,668	5,017	5,364
			hourly	22.93	24.93	26.93	28.95	30.95
R5	NE	Administrative Assistant	annually	51,259	55,746	60,232	64,718	69,205
			monthly	4,272	4,645	5,019	5,393	5,767
			hourly	24.64	26.80	28.96	31.12	33.27
R6	NE	Sr. Admin Assistant	annually	55,101	59,933	64,741	69,573	74,381
	NE	Public Affairs Assist	monthly	4,592	4,994	5,395	5,798	6,198
			hourly	26.50	28.82	31.13	33.45	35.76
R7	NE	Records Coordinator	annually	59,243	64,419	69,596	74,795	79,972
			monthly	4,937	5,368	5,800	6,233	6,664
			hourly	28.49	30.97	33.46	35.96	38.44
R8	NE	Public Affairs Coordinator	annually	63,683	69,251	74,818	80,386	85,977
			monthly	5,307	5,771	6,235	6,699	7,165
			hourly	30.62	33.29	35.97	38.65	41.33
R9	NE	WUE Analyst I	annually	68,445	74,450	80,432	86,437	92,418
	NE	Executive Assistant	monthly	5,704	6,204	6,703	7,203	7,702
	NE	Assoc. Water Resources Analyst	hourly	32.90	35.80	38.67	41.56	44.43
	NE	Accountant						
	NE	WEROC Emergency Coordinator						
R10	NE	Public Affairs Specialist	annually	73,599	80,018	86,460	92,902	99,343
	NE	WUE Analyst II	monthly	6,133	6,668	7,205	7,742	8,279
	NE	WEROC Specialist	hourly	35.39	38.47	41.56	44.66	47.76
	NE	Sr. Executive Assistant						
R11	E	Water Resources Analyst	annually	79,120	86,023	92,948	99,873	106,798
	NE	Sr. Accountant	monthly	6,593	7,169	7,746	8,323	8,900
			hourly	38.04	41.35	44.69	48.02	51.34
R12	E	Fin. Analyst/Database Analyst	annually	85,033	92,487	99,919	107,373	114,804
	E	Network Systems Engineer	monthly	7,086	7,707	8,327	8,948	9,567
	NE	Sr. WUE Analyst	hourly	40.88	44.47	48.04	51.62	55.20
	E	Public Affairs Supervisor						



R13	E	Accounting Supervisor	annually	91,429	99,412	107,419	115,425	123,409
	E	Public Affairs Manager	monthly	7,619	8,284	8,952	9,619	10,284
	E	Sr. Water Resources Analyst	hourly	43.96	47.79	51.64	55.49	59.33
	E	Sr. Exec. Assist to the Board						
R14	E	WUE Program Supervisor	annually	98,285	106,867	115,471	124,076	132,680
	E	WEROC Programs Manager	monthly	8,190	8,906	9,623	10,340	11,057
	E	Sr. Financial Analyst/Database Analyst	hourly	47.25	51.37	55.52	59.65	63.79
R15	E	Sr. Engineer	annually	105,647	114,896	124,145	133,371	142,619
	E	Accounting Manager	monthly	8,804	9,575	10,345	11,114	11,885
	E	Governmental Affairs Mgr	hourly	50.79	55.24	59.69	64.12	68.57
R16	E	Principal Water Resources Analyst	annually	113,562	123,501	133,440	143,379	153,317
	E	WUE Program Manager	monthly	9,463	10,292	11,120	11,948	12,776
			hourly	54.60	59.37	64.15	68.93	73.72
R17	E	Principal Engineer	annually	122,097	132,772	143,448	154,146	164,821
	E	Administrative Services Manager	monthly	10,175	11,064	11,954	12,845	13,735
			hourly	58.70	63.83	68.97	74.11	79.24
R18	E	Director of Public Affairs	annually	131,254	142,734	154,215	165,695	177,176
	E	Director of Water Use Efficiency	monthly	10,938	11,895	12,851	13,808	14,765
			hourly	63.10	68.62	74.14	79.66	85.18
R19	E	Director of Finance/IS	annually	141,101	153,433	165,787	178,119	190,474
	E	Associate General Manager	monthly	11,758	12,786	13,816	14,843	15,873
			hourly	67.84	73.77	79.70	85.63	91.57
R20	E	Open	annually	151,661	164,936	178,211	191,486	204,761
			monthly	12,638	13,745	14,851	15,957	17,063
			hourly	72.92	79.30	85.68	92.06	98.44
R21	E	Assistant General Manager	annually	159,644	175,611	191,578	207,545	223,511
			monthly	13,304	14,634	15,965	17,295	18,626
			hourly	76.75	84.43	92.11	99.79	107.45
GM	E	General Manager (eff. 9/9/17)	annually	260,614				260,614
<b>MWDOC INTERN PAY STRUCTURE</b>								
INT	NE	Student Intern	hourly	14.28	16.05	17.81	19.58	21.35

Annual and Monthly amounts are based on a 40-hour work week.

If you have questions on the pay structure or classifications,

please contact Human Resources at 714.963.3058





**ACTION ITEM**

April 18, 2018

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

**FROM: Robert Hunter  
General Manager**

Staff Contact: Francisco Soto, WEROC Emergency Coordinator

**SUBJECT: WEROC Emergency Operations Plan Resolution**

**STAFF RECOMMENDATION**

---

Staff recommends the MWDOC Board of Directors adopt Resolution approving the revised WEROC Emergency Operations Plan.

**COMMITTEE RECOMMENDATION**

---

Committee concurred with staff recommendation.

**SUMMARY**

---

The Water Emergency Response Organization of Orange County (WEROC) Emergency Operations Plan (EOP) was last updated in 2011 and required significant revisions. Revision of the EOP is a key factor for ensuring readiness for disaster response and recovery. Emergency Operation Plans should be updated yearly for frequently changed information (i.e. phone numbers and contacts), and revised every two years for larger concepts (i.e. lessons learned and new hazards). EOP revisions are required by the State Office of Emergency Services in accordance with the National Incident Management System (NIMS) and the California Standardized Emergency Management System (SEMS). The revised WEROC EOP will be distributed for comment to WEROC's Member Agencies and other response partners, and will be presented at the May 1<sup>st</sup> WEROC Quarterly Emergency Coordinators meeting. No significant changes are expected, including the State's review, which may take several months.

Budgeted (Y/N): NA	Budgeted amount: NA	Core ____	Choice ____
Action item amount: \$0	Line item:		
Fiscal Impact (explain if unbudgeted): The plan was updated by staff.			



## DETAILED REPORT

---

The EOP is designed to include the State-mandated Standardized Emergency Management System (SEMS), the concepts and principles set forth in the Federally mandated National Incident Management System (NIMS), the Incident Command System (ICS), and responsibilities of the County of Orange Operational Area (OA), and will reflect valuable input by WEROC Member Agencies, Metropolitan Water District of Southern California (MET), and other response partners.

The EOP reflects several major changes in WEROC's planning and response operations. These include new Member Agency and MWDOC Emergency Proclamation procedures, a revised Emergency Operations Center (EOC) organizational structure, alignment with the Hazard Mitigation Plan, a newly developed EOC Action Plan which provides the framework for EOC staff to respond to emergencies, inclusion of emergency purchasing authorities, and it has been condensed in a user friendly format.

The EOP also includes threat specific annexes which address the primary hazards identified in the Risk Assessment of the Hazard Mitigation Plan. These annexes include hazard specific response actions that should be taken in addition to those actions addressed in the EOP and EOC position guides. Hazards which are not identified in the annexes were not created because WEROC's role in response mirrors that of other hazards.

Furthermore, Staff met with a Finance Recovery expert to clarify and discuss issues related to Special District Emergency Declaration, Public Assistance reimbursement claims, and MWDOC's emergency purchasing authority. Once clarified, these concepts were discussed with MWDOC management and incorporated into the plan as appropriate.

In addition to these major revisions, there are additional updates to the Plan that include but are not limited to: Notification and Activation Protocols used for WEROC EOC activation, staff procedures, and inclusion of corrective actions from past exercises and actual events, and current County OA EOC operations. It is important to note that the WEROC EOP is written to assist the staff responding to the WEROC EOC. This plan is not intended to be a response guide for the WEROC Member Agencies. It is our assumption that each Member Agency has an internal EOP and policies for response. The EOP will be provided to the WEROC Member Agencies for comment at this time and will be presented at the WEROC Member Agencies Emergency Services Coordinator Quarterly Meeting on May 1, 2018.

The WEROC EOP will be presented to the Planning and Operations Committee at the April 2, 2018 meeting. The Board will be given an opportunity to review the document and provide comments for inclusion into the plan on April 18, 2018. The plan is being brought to the Board for review and approval.





# **WEROC EMERGENCY OPERATIONS PLAN (EOP)**

Revised March 2018





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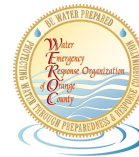
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## QUICK REFERENCE

### How To Use This Document?

Personnel who are assigned a responsibility in this plan should have a working knowledge of the functions and actions described throughout. All WEROC Emergency Operations Center (EOC) staff should refer to this document before and throughout a response for guidance in WEROC EOC activation, response, and deactivation procedures. When WEROC EOC staff arrive to the WEROC EOC during an emergency, locate your specific position guide or the WEROC Emergency Operations Plan (EOP). If WEROC EOC staff are at home/work/car, they should refer to the WEROC Auto-Pack or Safety Center mobile application for information on activation, reporting, response, and functional duties and responsibilities.

### What To Do With This Document?

The WEROC Emergency Manager will provide a current copy of the EOP to WEROC EOC staff. All WEROC EOC staff are responsible for familiarizing themselves with the contents of this EOP. During an emergency, EOC staff should know where the EOP is located and how to use it. It is important to familiarize staff with the EOP's location and contents through review and exercises.

### What is an EOC?

An Emergency Operations Center, or EOC, is a central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management functions at a strategic level in an emergency situation. The WEROC EOC is responsible for assessing the overall condition and status of the Orange County regional water distribution and wastewater collection systems including MET facilities serving Orange County. Additionally, the WEROC EOC collects and analyzes damage assessments, obtains resource requests, and procures resources that are needed by member agencies to respond and recover from the event.

### When will I need to report to the WEROC EOC?

The EOC can be activated during an emergency situation that can result from both natural and man-made causes. Types of emergencies include earthquake, fire, flood, water contamination, power outages and dam failure. Not every incident affecting water utilities will activate the EOC. The magnitude and scale of an incident can vary widely and many can be handled within the parameters of an agency's usual policies and procedures. It is when an agency's daily operating procedures or resources are not sufficient to cope with an emergency that the WEROC EOC may be activated. For specific criteria on when to report to the EOC, see EOC Activation.

- *Automatic Activation:* Significant events (i.e. earthquake), will most likely result in an Automatic Activation.
- *Manual Activation:* Notification is provided by a member agency, the OA, MET, the Media, the DDW (potable water), or the Regional Water Quality Control Board (Wastewater) of an event. These events may result in manual activation in which staff are notified to respond to the EOC.
- *Standby for Activation:* Advanced notification of an event or possible need, such as a winter storm or an emergency replacement of a waterline. WEROC EOC will monitor the situation, and if deemed necessary, WEROC will notify EOC staff to respond to the EOC.





### **How Do I Respond To An Emergency?**

- Be prepared - have a personal emergency plan and an emergency kit ready and accessible.
- Make sure your family is safe.
- Determine whether the emergency requires you to respond to the EOC (automatic or by notification) See EOC Activation.
- Once you determine that activation is required, reference the WEROC Auto-Pack, Safety Center mobile Application for EOC maps and start-up actions upon arrival to the designated EOC.

For more specific instructions refer to the EOC Activation Section (Page 24).

### **Do I Have To Report For Duty?**

As public employees, MWDOC staff are, by law, Disaster Service Workers (DSW). If a “Local Emergency” is declared during normal work hours, staff will be expected to remain at work to respond to the emergency needs of our water utilities. If a “Local Emergency” is declared outside of normal work hours, employees may be called back to work.

Some WEROC EOC Staff have opted to sign a volunteer agreement with WEROC to volunteer their time to the WEROC EOC during emergencies. These individuals may be composed of member agency staff, private partners, and non-governmental organizations. Volunteer EOC Staff are expected to check in with their agency first for approval to respond to WEROC, and have agreed to respond as long as their own agency is not impacted.

If WEROC EOC staff are unable to report to their assigned location as a result of the event, they should immediately contact the WEROC primary contact or alternate to update them on their status and to receive further instructions. For more information on notification and reporting policies refer to EOC Activation section of the plan.

Whether reporting directly to WEROC or to another agency’s EOC or location, WEROC EOC staff need to check-in with the WEROC Emergency Manager or alternate during an emergency to notify WEROC of their status.

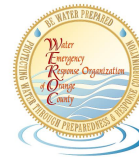
### **Where Do I Go To Report For Duty?**

WEROC maintains two functional EOC’s; the South EOC (SEOC) and alternate (MWDOC Administration building). When the EOC is activated, WEROC EOC staff are to report to the WEROC SEOC unless informed otherwise. The location will be determined based on the condition and function of each building. Maps and addresses to the EOC’s are located in **Attachment I**.

### **What Hours Will I Be Working?**

During emergencies, shifts may be extended to 13 hours. Depending on the event, length of shifts may vary. Shift schedules will be developed by the EOC Director for events requiring an extended period of response. Employees will be discouraged from working shifts longer than 13 hours without an appropriate rest period as it leads to fatigue and other safety concerns.





## ACRONYMS

CAL EPA	California Environmental Protection Agency
CPRI	Critical Priority Risk Index
CPUC	California Public Utilities Commission
DDW	Division of Drinking Water
DPH	Department of Public Health
DSW	Disaster Service Worker
DWR	Department of Water Resources
EAS	Emergency Alert System
EOC	Emergency Operations Centers
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency (Federal)
ESF	Emergency Support Functions
FEMA	Federal Emergency Management Agency (Federal)
IAP	Incident Action Plan
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IDE	Initial Damage Estimates
JIC	Joint Information Center
JIS	Joint Information System
MA	Member Agency
MET	Metropolitan Water District of Southern California
MMAA	Master Mutual Aid Agreement
MWDOC	Municipal Water District of Orange County
NEOC	WEROC North Emergency Operations Center
NGO	Non-Governmental Organization
NIMS	National Incident Management System (Federal)
NOAA	National Oceanic and Atmospheric Administration
OA	Operational Area
OCHCA	Orange County Health Care Agency
OCEMO	Orange County Emergency Management Organization
OES	Office of Emergency Services
PDA	Preliminary Damage Assessment
PIO	Public Information Officer
REOC	Regional Emergency Operations Center (Cal OES)
RWQCB	Regional Water Quality Control Boards
SEMS	Standardized Emergency Management System
SEOC	WEROC South Emergency Operations Center
SOC	State Operations Center (Cal OES)
SONGS	San Onofre Nuclear Generating Station
SOP	Standard Operating Procedures
SWRCB	State Water Resource Control Board
UC	Unified Command
WEROC	Water Emergency Response Organization of Orange County





## FORWARD

### FORWARD

The Water Emergency Response Organization of Orange County (WEROC) Emergency Operations Plan (EOP) is designed to be flexible enough to be used in all emergencies and will facilitate response and short-term activities. The goals of this plan are to outline a strategy to prepare for, respond to, and recover from an emergency or disaster that affects the Orange County water and wastewater agencies and the population served by them. As part of this strategy, this plan will:

- Establish activation protocols of the WEROC Emergency Operation Centers (EOC)
- Identify authorities and assign responsibilities for planning and response activities
- Identify the scope of hazards which will guide the specific response activities
- Outline response actions that will be taken by WEROC EOC staff
- Identify other agencies and organizations with which planning and emergency response activities should be coordinated
- Identify the role of the WEROC EOC in coordinating response efforts during an emergency impacting Orange County water and wastewater agencies
- Outline the process of assisting with the dissemination of emergency information and instructions to the public
- Describe the resources available to support EOC operations
- Provide the basis for ongoing training of EOC and member agency staff

During a major emergency or disaster, the enclosed procedures and EOC position binders at each EOC provide guidance for each function to be performed.





## **RESOLUTION NO. 2067**

### **A RESOLUTION OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY ADOPTING THE REVISED WEROC EMERGENCY OPERATIONS PLAN**

WHEREAS, The Municipal Water District of Orange County (MWDOC) established the goal of developing and maintaining an emergency plan; and

WHEREAS, The California Code of Regulation Section 2401 has since established the Standardized Emergency Management System (SEMS), and the President of the United States in Homeland Security Directive (HSPD)-5, directed the Secretary of the Department of Homeland Security to develop and administer a National Incident Management System (NIMS), both of which standardize response to emergencies involving multiple jurisdictions or agencies; and

WHEREAS, Government Code Section 8607 required all political subdivisions to be in compliance with SEMS by December 1, 1996, to be eligible for reimbursement of emergency response personnel costs and now pursuant to the President's Executive Order, Homeland Security Directive (HSPD)-5, local governments are required to establish the NIMS as the standard for incident management by September 30, 2007; and

WHEREAS, with this revised emergency plan MWDOC continues to conform to State SEMS and Federal NIMS guidelines for emergency plan compliance; and

WHEREAS, MWDOC has determined that it is in the District's best interest and benefit to maintain a current emergency plan that meets emergency management best practices.

NOW, THEREFORE, BE IT RESOLVED the Board of Directors of Municipal Water District of Orange County hereby adopts the WEROC Emergency Operations Plan, dated March 2018.

Said resolution supersedes Resolution \_\_\_\_ and was adopted on \_\_\_\_\_, by the following roll call:

AYES:	Directors
NOES	None
ABSENT:	Directors
ABSTAIN:	None

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

\_\_\_\_\_.

\_\_\_\_\_  
Maribeth Goldsby, Board Secretary  
Municipal Water District of Orange County





## **APPROVAL AND IMPLEMENTATION**

### **PLAN APPROVAL AND IMPLEMENTATION**

The Municipal Water District of Orange County Board of Directors will review and approve the plan as the administrative agency of the WEROC Program.

### **PLAN MODIFICATION**

The EOP is a living document, subject to revision based on agency reorganization, new laws, experience with exercises, and actual disasters. The EOP will be reviewed annually to ensure that plan elements are valid and current. The EOP will be modified as required based on deficiencies identified during drills, exercises or actual occurrences. Changes in agency structure and emergency response procedures will also be considered in the EOP revisions. All WEROC water utilities are invited to review the plan and provide comments.

WEROC is responsible for making revisions to the EOP that will enhance the conduct of response and recovery operations.

Revisions to the plan will be presented to the MWDOC Board every three years for approval.





## INTRODUCTION

### PURPOSE

This Plan determines the actions to be taken by WEROC EOC staff to reduce the loss of water and wastewater infrastructure; to respond effectively to a disaster; and to coordinate recovery operations in the aftermath of any emergency involving extensive damage to Orange County water and wastewater utilities.

### PLAN ORGANIZATION

The plan is organized into three elements, as well as companion documents which are incorporated into the EOP:

- **Basic Plan.** The Basic Plan contains information on the overall organizational and operational concepts relative to response and recovery.
- **Appendices.** The Appendices provide supplemental reference information.
- **Hazard Specific Annexes.** Hazard Specific Annexes provide specific information and procedures for responding to hazards that may affect Orange County water utilities.

### SCOPE

The EOP has been designed to serve the growing needs of water and wastewater utilities. It is important that the EOP be flexible enough to use in all emergencies. This plan not only meets that need but will also improve the effectiveness and efficiency of the response and short-term recovery activities. It is intended as an overview of emergency management for the WEROC organization and is not a detailed operational document. WEROC water and wastewater utilities will be referred to as “Member Agencies” from here on out.

#### Intended Audience

The intended audience of this EOP is the staff that supports the WEROC EOCs, the WEROC OA EOC Liaison position, as well as any other position in which a person is serving on behalf of the WEROC organization. This plan is also a reference for the managers, staff and elected officials of the member agencies, the OA, and other coordinating partners. An EOP Distribution List is available as **Attachment D**.

### SITUATION OVERVIEW

This section describes the county and a number of potential hazards that could affect the county water infrastructure within Orange County upon their occurrence, which would warrant the activation of this plan.

#### Community Profile, Geography, and Nature Features

From a regional perspective, Orange County, like the rest of Southern California, is heavily dependent upon imported water supplies. Approximately fifty (50%) percent of the total water consumed within Orange County comes from distant sources outside the County. This imported





water is conveyed via the Colorado River and State Water Project aqueducts which travel 242 and 444 miles, respectively, to reach urban Southern California.

The other 50% of water consumption is mostly supplied by groundwater pumped from the vast underground aquifer located below north and central Orange County. The groundwater supply resources in Orange County result from the existence of the following three groundwater basins: Orange County Water District's Groundwater Basin, the La Habra Groundwater Basin, California Domestic Water Company supplies from the main San Gabriel Basin, and San Juan Capistrano Groundwater Basin (San Juan Basin Authority). The Orange County Basin is by far the largest groundwater basin in the County.

Orange County's wastewater infrastructure has very extensive regional infrastructure, as well as locally managed collections systems. Key components of the regional infrastructure includes the reception of wastewater from outside of Orange County via the Santa Ana Regional Interceptor and pipeline, the transmission of treated wastewater to the ocean, and the conversion of 100 million gallons per day of treated wastewater into water used for groundwater recharge via the Ground Water Recovery System. Orange County Sanitation District manages the regional systems and treatment within the northern portion of the County. The South Orange County Wastewater Authority is a Joint Powers Authority that serves the southern portion of the County.

The imported and local water, along with wastewater and storm water, flows through an intricate network of pipes and mains, which are susceptible to damage from natural as well as man-made disasters.

### Threats and Hazards

A hazard analysis has indicated that Orange County is at risk from hazards associated with both natural and manmade events. Natural hazards have historically had the largest effect on Orange County and are likely to continue to affect the County; consequently, the process of identifying these hazards includes determining whether or not the hazard has occurred previously. Manmade hazards occur less frequently in the County, but are a priority in water/wastewater security management as the threat of terrorism and technological hazards grow. Through research and experience, 19 potential natural and manmade hazards have been identified as threats to the County.

The Critical Priority Risk Index (CPRI) is used to prioritize hazards that may affect OC and provides a standardized numerical value for each hazard so they can be ranked. CPRI scores were calculated as part of our hazard mitigation planning process by using five categories; probability, impact, special extent, warning time, and duration. Each category is assigned a numerical value (1-4) depending on how the hazard will impact the specific category. Once the numbers for each hazard are calculated, the hazards are organized from highest to lowest priority. The following table taken from the 2018 WEROC Hazard Mitigation Plan ranks each identified hazard that can potentially impact OC water and wastewater infrastructure.





Table 1: Critical Priority Risk Index

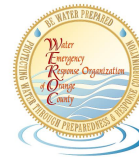
HAZARD RANKING WORKSHEET - Orange County Regional Water & Wastewater MJHMP					DATE: 7/26/2017	
Hazard Type	Probability	Impact			Total Score	Hazard Planning Consideration
		Location	Primary Impact	Secondary Impacts		
Power Outage	4	3	4	4	57.60	High
Wildfire	4	3	3	4	52.00	High
Seismic Hazards - ground shaking	3	3	4	4	43.20	High
Seismic Hazards - liquefaction	3	3	4	4	43.20	High
High Winds/Santa Ana	4	4	2	1	40.80	Medium
Drought	4	4	1	1	35.20	Medium
Dam/Reservoir Failure	2	3	4	4	28.80	Medium
Flood	3	3	2	1	25.80	Medium
EQ Fault Rupture	2	1	4	2	18.40	Medium
Landslide/Mudflow	2	2	2	3	18.00	Medium
Contamination	1	2	3	4	11.40	Low
Human-caused Hazards - terrorism (shooting, explosive)	1	1	3	3	8.80	Low
Human-caused Hazards - HazMat	1	1	2	3	7.40	Low
Urban Fire	1	1	2	1	5.40	Low
Geo Hazards - land subsidence	1	1	1	2	5.00	Low
Geo Hazards - expansive soils	1	1	1	2	5.00	Low
Tsunami	1	1	1	1	4.00	Low
Climate Change	1	1	1	1	4.00	Low
Coastal Storm & Erosion	1	1	1	1	4.00	Low

## PLANNING ASSUMPTIONS

Certain assumptions were used during the development of this plan. These assumptions are associated with emergency management operations in preparation for, response to, and recovery from major emergencies. The assumptions provide context, requirements, and situational realities that must be addressed in plan development and emergency operations. The following assumption apply to this plan:

- Priority will be given to protecting public health; this includes restoration of fire suppression, potable water delivery and wastewater collection.
- Allocation of water will require a public request for emergency conservation based on the circumstances of the event. It could range from 0% to 50% or more in specific areas.
- WEROC is primarily responsible for coordinating resources and establishing a central communication point for all of WEROC member agencies.
- WEROC will utilize SEMS/NIMS in emergency response operations.
- WEROC and its signatories will commit their own resources to a reasonable degree before requesting mutual aid assistance.





## CONCEPTS OF OPERATION

### WEROC RESPONSIBILITIES

WEROC is organized on the basis that each member agency is responsible for developing its own EOP in accordance with SEMS, NIMS, and Public Health Security and Bioterrorism Preparedness and Response Act of 2002 to meet specific emergency needs within its service area. In turn, WEROC will coordinate the exchange of resources for member agencies, and if necessary, for MET, the Orange County Operational Area, and other appropriate outside agencies. In the event of a major regional disaster, WEROC would perform but not limit itself to the following functions:

1. Activate the EOC
2. Notify all EOC staff
3. Send a water liaison to the OA EOC and ICP (if needed)
4. Assess overall condition of water supply system, including availability, quantity and quality of MET and member agency water supplies
5. Assess overall condition of the wastewater collection systems, including operability of treatment systems
6. Identify resource and coordination needs of member agencies
7. Collect Initial Damage Estimate (IDE) reports
8. Quantify available Mutual Aid and private resources and secure as necessary
9. Request resources
10. Determine optimal use of resources
11. Establish response and repair priorities
12. Recommend water allocation schemes, if required
13. Maintain liaison with MET, OA EOC and outside agencies
14. Document all actions taken
15. Prepare After Action Reports
16. Implement Corrective Actions

### PHASES OF EMERGENCY MANAGEMENT

WEROC recognizes four primary phases of emergency management which relate to a Federal, State, Region, County, City, or Special Districts activities before, during, and after an emergency or disaster has occurred. These include:

- Preparedness
- Response
- Recovery
- Mitigation/Prevention

#### **Preparedness**

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





WEROC and its member agencies participate in developing procedures and checklists describing how each will respond to an emergency. Such preparedness measures will provide coordination and communications within WEROC, member agencies and other jurisdictions. Elements addressed in these procedures/checklists include:

- Personnel notification rosters and a method for implementation.
- Designation of a WEROC representative to report to the OA EOC during an emergency to advise decision makers and coordinate the member agency's response effort with other responding entities.
- Reporting of appropriate information (staffing, damage assessments, water quality issues, evacuation status, chemical exposure, etc.) to both WEROC and water agency EOCs during an emergency.
- Providing Mutual Aid support to member agencies.

In addition to the above procedures, ongoing actions to be accomplished during this phase include but are not limited to:

- Review and update of Emergency Plans.
- Training of WEROC EOC and member agency staff.
- Inspection and maintenance of critical facilities, including EOC's.
- Regularly scheduled drills and test exercises.
- Recruitment of additional EOC staff, as needed.
- Identification resources

### **Response**

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

The nature of WEROC's emergency operations will depend on the characteristics and requirements of the situation. WEROC and member agency's EOC/DOC will be activated as required to respond to a specific situation and each will operate according to the provisions of their emergency plans. Priority will be given to the following operations:

- Law and Fire will be conducting evacuation and/or rescue operations as required, and implementing health and safety measures.
- Assessing and evaluating the emergency situation.
- Assembling, allocating, and positioning personnel and equipment.
- Disseminating emergency public information as appropriate.
- Protecting, controlling and allocating vital resources.
- Restoring or activating essential facilities and systems.
- Stabilize water and wastewater systems with temporary measures or actions





## **Recovery**

Recovery is the phase that involves restoring systems to normal. Short-term recovery actions are taken to assess damage and return vital life-support systems to minimum operating standards; long-term recovery actions may continue for many years.

## **Mitigation/Prevention**

Mitigation activities are those that either prevent the occurrence of an emergency or reduce the district's vulnerability in ways that minimize the adverse impact of a disaster or other emergency. Mitigation is a best practice that can protect lives and save money. MWDOC and nineteen additional WEROC member agencies came together to produce the Orange County Regional Water and Wastewater Multi-Hazard Mitigation Plan, which is scheduled to be approved by FEMA in August 2018. The Mitigation Plan outlines the natural and man-made threats that can impact the agencies included in the plan, as well as identified specific mitigation projects per agency and then prioritized those projects. The Mitigation Plan provides eligibility for federal pre-disaster and post-disaster mitigation grant funding for the included agencies. For more information, the Orange County Regional Water and Wastewater Multi-Hazard Mitigation Plan is available at [www.ocweroc.com](http://www.ocweroc.com)

## **STANDARDIZED EMERGENCY MANAGEMENT SYSTEM (SEMS) AND NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS) RESPONSE LEVELS**

Both SEMS and NIMS recognize local jurisdictions as the first line of response for emergency preparedness and response. As stated in the National Response Framework (NRF):

“The responsibility for responding to incidents, both natural and manmade, begins at the local level with individuals and public officials in the County, City or town affected by the incident.”

The Standardized Emergency Management System (SEMS) defines special districts and cities as local governments. During an incident, water and wastewater utilities are responsible for managing the response effort within their service areas. WEROC would provide communication and coordination of information, multi-agency coordination, and mutual aid resources to water and wastewater agencies impacted upon request, and automatically for larger events affecting multiple agencies.

The adoption of NIMS, the national policy that is complementary to the SEMS, and the adoption of the SEMS create an organized system of information flow which can avoid duplication of requests for assistance and ensure a more coordinated and timely response to the effects of a disaster. The SEMS response levels, the federal role, and other key coordinating partners for water and wastewater utilities are described below, along with a chart (Figure 1: WEROC EOC Organization Chart) showing the WEROC Organization within these SEMS/NIMS reporting levels.

The **WEROC Resource Communication Protocol** graphic on page 59 demonstrates the coordination response levels discussed below, including the traditional SEMS response levels,





NIMS, and other coordinating partners important to the water industry. In some instances, primarily localized incidents, local water agencies may coordinate directly with higher response levels, rather than following the traditional SEMS levels of communications and response. However, during incidents in which multiple water utilities are impacted all water utilities are expected to follow traditional SEMS levels of communication (these are indicated with bolder arrows).

The following is an example of how SEMS/NIMS is intended to work in a major disaster with damage in multiple Operational Areas (Counties). It is assumed that appropriate emergency declarations have been made:

**Field Response Level:** Field crews within affected agencies respond, as feasible, using the Incident Command System. Incident Command Posts (ICP) may be established at various sites throughout the disaster area. The member agencies may set up an ICP or may integrate into a Multi-Agency ICP. Resources are requested via dispatch centers, Department Operations Centers (DOC), and EOCs.

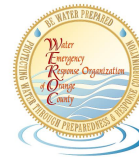
**Local Government Level (Local Agency EOC):** Local Governments assess capability and report their status to the Operational Area EOC. Water utilities report their status to the WEROC EOC. Local governments mobilize all available resources, establish EOC priorities, allocate available resources to support the field response, and request assistance (through WEROC for Water utilities) from the Operational Area. Water utilities would notify WEROC of any damage to their service areas while responding with available agency crews / resources. Water utilities may choose to provide staff to the WEROC EOC as a liaison for their agency if they feel it necessary or beneficial.

**Water Emergency Response Organization of Orange County (WEROC):** WEROC is responsible for coordinating the Orange County water and wastewater community information and mutual aid status with the OA EOC. WEROC EOCs are staffed with representatives from member agency Mutual Aid EOC Staff, MWDOC Staff, and volunteers with technical expertise. Assignments to either South EOC or alternate location is based upon the event and the integrity of the building. All pre-assigned EOC Staff have been dedicated by their respective employers to report to WEROC EOC.

In addition to the EOC Staff members assigned to the WEROC EOC, WEROC has assigned staff as a WEROC EOC Liaison to report to the OA EOC located on Loma Ridge or the ICP (if needed). When the OA EOC is activated, this position will report to the Public Works Branch Director at the OA EOC to be briefed on the present situation along with other liaison representatives, e.g. Red Cross. They will serve as liaison between WEROC and OA EOC operations following a disaster.

The DDW will respond to the WEROC EOC to coordinate directly with water utilities, as well as WEROC, to ensure water quality standards are being addressed. WEROC may also coordinate with other entities as needed, such as non-profits, businesses, and non-water utilities.





**County Operational Area (OA) Level:** All political subdivisions have been organized into Operational Areas by the county to ensure coordination, communication, resource allocation, and to avoid duplication in the response effort. The County OA activates its EOC and notifies the California Office of Emergency Services (CalOES) Southern Regional Administrator. The OA EOC assesses the situation (based in part from damage assessment reports received from WEROC and through face-to-face communication with the WEROC Liaison at the OA EOC) and reports information to the Southern Regional Emergency Operations Center (REOC). The OA EOC coordinates available resources, requests additional mutual aid resources through the EOC and provides overall situation reports to local government (through WEROC for Water utilities).

**Regional Level:** The CalOES Southern Regional Administrator activates the Regional Emergency Operations Center (REOC) and notifies the State Operations Center (SOC). REOC staff locates and mobilize resources available within the region and from state agencies. Additional resources are requested through the State Operations Center. REOC monitors the situation and updates the State Operations Center (SOC).

WEROC will also directly coordinate with additional regional organizations. The first agency and organization is MET and its Member Agency Response System (MARS); providing direct regional potable member agency coordination. The other two organizations are the California Utilities Emergency Association (CUEA) and the California Water/Wastewater Agency Response Network (CalWARN); providing, respectively, a liaison to many California utilities, and mutual aid coordination with water and wastewater utilities across the State.

**State Level:** State Operations Center (SOC) is activated and state agency representatives are requested to staff the SOC. SOC coordinates state agency response and mobilization of mutual aid resources from unaffected regions. SOC may direct activation of other CalOES REOC's to assist in resource mobilization. State agency department operations centers are activated, as applicable. Federal assistance is requested, if needed. SOC continuously monitors situation.

**Federal Level:** At the time that an incident is determined to be an event of National Security, the Federal Emergency Management Agency and the Department of Homeland Security become actively involved in the response and recovery of that incident. Federal support will be coordinated from a Joint Federal Office (JFO) that will be set up at the local level in support of the incident. Federal Emergency Support Functions (ESFs) will be staffed to support specific areas of expertise in the response.

### **Continuity of Government**

A major disaster or national security emergency could result in the death or injury of key government officials and/or the partial or complete destruction of established seats of government, and public and private records essential to continued operations of government. Government at all levels is responsible for providing continuity of effective leadership, authority and adequate direction of emergency and recovery operations. The California Government Code Section 8643(b) and the Constitution of California provide the authority for state and local government to reconstitute itself in the event incumbents are unable to serve. A detailed description of MWDOC's Continuity of Operations Plan can be found in a separate document called 2017 MWDOC Continuity of Operations Plan.





## **ROLES AND RESPONSIBILITIES**

### **WEROC EOC Personnel**

The WEROC EOC is staffed with assigned MWDOC personnel and representatives from member agencies and consultants. WEROC has partnered with special districts, private and government organizations to supplement EOC staff and provide technical expertise at the EOC during emergencies. Some WEROC member agencies have designated personnel to staff the WEROC EOC when requested by WEROC.

#### Designated WEROC EOC Personnel

MWDOC has assigned EOC personnel that will respond to the EOC when activated. When responding to the EOC, staff must have their agency issued identification or government identification, closed toed shoes, and personal belonging. EOC staff have been given a WEROC Auto Pack (details can be found on page 33) to assist with key contacts, EOC maps, and EOC activation procedures.

#### Mutual Aid EOC Personnel

Member Agencies may provide staff to the WEROC EOC if their service area has not been affected and assistance is needed to staff WEROC EOC positions and provide technical expertise. WEROC will contact the unaffected Member Agencies to determine if staff can be allocated through mutual aid to the WEROC EOC.

#### Private EOC Volunteers

WEROC has volunteer personnel from various private sector organizations who have technical expertise. As staff become available, we will incorporate them into the EOP. Volunteers will be sworn in as Disaster Service Workers and will be protected as an employee for workers compensation and other liabilities.

### **Member Agencies**

Member Agencies will provide damage assessment reports and resource requests to the WEROC EOC. In a significant event, water utilities may send a liaison to the WEROC EOC.

### **Private Sector**

Private sector organizations play a key role before, during, and after an emergency. First, they must provide for the welfare and protection of their employees in the workplace. In addition, WEROC must work seamlessly with businesses that provide water, power, communication networks, transportation, security, and numerous other services upon which both response and recovery are particularly dependent.

### **Nongovernmental Organizations**

Nongovernmental organizations (NGOs) play an important roles before, during, and after an emergency. For WEROC, NGOs such as California Water/Wastewater Agency Network and the American Water Works Association are vital partners in supporting and promoting statewide emergency preparedness, disaster response, and mutual assistance process for public and private water and wastewater utilities.





## **NOTIFICATION AND MOBILIZATION**

### **EMERGENCY OPERATIONS**

All WEROC EOC responders are pre-assigned to report to the WEROC Primary EOC unless notified otherwise. This plan recognizes that emergency functions requiring specific technical knowledge by EOC staff, i.e. Engineers, Water Quality, and Operators, will generally parallel their normal day-to-day functions. It is also desirable to assign other EOC staff and available personnel to EOC functions with tasks and responsibilities similar to their daily operations, i.e. accounting staff assigned to Finance/Administration EOC functions.

However, in a disaster it may be necessary to draw on the basic capabilities of people, and assign them to areas of greatest need. Day-to-day functions that do not contribute directly to the disaster response effort may be suspended for the duration of the disaster. Actions normally required of those functions will be redirected to accomplish the emergency tasks at hand.

Ongoing training and cross training of both WEROC EOC Staff and Member Agency personnel is critical to maintaining a high level of confidence in performing specific duties in response to a disaster. Training opportunities provided to staff include, but are not limited to, EOP orientations, ICS trainings, SEMS/NIMS trainings, and participation in WEROC hosted Tabletop and Functional Exercises.

### **ALERT AND WARNING SYSTEMS**

Warning is the process of alerting agencies and the general public to the threat of imminent danger. Depending upon the nature of the threat and the population group at risk, warnings can originate at any level of government. Success in saving lives and property is dependent upon timely dissemination of warning and emergency information to persons in threatened areas. There are various mechanical systems in place, described below, whereby an alert or warning may originate or be disseminated.

#### **National Oceanic and Atmospheric Administration (NOAA)**

NOAA is an American scientific agency within the United States Department of Commerce that focuses on the conditions of the oceans and the atmosphere. NOAA warns of dangerous weather, charts seas, guides the use and protection of ocean and coastal resources and conducts research to provide understanding and improve stewardship of the environment.

#### **United States Geological Survey (USGS)**

The USGS provides science about the natural hazards that threaten lives and livelihoods; the water, energy, minerals, and other natural resources we rely on; the health of our ecosystems and environment; and the impacts of climate and land-use change. The USGS provides a free Earthquake Notification Service (ENS) that can send automated notification emails when earthquakes happen in your area. Additionally, the USGS provides Water Alerts service which sends e-mail or text (SMS) messages when certain parameters, as measured by a USGS real-time data-collection station, exceed user-definable thresholds.





### **Orange County Operational Area Notification**

The OA is WEROC's primary link to information about pending emergency conditions. The OA maintains constant communications with CalOES, which notifies the OA of any warnings it receives or becomes aware of. CalOES is considered to be the primary agency for receipt of notification of pending or occurring events from all sectors of response, including the California Department of Public Health, Homeland Security, InfraGard, etc. The State will then use a variety of redundant systems to communicate threat and warning information to the OA. In turn, the OA will notify WEROC and all Orange County jurisdictions using any available means of communication (reverse dial systems, phone, fax, email, radio, etc.).

## **PUBLIC INFORMATION**

The public's response to any emergency is based on an understanding of the nature of the emergency, the potential hazards, the likely response of emergency services and knowledge of what individuals and groups should do to increase their chances of survival and recovery.

Public awareness and education prior to any emergency is crucial to successfully protect the public during and after the emergency. Pre-disaster awareness and education programs must be viewed as equal in importance to all other preparations for emergencies and receive an adequate level of planning. These programs must be coordinated among local, state and federal officials to ensure their contribution to emergency preparedness and response operations.

### **Community Outreach**

Throughout the year, WEROC partners with member agencies to bring awareness to emergencies that may impact the water utilities. This plan encourages WEROC and member agencies to utilize community outreach opportunities to inform residents and business owners of the County's emergency procedures and the community's personal preparedness techniques. Alert OC allows WEROC and water utilities to notify their customers of potential emergencies impacting their water supply as well as offer resources to help alleviate the problem.

### **Social Media**

WEROC maintains a Facebook and Twitter account to keep member agencies and the public informed of events and current news affecting water systems. During an emergency, WEROC will use these social media platforms to notify users of water quality issues, alternative water information, and recovery information. Find WEROC on Facebook or Twitter using @OCWEROC.

### **Emergency Alert System (Television and/or Radio Broadcast)**

The Emergency Alert System (EAS) is a national public warning system that requires broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers, and direct broadcast satellite (DBS) providers to provide the communications capability to the President to address the American public during a national emergency. The system also may be used by state and local authorities to deliver important emergency information, such as AMBER alerts and weather information targeted to specific areas.





The President has sole responsibility for determining when the EAS will be activated at the national level, and has delegated this authority to the director of FEMA. FEMA is responsible for implementation of the national-level activation of the EAS, tests, and exercises. The National Weather Survey develops emergency weather information to alert the public about imminent dangerous weather conditions.

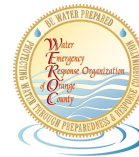
Message priorities under Part 73.922(a) of the FCC's rules are as follows:

Priority One.....Presidential Messages (carried live)  
Priority Two.....Operational (Local) Area Programming  
Priority Three.....State Programming  
Priority Four.....National Programming and News

Examples of emergencies identified by the Orange County OA which may warrant EAS activation by the broadcast industry include: large water quality notifications, earthquake, serious fires, heavy rains and flooding, widespread power failures, severe industrial accidents, and hazardous material accidents. The context of any emergency broadcast transmitted on EAS should be of concern to a significant segment of the population of Orange County. The message must be a voice message, it may be prerecorded and it must originate from the Sheriff's Communications Center.

The Orange County Sheriff's Department, while not the originator of the EAS material, is responsible for verifying the content and authenticity of the information and is the entity in charge to broadcast EAS messages. Local broadcast stations have the right to edit or use any or all of an EAS broadcast, but are not required to broadcast the messages.





## EOC ACTIVATION

### EOC ACTIVATION

The WEROC Emergency Manager or Emergency Coordinator, is the primary contact for WEROC emergencies. Notification may come from a WEROC member agencies, the OA, MET, NOAA and others. Upon receipt of the emergency notification, the Emergency Manager or alternate will communicate with the MWDOC General Manager or alternate to determine appropriate response actions.

If WEROC or MWDOC management receive notification of a disaster, he/she will contact the other Managers (and vice-versa) by telephone. Contact telephone numbers are listed in **Attachment F: WEROC Key Contacts List**. The Activation Decision Steps below provide the WEROC guidance for determining conditions warranting EOC Activation and Notification

The increasing levels of action taken by WEROC are as follows:

- Standby – Assistance remotely
- County Liaison – Send a WEROC representative to the OA
- Support – Send a WEROC representative to either:
  - The Incident Command Post
  - Member Agency DOC
- Full EOC Activation - WEROC EOC activated

The WEROC EOC can be activated in the following methods:

- *Automatic Activation:* Significant events (i.e. earthquake) that impact communication or power infrastructure. These events will most likely result in an Automatic Activation.
- *Manual Activation:* Notification is provided by a member agency, the OA, MET, the Media, or the DDW or RWQCB.
- *Standby for Activation:* WEROC will receive advanced notification of an event or possible need, such as a winter storm or an emergency replacement of a waterline. Given the information, WEROC staff will actively monitor the event and activate the EOC if needed. After a determination is made by MWDOC management and WEROC to activate, EOC staff will be contacted to report to the EOC.

#### **Automatic Activation**

WEROC EOC staff will automatically report to the EOC without being notified at any time under the following conditions:

- Following a **magnitude 5.0 or larger** earthquake within Orange County
- An earthquake outside of Orange County strong enough to disrupt public phone systems or cause visible damage, or other large regional event.





### **Manual Activation**

The WEROC EOC will be activated under the following conditions:

- When an earthquake or other event creates damage near MET facilities (outside of Orange County) which may affect Orange County's water supply. WEROC and MWDOC management will determine whether to activate based on MET damage assessment reports.
- Following an earthquake or other emergency such as a fire, flood or power outage affecting one or more WEROC Water utilities, WEROC will activate when requested by any Member Agency.
- Staff will be notified of the activation through AlertOC, Phone, or email.

### **Stand By For Activation**

WEROC EOC staff will standby pending activation under the following conditions:

- An earthquake **less than M5.0** occurs within Orange County and there is damage or suspected damage to the water distribution system in Orange County. WEROC and the EOC director will determine if activation is required.
- When a **magnitude 5.0 or larger** earthquake occurs anywhere within MET's service area (outside of Orange County) and damage to MET facilities is unknown.
- Advanced notification of an event or possible need by NOAA, Orange County OA, CalOES, Member Agency, or MET.
- WEROC EOC Manager will make the decision to activate based upon information received from appropriate Operational Area, MET, WEROC staff, and/or Member Agency personnel after a disaster.
- Includes monitoring and minor coordination.

When an earthquake occurs in Southern California outside of Orange County, WEROC will be concerned about MET facilities that deliver imported water into Orange County. Those MET facilities include the following:

- Diemer Filtration Plant in Yorba Linda
- Lower Feeder from Lake Mathews to Diemer
- Lake Mathews Outlet Facilities
- Weymouth Filtration Plant in La Verne
- Orange County Feeder from the Weymouth Plant to Orange County
- Yorba Linda Feeder between the Weymouth and Diemer Plants
- Colorado River Aqueduct
- State Water Project
- Diamond Valley Lake and Associated Infrastructure
- Baker Treatment Plant
- East Orange County Feeder No.2
- Allen McColloch Pipeline (AMP)
- Santiago Lateral

Note: A map of these facilities can be found at each WEROC EOC





## **WEROC EOC ACTIVATION DECISION STEPS**

Below are steps to be considered when WEROC and MWDOC management determine whether or not to activate the WEROC EOC. Following these steps, there is additional information that can be used to assess if activation is required.

### **1. Categorize Incident**

Using information gathered from one or more sources, the WEROC Primary Contact or Alternate will categorize the incident:

- Natural Disasters
- Manmade Disaster
- Terrorist Threat
- Terrorist Physical Attack

### **2. Initial Determination of Situation**

WEROC and MWDOC management will make an initial determination of the situation based upon:

- Scope and severity of the incident
- Damage to affected agency(s)
- Potential impacts to other agencies and surrounding infrastructure
- Potential impacts to Metropolitan's facilities
- Potential impacts to the County
- Potential requests for mutual aid from affected member agencies

### **3. WEROC Activation Level**

WEROC and MWDOC management will determine the appropriate level of WEROC activation.

- Standby – WEROC monitors, receives and relays information.
- County Liaison - WEROC Liaison at County Operational Area EOC
- Support – WEROC provides a support role to a Utility activation.
- EOC Activation - EOC partially or fully staffed

### **Operational Area Activation Levels**

When the OA EOC is activate their levels of activation are as follows:

- Level 3 (Type III) Low Level Activation
- Level 2 (Type II) Moderate Level Activation
- Level 1 (Type I) High Level Activation

### **4. Groups That Will Be Notified**

When the EOC is activated, at a minimum, the following groups should be notified. Notifications should also be made to the following agencies if activation was not needed.

- WEROC EOC Staff
- Affected Water Utilities





- Metropolitan's EOC at Eagle Rock
- Operational Area Emergency Operations Center (OA EOC)
- Division of Drinking Water
- Health Care Agency
- California Department of Public Health

Once the decision has been made to activate, the EOC will be activated and EOC staff will be notified. Following the determination of activation, the WEROC Emergency Manager or alternate will make an announcement over the WEROC Radio at the EOC and WEROC EOC Staff will be contacted using the EOC Activation Notification Protocols.

## **EOC ACTIVATION NOTIFICATION PROTOCOL**

The following is a standard notification protocol to be used once it is determined that the EOC will be activated. At times, concurrent notification of multiple groups should be utilized when there is available staff to do so. The EOC Director determines which groups should be contacted and the priority of each group's notification.

### **Key Partner Notifications**

Following an event or if notified of a potential emergency situation, partner agencies should be contacted to: inform them of the situation, activation status of the EOC, known damage or impacts, or resource needs. The following agencies should be notified by the EOC Director or alternate when determined necessary:

- WEROC EOC Staff
- Affected Member Agencies
- Nearby Member Agencies
- Metropolitan's EOC at Eagle Rock
- Operational Area Emergency Operations Center (OA EOC)
- Regulatory Agencies (**Attachment L**)

### **WEROC EOC Staff Notification**

The following steps assume a full activation. If the activation is partial, then only those staff members who are identified will be notified. The WEROC emergency manager or alternate will notify EOC staff of activation. Either of the following forms of communication can be utilized until the EOC staff member is reached and has confirmed:

- WEROC will utilize AlertOC as the primary means to notify EOC staff of activation. Staff will receive a phone call, text, and/or email to inform staff of various situations and any actions expected. The system uses a voting mechanism that allows recipients to confirm receipt of the message.
- Email all EOC staff of the situation and actions expected of them. The email should utilize the Message Options button to indicate: high importance, sensitivity level if security incident, and if a reply is requested. The email should request a read receipt in order for the EOC to track who has received the message.





- Staff members should be assigned to call staff and direct them to the designated EOC. Both staff members track messages left and successful contacts.
- Tracking of messages includes: date, time and with whom the message was left
- Successful contacts includes: date, time, and estimated time of arrival
- One hour later, compare email receipts and both tracking pages to determine which staff members should be called again to confirm notification of the event. Make any remaining phone calls needed.

Staff notifications should include:

- Situation Status
- Activation Status
- Report Location
- Safety Instructions
- Shift length
- Expected Action

### **WEROC Member Agency Notification**

The following steps assume the need to contact all member agencies. The EOC Director should assign at least one staff member to Member Agency Notification. Either of the following forms of communication can be utilized until the Member Agency is reached:

- WEROC will utilize AlertOC (Email, phone call, text message) as the primary means to notify member agencies of EOC activation.
- Using WEROC EOC Phone Book or Safety Center Application, email or call affected water utilities to inform them of the situation and expected actions. The email should utilize the Message Options button to indicate: high importance, sensitivity level if it is a security incident, reply requested, and request a read receipt for this message. The text or voice message should include:
  - Why the notification is being made?
  - Who has been effected?
  - What action is being requested?
  - Has your agency been affected?
- Assigned staff member should then utilize the WEROC radio to provide an update of the emergency situation and the EOC activation status. Conduct a member agency roll call utilizing the WEROC radio in order to track who heard the announcement.
- Compare any email receipts to the radio roll call to determine which agencies should be called individually to confirm notification of the event. Make remaining phone calls utilizing the Member Agency Emergency Contacts List found in the WEROC EOC Phone Book or Safety Center Application





## **EMERGENCY PROCLAMATIONS**

The California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the Government Code), hereafter referred to as the Act, provides the basic authorities for conducting emergency operations following a proclamation of Local Emergency, State of Emergency or State of War Emergency by the Governor and/or appropriate local authorities, consistent with the provisions of the Act. Although the Act refers to cities and counties proclaiming emergencies, it does not exclude districts from the practice. It is a necessary and important step for special districts to proclaim a local disaster for both the purposes of financial purchasing power (California Code, Public Utilities Code 12753), as well as for the use of some mutual aid agreements.

### **Member Agency Emergency Declaration**

Each member agency should have emergency declaration procedures that are activated during emergencies that activate procedures outside of normal operations. When deciding whether to declare an emergency, the agency can use the local emergency procedures on the next page as a guidance. A member agency should declare an emergency when:

- Impacts to public health exist or are possible
- Long term water or wastewater system outages occur or are expected
- Activating the EOC and/or running an ICP
- Impacts to hospitals or schools exist or are possible
- Need for resources or support

The internal emergency declaration should trigger cost tracking procedures for FEMA reimbursement. The emergency declaration helps support the agency's purchasing ordinance policy to make purchases and contract in accordance with state and federal regulations during an emergency. Emergency purchasing authority guidelines can be found on page 52 of the Resource Management section. Member agencies should notify WEROC and the OA of the local emergency as soon as a significant problem arises. Additional notifications should be made to the appropriate regulatory agency.

### **MWDOC Emergency Declaration**

When WEROC is informed that a Member Agency has declared an emergency, WEROC will analyze the extent of the situation, if justified, will ask the MWDOC Board of Directors to declare an emergency. The MWDOC Board of Directors declaration should be made for the purpose of:

- Activate internal emergency purchasing authority which will enable MWDOC to enter into contracts, make purchases, and request mutual aid, that otherwise would not be available without the official declaration. Emergency purchasing authority guidelines can be found in the Resource Management Section.
- Gaining support from stakeholders
- Expending and tracking EOC resources for disaster recovery

WEROC should inform the OA that the member agency and MWDOC have declared an emergency and request the OA to proclaim a local emergency on behalf of the member agency. This action should trigger internal cost tracking procedures for FEMA reimbursement in the case that a state or federal emergency declaration is made. Emergency Purchasing Authority procedures can be found in the Resource Management section.





When informing the OA of the emergency, the member agency and/or WEROC should provide justification for the declaration by providing:

- An overview of the issue
- Potential or current impacts to public health
- Potential or current impacts to water distribution or wastewater collection
- Resources needed to resolve the issue
- A timeline to resolve the issue

The internal emergency declaration should trigger cost tracking procedures for FEMA reimbursement in the case that a state or federal emergency declaration is made. For situational awareness, the appropriate agencies should be notified of the situation.

### **Local Emergency (Operational Area Emergency Declaration)**

A Local Emergency proclaimed by the designated official must be ratified by the elected body within seven days. The governing body must review the need to continue the proclamation at least every fourteen days until the Local Emergency is terminated. The Local Emergency must be terminated by resolution as soon as conditions warrant. Proclamations are normally made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within a jurisdiction, caused by natural or man-made situations.

The proclamation of a Local Emergency provides the governing body with the legal authority to:

- If necessary, request that the Governor proclaim a State of Emergency.
- Promulgate or suspend orders and regulations necessary to provide for the protection of life and property, including issuing orders or regulations imposing a curfew within designated boundaries.
- Exercise full power to provide mutual aid to any affected area in accordance with local ordinances, resolutions, emergency plans, or agreements.
- Request that state agencies and other jurisdictions provide mutual aid.
- Require any local official or employee to provide emergency services support.
- Requisition necessary personnel and materials from any local department or agency.
- Obtain vital supplies and equipment and, if required, immediately commandeer the same for public use.
- Impose penalties for violation of lawful orders.
- Conduct emergency operations without incurring legal liability for performance, or failure of performance. (Note: Article 17 of the Emergency Services Act provides for certain privileges and immunities.)

### **State Emergency Services Act**

A State of Emergency may be proclaimed by the Governor when:

- Conditions of disaster or extreme peril exist which threaten the safety of persons and property within the state caused by natural or man-made incidents.
- The Governor is requested to do so by local authorities.
- The Governor finds that local authorities are inadequate to cope with the emergency.





When the Governor proclaims a State of Emergency, the following conditions apply:

- Mutual aid shall be rendered in accordance with approved emergency plans when the need arises in any county, or city and county for outside assistance.
- The Governor shall, to the extent deemed necessary, have the right to exercise all police power vested in the state by the Constitution and the laws of the State of California within the designated area.
- Jurisdictions may command the aid of citizens as deemed necessary to cope with an emergency.
- The Governor may suspend the provisions of orders, rules, or regulations of any state agency and any regulatory statute or statute prescribing the procedure for conducting state business.
- The Governor may commandeer or make use of any private property or personnel (other than the media) in carrying out the responsibilities of their offices.
- The Governor may promulgate, issue, and enforce orders and regulations deemed necessary.

## **Presidential Declaration of Emergency or Major Disaster**

### Definitions

**Major disaster:** A major disaster is defined as "any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the U.S. which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby."

**Emergency:** An emergency is defined as "any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the U.S."

### Process

In order for the President to declare a federal major disaster or emergency, the Governor of California must submit the following:

- Local Jurisdiction Emergency Declaration
- The California State of Emergency Proclamation

The Governor's written request for federal assistance must also include:

1. Certification of implementation of the State Emergency Plan
2. Description of how the disaster caused needs beyond state/local capabilities
3. A description of state/local resources already committed





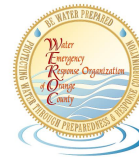
4. Preliminary estimates of supplementary federal assistance needed
5. Certification of compliance with cost-sharing requirements of the Stafford Act

Basis for Request

The situation is of such severity and magnitude that effective response is beyond the capabilities of the state and affected local governments, and federal assistance under the Stafford Act is necessary to supplement the efforts and available resources of the state, affected local governments, disaster relief organizations, and compensation by insurance. The Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) (Public Law 100-707) is a United States federal law designed to bring an orderly and systemic means of federal natural disaster assistance for state and local governments in carrying out their responsibilities to aid citizens.

(For more information on the Stafford Disaster Relief and Emergency Assistance Act visit [www.fema.gov/library/stafact](http://www.fema.gov/library/stafact))





## **EOC OPERATIONS**

### **EOC OPERATIONS**

WEROC EOC staff shall report to the EOC following an automatic trigger or upon notification by WEROC or designee. The WEROC Liaison to the Operational Area (OA) will report directly to the OA EOC and upon arrival make contact (by WEROC Radio, cell phone or telephone) with the WEROC EOC. If the WEROC OA EOC Liaison has not contacted the WEROC EOC within an adequate amount of time following WEROC activation, additional WEROC Staff will be dispatched by the EOC Director to the OA EOC.

#### **WEROC Auto-Pack**

WEROC EOC staff are provided an Auto-Packs to keep in their vehicles to assist them in case an event occurs while they are out of the office or after hours that requires EOC activation. The Auto-Pack contains important contact information, maps to the WEROC and OA EOC's and general EOC Activation Protocols (can also be found on page 24 of this plan) so that staff are prepped and have access to vital information that will assist them throughout the process of reporting to the WEROC EOC.

#### **Safety Center Phone Application**

The Safety Center Phone Application (Apple and Android) allows users access to timely emergency response information. WEROC staff can assist EOC or MWDOC staff to gain access to the application. The application allows users to access:

- Emergency contact information
- Emergency Operations Plan
- Continuity of Operations Plan
- AlertOC user guide and login information
- WebEOC user guide and login information

### **EOC LOCATIONS**

WEROC maintains two EOC's. The Primary EOC is in the City of Mission Viejo near the cross streets of Los Alisos Boulevard and Trabuco Road. The Alternate EOC is in the MWDOC Administration Offices in the City of Fountain Valley. Additionally, WEROC maintains a facility with limited resources in the City of Orange that can be used as a satellite facility. Maps and addresses to the EOCs are available in **Attachment I: EOC Maps**.

Readiness of the EOCs is the responsibility of WEROC staff. When the use of an alternate EOC site becomes necessary, EOC staff will be instructed to relocate to the alternate EOC site (Fountain Valley or Orange). If the primary EOC is unusable before its activation, staff members will be asked to report directly to the alternate EOC site in Fountain Valley.





## **GENERAL EOC START UP ACTIONS**

When activated, the WEROC EOC will assess the overall condition/status of the Orange County's water distribution and wastewater collection systems, including, regional facilities serving Orange County. Preliminary contact will be made with each agency including MET to determine:

1. If member agency facilities have been damaged
2. Impacts of damages to community
3. Whether any assistance is required
4. Resource Needs
5. Water/wastewater system status updates
6. Facilities threatened
7. Usable water storage levels
8. Pumping capabilities
9. Any deficiencies in service due to damage to member agencies

Following the activation of the EOC, the EOC Director will work with the Intelligence Unit to monitor the situation using WebEOC, email, phone, MARS Radio, and the OA Radio System.

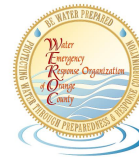
### **WebEOC**

Web Based Emergency Operations Center (WebEOC) is a web-based information management system that is used by all OA signatories and county departments to provides users a single access point for the collection and dissemination of emergency or event-related information such as, position logs, significant events, logistical requests, press releases, and staffing. Additionally, the user has the ability to provide status updates to include: Initial Damage Estimates, Casualties, Proclamations, Utilities Outages, Evacuations, Mass Care Centers, Road Closures, Infrastructure, Advisories/Press releases, DOC status, Potable and waste Water. Note: WebEOC is not a communication tool, it is an information gathering platform.

## **WEROC EOC ORGANIZATION AND RESPONSIBILITIES**

The following pages is a description of each EOC Section. The WEROC EOC organization chart is visually represented in Figure 1: WEROC EOC Organization Chart.





<b>EOC Organization</b>	
<b>Management Section</b>	Responsible for overall WEROC emergency policy and coordination through the joint efforts of WEROC EOC Management Staff, Rumor Control, Public Inquiries, Identification of Safety Officer, Facility Security, Agency Liaison, and State/federal activity coordination. This section includes the EOC Director, Public Information Officer, Legal Advisor, and liaisons from outside agencies such as MET, the Operational Area (OA), and WEROC Water utilities.
<b>Planning and Intelligence Section</b>	Responsible for collecting, evaluating, disseminating intelligence and information; developing the EOC Action Plan in coordination with other functions; and maintaining documentation, advanced planning, Technical Services, Action Planning, and Demobilization Planning. Communication and coordination is part of the Planning and Intelligence Function and shall be established between the WEROC EOCs, WEROC member agencies, the OA, SWRCB, MET and other appropriate resource agencies.
<b>Logistics Section</b>	Responsible for managing all requests made of WEROC for logistical support by WEROC member agencies during a disaster operation, including the facilitation of mutual aid, Transportation Support, Personnel, Supply and Procurement, Resource Tracking, and IT Support,
<b>Finance and Administration Section</b>	Responsible for managing all financial aspects of the disaster operation, including the tracking of hours, compensation claims, Purchasing, Cost Recovery, contracts, and Travel Request forms and claims.

Note: WEROC does not have an Operations Section as part of its EOC structure because the agency is not responsible operations in the field. Operations are conducted by the member agencies in the field and their Department Operations Center.

### **Chain of Command**

The first WEROC Staff member to arrive at the EOC will start making the EOC operational. In accordance with ICS, the most qualified EOC management staff member to arrive will exercise overall EOC management responsibility until relieved by the next qualified management staff member. This will be done in the following order:

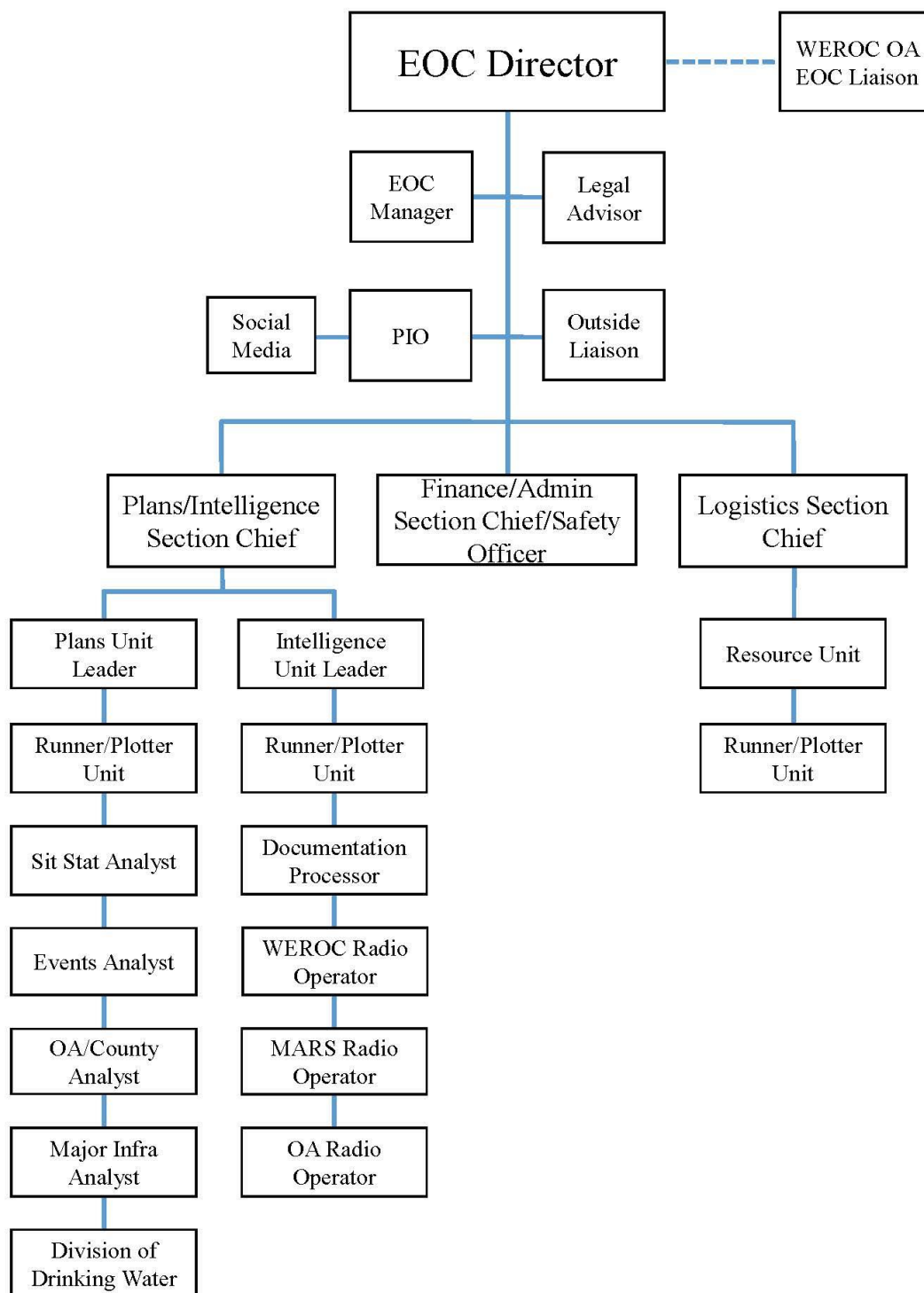
1. EOC Director
2. EOC Manager
3. Planning/Intelligence Chief
4. Logistics Chief
5. Finance/Administration Chief / Safety Officer

As additional WEROC Staff arrive, a more permanent and expanded EOC organization will begin to identify these initial tasks in a more formal manner, i.e. using functional checklists and the EOC action plan (See position binders in each EOC)





**FIGURE 1: EOC ORGANIZATION CHART**







## EOC SECTION RESPONSIBILITIES AND REPORTING PROCEDURES

Responsibilities for each WEROC Function are listed below. EOC Staff assigned to a specific function should review the checklist for that function found in each EOC position binder in the EOC. In addition staff should review and become familiar with the other checklists in the event that a reassignment of functions is required. It is WEROC's intent to provide opportunities for cross-training in all EOC functional positions to maintain a high level of staff preparedness.

<b>Management Section</b>	
<b>EOC Director</b>	Responsible for the overall emergency management, policies and coordination of the WEROC EOC. Manage WEROC EOC activity and develop EOC priorities and objectives in the EOC Action Plan (IAP). Approve the demobilization plan for the WEROC EOC provided by Planning and Intelligence. This position utilized WebEOC.
<b>EOC Manager</b>	Facilitate the overall functioning of the EOC by providing guidance and technical expertise to the Director and Section Chiefs during EOC operations. Ensure that the mission of WEROC is achieved through the communications and coordination of the EOC. This positions is privy to the tools and resources available at the EOC. This position utilizes WebEOC.
<b>Legal Advisor</b>	Responsible for assessing WEROC and Member Agency risks resulting from the emergency. This function provides professional counsel to the EOC Director regarding emergency actions, liability, legal procedures and possible legal eventualities. Coordination and communication may be accomplished by phone and e-mail; however the position may attend EOC meetings with EOC Director and Management to achieve closer coordination.
<b>Public Information Officer</b>	Provide assistance and coordination to WEROC member agencies for public and media outreach and serves as the dissemination point for all public information released from the WEROC EOC to the affected area(s) throughout the operational period. A PIO Liaison may be assigned to the OA EOC if the OA JIC is activated or the OA hotline in support of water operations. May act as the JIC coordinator for water issues. This position utilizes WebEOC.
<b>Social Media</b>	Reports to the Public Information Officer and has the responsibility of monitoring social media, reporting new information, and posting approved information using WEROC social media accounts.
<b>WEROC OA EOC Liaison</b>	Reports to the OA EOC Public Works Director. This function is located at the Operational Area (OA) EOC and serves as the on-site liaison to the OA as a representative of WEROC and all water/wastewater agencies affected by the disaster. This function utilizes WebEOC.
<b>Outside Agency Liaison</b>	Reports to the EOC Director. This function serves as the liaison of the affected agency. Responsible for coordinating resources between WEROC and the member agency.





<b>Planning Section (Part of Planning &amp; Intelligence Section)</b>	
<b>Planning/ Intelligence Chief</b>	Exercise overall responsibility for the coordination of activities within the Planning & Intelligence Section. This section is responsible for gathering, analyzing, evaluating, displaying, and disseminating emergency information and is made up of the Planning Unit and Intelligence Unit. This section maintains information and intelligence on the current and forecasted situation. The Planning Section plays an integral part in developing the EOC Action Plan, prepares and documents incident maps, maintaining documentation for the overall event, and gathers and disseminates information and intelligence critical to the incident. Responsible for creating the water and wastewater Situation Summary Report. This function utilizes WebEOC.
<b>Planning Unit Leader</b>	Manage the Planning Unit that is responsible for gathering, analyzing, evaluating, displaying, and disseminating emergency information. Based upon information gathered, the Unit formulates and forwards planning recommendations to the Planning and Intelligence Chief and all other affected EOC sections. The Planning Unit Leader also routes information from the Intelligence Unit Leader to the appropriate Planning Unit function to be displayed and maintained on EOC whiteboards. This function utilizes WebEOC.
<b>Situation Status Analyst</b>	Responsible for collecting and following up on general situation status regarding WEROC member agencies. The Situation Status Analyst uses a variety of methods to collect situational information, once collected the information is to be organized and displayed on the Situation Status Whiteboard, which will be continuously updated to provide all WEROC EOC staff with general situational awareness. This function utilizes WebEOC.
<b>Events Analyst</b>	Responsible for collecting, evaluating, and tracking, and following up on member agency events of significance during the course of an incident. This position analyzes information it processes and assists the Planning Unit Leader with advanced planning. Additionally, ensures the events board is updated regularly. This function utilizes WebEOC.
<b>OA/County Analyst</b>	Collect and analyze disaster information related to overall OA/County operations and significant events. Be aware that although events may not be directly related to water and wastewater, indirect effects have the potential to significantly affect the operations or recovery of Orange County water and wastewater systems. Summarize and forward significant findings to the Planning Unit Leader and other EOC staff, as needed. This function utilizes WebEOC. Responsible for maintain the OA/County events board updated.
<b>Major Infrastructure Analyst</b>	Collect and analyze damage assessment information to identify issues related to major water and wastewater infrastructure in Orange County. Determine the likely impacts of damage to the Orange County water and wastewater system. Summarize and forward significant findings to the Planning Unit Leader and other EOC staff, as needed. Responsible for major infrastructure board. This function utilizes WebEOC.





<b>Division of Drinking Water</b>	This function serves as the representative from the DDW. Responsible for coordinating resources and providing guidance to member agencies. This function utilizes WebEOC.
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<b>Intelligence Unit (Part of Planning &amp; Intelligence Section)</b>	
<b>Intelligence Unit Leader</b>	This function reports to the Planning and Intelligence Chief and is responsible for collecting, evaluating, and designating responsibility of all incoming messages to the WEROC EOC. This function utilizes WebEOC.
<b>WEROC/OA/MARS Radio Operators</b>	Facilitates all emergency radio communications between WEROC EOC, member agencies, County OA EOC, and MET's EOC. The amount of radio staff will depend on the amount of radio traffic.
<b>Runner Unit</b>	Reports to the Intelligence Unit Leader and is responsible for ensuring a timely and smooth flow of written information between all EOC functions, especially the radio room.
<b>Plotter Unit</b>	Reports to the Intelligence Unit Leader and is responsible for providing an updated visual picture and situation status of the disaster for the EOC Director and staff on the white boards and projector. Assigned to sections as needed.
<b>Documentation Processor</b>	During the initial phases of activation, the Documentation Processor assists: the Situation Status, Events, OA/County, and Major Infrastructure Analyst to collect and organize information. Throughout all phases of activation, the Documentation Processor must review the EOC message flow process and offer critiques on procedures to improve the overall EOC system. Creates the official record of activities for the EOC by collecting, organizing, and documenting all EOC communications throughout the operational period in the Documentation Log and event binder

<b>Logistics Section</b>	
<b>Logistics Chief</b>	Manage all resource requests made by member agencies and provide logistical support to the WEROC EOC operations. This includes tracking resources and determining resource request priorities. Ensure all resource requests are organized and clearly displayed on the WEROC EOC Resource Request board. This function utilizes WebEOC.
<b>Resource Unit</b>	Identify and coordinate resources identified through resource requests made by member agencies. Provide logistical support to WEROC EOC Staff during WEROC EOC operations. Ensure all resource requests are organized and displayed on the WEROC EOC Resource Request board.





<b>Finance and Administration Section</b>	
<b>Finance and Administration Chief/Safety Officer</b>	Manage all WEROC EOC related financial aspects of the disaster operation. This includes maintenance of personnel and equipment time records; providing payments to vendors for supplies and equipment usage; and for determining the cost considerations or various alternative strategies associated with incident planning. Additionally tracks member agency IDE information and collection, and acts as the safety officer for the EOC. As the safety officer, assess and anticipate hazardous or unsafe conditions and recommend measures for assuring personnel safety. Ensure all emergency response personnel follow and demonstrate appropriate safety precautions during an emergency. This function utilizes WebEOC.

### **Required Forms**

Each position at the EOC has a designated position guide to assist personnel throughout the response and recovery phase. Each folder is equipped with documents, checklist, contact information, and supplemental resources each position will need fulfill their role. The folders are designed to be all inclusive, but staff are encouraged to utilize other means that may not be in the function guides to complete their task if necessary. The position guides include:

- General Start Up/Deactivation Procedures
- WEROC Organizational Chart
- WEROC EOC Functional Descriptions
- Job Action Checklist
- Important Contact Information
- Location of Supplies Within the EOC
- General Forms i.e. Activity Log
- Function Specific Forms
- Function Specific Resources

All forms identified above are also available in electronic format by utilizing the USB drive attached to your position guide basket and back up hard copies are available in the position binders.

### **EOC ACTION PLAN**

EOC Action Plans (EAP) provide framework for EOC staff to respond to the situation by providing them with the objectives and the steps required to complete them. EAPs not only provide direction, but also serve to provide a basis for measuring achievement of objectives and overall system performance. EAPs are an important management tool that involves a process for identifying priorities and objectives for emergency response or recovery efforts. EAP's also provides documentation of the priorities, associated tasks, and the personnel assigned to perform the tasks within the EOC.

The EAP is a living document prepared based on the best available information at the time of the planning meeting. EAPs are developed for a specified operational period that may range from a few hours to 24 hours. The operational period is determined by first establishing a set of priority





actions that need to be performed. A reasonable time frame is then established for accomplishing those actions. The EAPs need not be complex, but should be sufficiently detailed to guide EOC elements in implementing the priority actions. For the initial response, the format may be limited to a well-prepared outline for an oral briefing. For most incidents that will span multiple operational periods, the plan will be developed in writing according to ICS procedures.

## **EOC ACTION PLAN ELEMENTS**

The EAP template and sample can be found within the Planning and Intelligence position binders. Below is a brief explanation of what information is requested on that template.

**Operational Period:** Period of time in which EOC Staff will meet the stated objectives. Typically, during the first day of a major emergency or disaster, change is rapid, thus EOC Management may set the operational period to last only a few hours. Later, change is less rapid and the operational period may expand to cover a number of days.

**EOC Objectives:** Stated objective(s) the EOC should accomplish within the operational period. Example objectives for the initial stages of EOC activation for a major earthquake include:

- Establish emergency communications with Metropolitan, Orange County Operational Area, and WEROC Water utilities
- Update Situation Status board with each agencies communication resources and availability
- Receive summary of all water and wastewater damages, support needs, and impacts to surrounding communities
- Identify and prepare most likely anticipated resource requests from member agencies

**Operational Priorities:** List priorities in order of importance (note: the order of priorities may change based on the disaster situation).

**Actions Needed:** List the steps necessary to accomplish the objectives e.g. Analyze, Coordinate, Formulate, Monitor, etc.

**Resources Needed:** List Personnel, Equipment, and Supplies, along with the costs associated with those resources. Create a schedule that outlines what kinds of resources are required, how many, where and when. Logistics will order resources based on the EOC Action Plan. The ICS 213 Resource Request form is used to request resources, the form contains the following information:

- Mission Name and Detailed Description
- Requesting Agency Information
- Deployment Information
- Estimated Costs





**Support Needed:** List the various partner agencies the WEROC EOC will require the support of in order to meet operational objectives.

The EAP process should involve the EOC Director and Section Chiefs along with other appropriate EOC staff and other agency representatives as needed. The Planning/Intelligence Section is responsible for development of the EOC IAP and for facilitation of EOC action planning meetings. Planning meetings will not be delayed in anticipation of future information. A sample EAP can be found within each of the positions of the Planning Unit. The planning process for the first EAP will begin upon the activation of the WEROC EOC and will consist of the following steps:

### **Planning Process**

1. Gather, record, analyze, and display situation and resource information in a manner that ensures a clear picture of the magnitude, complexity, and potential impact of the incident **(Planning Section with input from General Staff)**.
2. Conduct a briefing with management section and section chiefs on the situation and status of resources **(Planning Section)**.
3. Formulate and prioritize measurable EOC objectives that conform to the legal obligations and management objectives of WEROC as it relates to the response. **(EOC Director with consultation from General Staff and others)**.
4. Identify reasonable alternative strategies that will accomplish overall incident objectives to determine the most appropriate strategy for the situation at hand **(EOC Director with consultation from General Staff and others)**.
5. Develop evaluation criteria to include public health and safety factors, estimated costs, and various environmental, legal, and political considerations **(EOC Director with consultation from General Staff and others)**.
6. Determine the direction and the specific resource, reserves, and support requirements for implementing the selected strategy for one operational period. I.e. assign responsibilities and staffing **(Planning Section)**.
7. Specify known or expected resources and facilities that may be needed by each member agencies to support their response needs. **(Logistics Section)**.
8. Place orders for resources, facilities, and overhead personnel **(Logistics Section)**.
9. Draft and approve the EOC IAP **(EOC Director, Planning Section)**.
10. Distribute the approved EOC IAP to all EOC sections for implementation **(Planning Section)**
11. Compare planned progress with actual progress **(Planning Section)**.
12. Track deviations that occur from the EOC IAP and emerging information to include in the first step of the process for modifying the current plan or developing the plan for the subsequent operational period **(Planning Section)**.





A sample EAP can be found within the position guide at the EOC. The first EAP is for the first operational period (12 hours) that the EOC has been activated. The second and subsequent EAPs should be developed and approved prior to the next operational period.

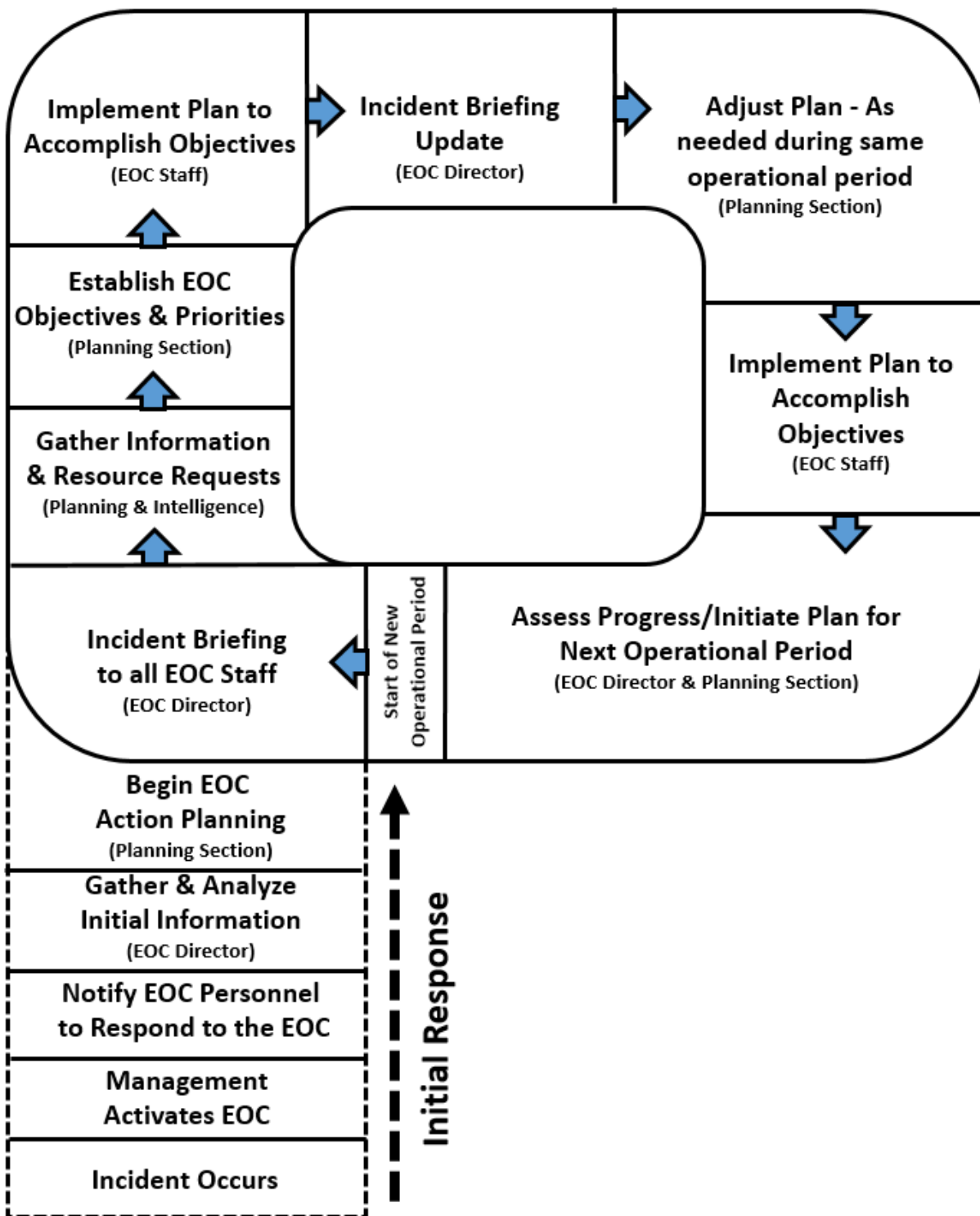
The planning process should provide the following:

- Current information that accurately describes the incident situation and resource status
- Predictions of the probable course of events
- Alternative strategies to attain critical incident objectives
- An accurate, realistic EOC IAP for the next operational period





**Figure 1: EOC Action Planning Cycle**







## **COMMUNICATIONS**

The WEROC EOC's have established multiple forms of communications for use during activation. The traditional forms of communication available are landline phones, cellular phones, satellite phones, a fax line and three separate radio communication systems (WEROC, MARS, OA1). In addition to those, the WEROC EOC's have wireless internet capability, Gmail accounts, and the use of WebEOC.

### **Telephone, Cellular Phone, Fax, and Satellite Phones**

Each EOC has six hardline phones, staff cellular phones, one fax machine, and a satellite phone. All phone lines have the capability to call out, transfer calls, and call waiting.

### Government Emergency Telecommunications Services/Wireless Priority Service

WEROC staff and both EOC's utilize Government Emergency Telecommunications Service (GETS). GETS is a federally sponsored program that provides government first responders with priority service for landline telecommunications. A GETS card has been issued to all managerial staff, each position in the Planning Section, Logistics Section, and Finance Section, and to both the Emergency Manager and Coordinator. Wireless Priority Service (WPS) is intended to be used in an emergency or crisis situation when the wireless network is congested and the probability of completing a normal call is reduced. All staff can add to their personal phone. A list of active participants is available in **Attachment N**.

### **AlertOC**

AlertOC is a mass notification system designed to inform Orange County residents and businesses of imminent emergencies and protective actions. By registering with AlertOC, time-sensitive voice messages, text messages, and emails from the County, WEROC, or member agencies can be sent to those who live or work in the county. Text messages may also be sent to cell phones, e-mail accounts and hearing impaired receiving devices.

MWDOC may use the system as an internal notification tool to notify staff of imminent or on going emergencies. Additionally, if requested by a member agency, WEROC may send out notifications to the public on behalf of the member agency. If WEROC EOC staff are unsure how to use AlertOC, they may contact the Operational Area EOC to send out a message on the agency's behalf. MWDOC staff with the responsibility to send out notifications have been pre-identified by the general manager.

### **WhatsApp**

WhatsApp is a phone application (Apple or Android) that allows the sending of text messages and voice calls, as well as video calls, images and other media, documents, and user location. The application runs from a mobile device though it is also accessible from desktop computers; the service uses standard cellular mobile numbers. This application allows users with different phone software to easily create and connect to group text messages.





### **Internet and Email**

Both EOC's have internet service with wireless connectivity available. Email accounts have been established for all EOC positions and are listed in position binders as needed. Additionally, any laptop brought to the EOC with wireless capabilities should be able to connect to the service.

### **WebEOC Operations**

During emergencies WEROC and all government agencies in OC use WebEOC as a crisis information management system for real-time information sharing. WebEOC is a software program for electronically sharing disaster information among the WEROC Water utilities, and from WEROC to the Operational Area or with other jurisdictions. WebEOC is accessed through the internet and is thereby accessible from any device with internet access (running Internet Explorer 6.0 or higher) as long as the user has an appropriate username and password. The system is used for, but not limited to:

- Situation status reports for all government agencies
- Monitoring and posting significant events
- Monitoring who is supporting the response, accessing their contact information, and tracking response actions
- Reporting IDEs
- Central location for public information

WebEOC should not be relied upon for up to date information. It is always best to communicate directly to receive a confirmation than to assume an agency is using WebEOC.

## **RADIO COMMUNICATION**

The WEROC EOC's have three radio systems available for different communication purposes: OA1, MARS, and WEROC. In accordance with NIMS policies, WEROC will only use standard speech communications, rather than any type of codes such as Ten-Code. All three radio systems conduct regular radio checks to ensure operability and user knowledge of systems. Practicing proper emergency radio procedures is necessary to ensure that radio operation is an automatic response and to reduce confusion. It is encouraged that a runner or designee assist the radio operator by acting as a second listener to ensure that communications are not misinterpreted. Below is a description of the three radio systems that are utilized at the EOC.

### **Operational Area One Radio (OA1 Radio)**

The OA1 Radio allows the WEROC EOC to communicate with the Operational Area and City EOC's on the OA1 frequency. This frequency is monitored 24/7 by the Sheriff's Control One and can also be overheard by all OA1 Member cities EOCs. As such, they can serve as back-up communications with other jurisdictions if the other jurisdictions are first prompted to continuously monitor the frequency. The Orange County Sheriff's Emergency Management conducts a monthly test of the system. For OA1 Radio operations guidance, refer to the OA Radio System Standard Operations Procedure which is available in the Radio Unit Position Guide.





### **Metropolitan Member Agency Response System (MARS) Radios**

The MARS Radio System provides an emergency communications network for all MET water utilities. Within Orange County, MARS radio units are located at the Diemer Filtration Plant in Yorba Linda, both WEROC EOCs, and the cities of Anaheim, Fullerton and Santa Ana. All three cities have agreed to coordinate emergency response operations through WEROC.

For MARS Radio System operation guidance, refer to the Member Agency Response System Operations Manual, which includes standard operations procedures for the radio system. Copies of the Manual are located in both WEROC EOCs in the Radio Unit Position Guide in each EOC has a copy of the MARS manual for reference.

### **WEROC 800 MHz Radio System**

WEROC's emergency radio system provides an emergency communications network for all WEROC member agencies, Diemer Filtration Plant, DDW, and the OA EOC. The system includes a "WEROC Channel" within the current 800 MHz system, with WEROC and its agency's as "Participating Agencies." WEROC's specific channel has the capacity to be connect with other operations, such as fire, law, public works, etc. at the time of a disaster as needed. Each EOC is equipped with a control station and one portable radio. If all other communication systems are inoperable and an emergency which requires immediate attention occurs, the red button on the radio can be pushed for immediate assistance.

## **STAFF SAFETY**

Ensuring the safety of EOC staff is of utmost importance. The Safety Officer is responsible for addressing all potential hazards within the EOC and responding to any staff who requires medical attention. Protocols for medical attention are listed in detail in the Safety Officer Position guide.

### **Staff Resources**

Each EOC is stocked with: first aid/trauma kits (located in the WEROC office and near the East MWDOC employee entrance), an automatic external defibrillator, sleeping bags, cots, meals ready to eat, drinking water, and hygiene products.

### **Injuries**

Any injury which occurs during working hours will be treated as a workers compensation injury. If medical attention is needed, but is not an emergency, the staff member can be taken to any of the designated clinics or the patients preferred doctor.

### **Family Notifications**

In stressful and fast pace situations, injuries can occur. If a staff member is seriously injured or perishes while on duty, the MWDOC General Manager or alternate will be charged with notifying the staff member's emergency contact. Emergency contact information can be found in the WEROC Staff Information binder located at each EOC. If while on duty an EOC staff member sustains a non-life threatening injury, the Safety Officer will notify the individual's emergency contact. Injury Forms are located in the Safety Center application and in the Safety Officer Position guide and should be utilized to document each incident.





### **Unauthorized Personnel**

Intruders may pose a threat to EOC staff. Doors and access gates to the EOC should remain closed at all times while the EOC is activated. The EOC doors are equipped with panic push bars to allow for easy exit in case of an emergency. The assigned Safety Officer will be in charge of allowing authorized personnel access to the EOC as well as denying access to non-authorized personnel. Unauthorized personnel will be asked to leave the premises and informed that law enforcement will be called if they do not get off the property.

## **OPERATIONAL PERIODS**

The Planning/Intelligence Section will be responsible for establishing formal shifts and staffing schedules. Depending on the circumstance, shifts can last up to but should never exceed 13 hours. It is important to stick to these schedules during EOC activation. Many EOC personnel may want to stay “on-duty” despite the pending end of their shift. Personnel need to be allowed to relax and decompress and should feel confident that appropriate personnel are taking their places.

### **Shift Transition**

Shifts should overlap by at least a half an hour to give the outgoing personnel an opportunity to debrief incoming personnel and to allow time to transition. To sustain continuity from shift to shift, this transition period is required. The incoming person is the one who releases the person they are replacing. The person going off shift cannot leave until the incoming person is ready to assume the role. The Finance/Administration Chief is responsible for ensuring personnel submit time cards and ensuring any staff leaving the EOC are in a physically and mentally safe position to drive home.

## **ADMINISTRATION AND FINANCE**

### **Administration**

The administration function manages all administrative, financial, and cost analysis aspects of the incident. Initially, this work may be done in the EOC, but after the EOC is deactivated the activities can also be conducted from MWDOC. Additionally, this function will be in charge of tracking IDE’s from member agencies.

### **EOC Documentation**

During EOC activation, the administration function during an event is a support role and requires proper and accurate documentation of all actions taken. This function coordinates with other sections in the EOC and/or departments to collect the necessary documentation pertaining to the incident for cost recovery purposes. This function also acts as a liaison with other disaster assistant agencies and coordinates the recovery of costs as allowed by law. The documentation gathered must be maintained and becomes official record of the event in order to pass an audit. Accurate and timely documentation is essential to financial recovery for the WEROC and its water utilities.





## **Finance**

WEROC may be reimbursed from ACWA JPIA Insurance, California Disaster Assistance Act, or Stafford Act for disaster-related expenses. Accurate record keeping will assist the recovery process for the said expenses after an incident. Recommended Finance Practices for Stafford Act Public Assistance should be adhered to. All EOC cost are tracked by activity codes, activity codes are located in the Finance and Administration Position Guide

## **Vital Record Retention**

State and federal governments require detailed information to support claims for reimbursement. Funding will be approved or denied based upon the information supplied by applicant agencies. Documentation supporting all costs claimed will be required, and all information must relate back to the original source records. The following guidelines should be followed when documenting disaster-related reimbursable expenses:

- Costs and reimbursements associated with emergency operations should be segregated from normal operation expenses.
- Separate records should be maintained for each vehicle and piece of heavy equipment used for emergency operations.
- Vehicle and equipment documentation should include the miles and/or hours operated by location and by operator.
- Vehicle operating expenses should include fuel, tires, tubes, and maintenance.
- Regular and overtime labor costs should be compiled separate from vehicle and/or equipment expenses.
- Equipment documentation should include exactly where the equipment was used and for what; hours and minutes used; and the name of the equipment operator if applicable.
- Revenues and subsidies for emergency operations must be subtracted from any costs claimed.
- Requisitions, purchase orders, and invoices must be maintained for all supplies, materials and equipment expenses claimed should be tracked by project or job site.
- Cost for supplies and materials must include documentation of exactly where resources were used and for what purpose.
- All non-competitive procurements must be justified and follow the agency's finance policies.

Expenditure tracking should commence in any occurrence of an incident that requires expense of labor, equipment used, materials, and other expenses. The Incident Commander(s), EOC Director and EOC staff are responsible for maintaining written records of all disaster-related staff time, requests for supplies, equipment and contract personnel, and receipts for emergency purchases of supplies, equipment and other disaster-related expense.

The Finance Section will compile reports, including total expenditures by Public Assistance category. The Finance Section Chief will submit a summary report on total costs to the EOC Director as requested. This information will be used for state and federal disaster assistance applications. The expenditure data and documentation is vital to state and federal agencies for requesting financial assistance during and after the incident.





MWDOC owns the records, and has the responsibility and liability for their management, and an obligation to direct employees how they are to manage their records; therefore, MWDOC has created various policies and procedures to retain records in the event of a disaster. MWDOC uses Laserfiche to manage and store vital records. This system is maintained by MWDOC's Record Coordinator. At the completion of each shift and the event, all records should be submitted to the Section Chiefs who will then submit the records to the Finance Section Chief.





## RESOURCE MANAGEMENT

WEROC considers the development of a comprehensive resource management strategy a priority. Mutual assistance should only be requested once the agency's own resources are reasonably depleted and private company (purchase, lease, or rent) resources have been exhausted. The WEROC EOC is responsible for managing response resource and will allocate resources for the greater good of the incidents recovery.

## MEMBER INTERAGENCY COOPERATION

The WEROC Indemnification Agreement (**Attachment A**) is a mutual assistance agreement between member agencies that outlines cost and liabilities associated with mutual assistance request, but it does not cover response cost reimbursement. It is recommended that reimbursement cost be decided between member agencies prior to any equipment or personnel being transferred. WEROC will assist the coordination of mutual aid resources in the event that various agencies are impacted or need assistance.

### *Small Scale Emergencies*

Depending upon the size and type of emergency affecting member agencies, it may not be necessary to fully activate the WEROC EOC. Emergencies confined to a specific small area (s) e.g. system failure, flooding, rural/urban fires, etc., may only require the DOC activation of the member agency(s) affected by the emergency. In these situations where only one or two agencies are impacted, the member agency affected may request assistance directly from another agency. (However, the requesting agency should always notify WEROC of these activities). In most cases, much of the resources required will come from inventories within our member agencies. WEROC would standby and monitor radio communications, or activate the EOC if requested to do so. Any member agency may request WEROC EOC activation in support of their activities.

### *Large Scale Emergencies*

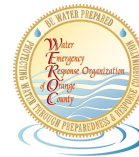
Local Emergency (No State or Federal Declaration) – When member agencies require assistance that does not warrant an emergency, they look to neighboring member agencies for assistance.

State and/or Federal Declaration Reimbursement for Mutual Assistance Response – The following process should be taken if using Public Assistance Reimbursement from a State and/or federally declared disaster. The Requesting Agency will pay for any incurred costs regardless which of the reimbursement methods below are used.

1. Responding Agency bills Requesting Agency for response costs
2. Requesting agency submits those costs through the FEMA Public Assistance process

When either process is initiated, the agency should follow the recovery documentation process found on page 64. It is up to the member agencies to come to terms on how the equipment or staff time will be reimbursed.





## **EMERGENCY PURCHASING AUTHORITY**

The following information has been referenced from the FEMA 44 C.F.R. § 13.36 (August 2014) and the FEMA Field Manual for Public Assistance Grantee and Sub-grantee Procurement Requirements under 44 C.F.R PT.13 and 2 C.F.R PT. 215. All agencies should be familiar with State and federal purchasing and contract regulations as they relate to water and wastewater, public works processes and disaster finance processes. The following is not a complete explanations of disaster financial processes, eligibility or regulations.

### **Vendor Contracts**

#### *Emergency Work (Temporary Repairs)*

During a public exigency or local emergency where a temporary repair is needed to restore water services and avoid issues to public health, member agencies may contract directly with a vendor and bypass the competitive bidding process of a permanent repair. This work can only include FEMA Category A: Debris Removal and B: Emergency Protective Measures under the Public assistance reimbursement process. If needed, WEROC may facilitate the purchasing contracts for member agencies in order to expedite the process and maintain public health. During extreme circumstances, MWDOC may consider to directly contract with a third party for services, with the caveat that MWDOC will not be eligible for FEMA reimbursement. It is recommended that WEROC request that the local health officer declare a public health emergency prior to MWDOC entering any contracts in order to build a case for the purchase and increase the odds of qualifying for FEMA reimbursement.

*Noncompetitive Procurements:* Procurement through solicitation of a proposal from only one source or inadequate competition. May be used only when: (a) Full and open competition is infeasible, and either (i) Item available only from single source; or (ii) Public exigency/emergency; or (iii) Awarding agency authorizes; or (iv) After solicitation of a number of sources, competition is determined inadequate; and (b) cost analysis is performed to determine cost reasonableness

*Small Purchase Procedures:* May use small purchase procedures for procurements under simplified acquisition threshold (SAT) \$150,000. This type of procurement is often accomplished by inviting vendors to submit three quotes, which the buyer then evaluates and makes an offer

#### *Permanent Work*

During an emergency where a permanent repair is needed to restore water and wastewater services and avoid issues to public health, member agencies must obtain three separate quotes if the total amount for the work performed is between \$3,500 and \$150,000. If the work exceed \$150,000, the agency must enter a competitive sealed bid process (lowest price bid). Member agencies may complete a Request for Proposal process for architectural or engineering consultation services which is categorized as Category C-G under the Public Assistance reimbursement process.





### **MWDOC Purchasing Authority**

Under the MWDOC Administration Code §1307, the MWDOC Board of Directors has authorized the General Manager to expend non-budgeted District funds to meet an emergency that adversely affects, directly or potentially, the ability of the District to perform its services; which puts District property or personnel in jeopardy; or which may jeopardize the health or property of the community and its residents. Per the Administration Code, Chapter 8, Exhibit A the expenditure of those funds are allowed as follows; up to \$100,000 with a purchase order/agreement or contract to be ratified by the Board at the next meeting, or if over \$100,000 the general manager must present an agreement or contract to the Board for approval. The General Manager shall determine that an emergency exists and shall inform the Board of the emergency, at the earliest opportunity, the steps taken and expenditures incurred to respond and recover.

### **Member Agency Purchasing Authority**

Each member agency should establish an emergency purchasing authority ordinance that is activated when the agency declares an emergency. If an agency is conducting temporary repairs, the agency is allowed to use their internal emergency purchasing procedures as long as it meets the FEMA emergency categories on page 52, and do not have to adhere to federal procurement standards. When the temporary repair is transitioned to a permanent repair, the agency must adhere to federal procurement standards.

### **Damage Repairs**

The entity who owns the damaged infrastructure is in charge of coordinating and paying for the repair cost. Given that damaged infrastructure may affect water distribution to various agencies, it is important for agencies to develop disaster specific agreements that give other agencies the authority during an emergency, to repair infrastructure that is not typically maintained by that agency on a daily basis. During an extreme circumstance when an agency's resources are depleted, this concept can expedite the restoration of water distribution and help ensure that agencies involved are reimbursed given a state or federal emergency declaration. Agreements for maintenance and repair should specifically state who is responsible for those cost and repairs during an emergency response and recovery. The above process will ensure that FEMA public assistance reimbursements are appropriately distributed.

Member agencies who jointly own infrastructure and use roads that might belong to public works or other agencies and need to access the property for safety reasons, should be asked by the owner of such property to make a mutual aid request to the agency willing to conduct the debris removal or temporary repairs.

In limited circumstances, FEMA may determine that emergency protective measures conducted on private property are eligible under the PA Program if:

- The immediate threat is widespread, affecting numerous homes and businesses in a community such that it is a threat to the health and safety of the general public in that community;
- The Applicant has legal authority to perform the work; and
- The Applicant obtained rights-of-entry and agreements to indemnify and hold harmless the Federal Government.





## **MUTUAL AID**

California participates in a statewide mutual aid system that is designed to ensure additional resources are provided to jurisdictions whenever their own resources are exhausted. The basis for the system is the California Disaster and Civil Defense Master Mutual Aid Agreement (MMAA). The agreement requires all government agencies in California to provide aid to each other during an emergency. Under specific conditions, federal and state monies may be appropriated to reimburse public agencies that aid other jurisdictions. Mutual aid is only eligible for reimbursement for temporary repairs and emergency protective measures, and not for permanent repairs. If other agreements, memoranda and contracts are used to provide assistance for consideration, the terms of those documents may affect disaster assistance eligibility and local entities may only be reimbursed if funds are available.

The Master Mutual Aid Agreement (MMAA) requires a Declaration of Emergency from a city, county, or state, and is coordinated through the SEMS system. WEROC will facilitate through the OA on behalf of its member agencies.

Emergency Managers Mutual Aid (EMMA) – The purpose of EMMA is to provide trained EOC personnel from unaffected areas to support local jurisdictions, OA's and regional emergency operations during proclaimed emergencies.

### **Emergency Water Allocation**

Emergency water allocation procedures specified by suppliers will be considered a priority. Water allocation recommendations made by WEROC will be based on:

- Firefighting requirements
- Potential threat to life or property directly related to water supply
- Health and safety considerations
- Water demand by member agencies and the status of their supply

If reallocation of water is needed, WEROC will take the following steps to ensure that the health and safety of the community is maintained:

- Evaluate impacted agencies, water supply, and supply needed
- Coordinate with all member agencies for capability to adjust source supply
- Coordinate movement of available water supply source via:
  - MET and joint agency pipelines, interties, and emergency connections;
  - including closing MET connections to non-impacted agencies with alternate water supply
  - Request and deploy water trailers

### **Mutual Aid Coordination**

Formal mutual aid requests will follow specified procedures and are processed through pre-identified mutual aid coordinators. Mutual aid requests will follow discipline-specific chains (e.g., fire, law enforcement, emergency manager, etc.) from one level of government to the next per SEMS protocols. The mutual aid coordinator receives the mutual aid request and coordinates the provision of resources from within the coordinator's geographic area of responsibility. In the event resources are unavailable at one level of government, the request is forwarded to the next higher level of





government to be filled. These levels are listed below in order from the lowest to the highest level of government.

- **Member Agency Requests:** Requests for resources originate from the Member Agency and are managed by the Incident Commander (IC). If the IC is unable to obtain the resource through existing local channels, the request is elevated to the water utilities DOC. If the DOC is unable to locate the resource, the request will be sent to the WEROC EOC.
- **WEROC Request:** WEROC will work with unaffected member agencies to obtain needed resources. If WEROC is unable to obtain the resource from an unaffected member agency, WEROC will contact the OA for support.
- **Operational Area Requests:** The OA is a composite of its political subdivisions, (i.e. municipalities, contract cities, special districts and county agencies). The OA Mutual Aid Coordinator assesses the availability of resources within the OA and fulfills the resource request based upon that assessment. In the event resources are unavailable at the OA level, the request is forwarded to the responsible Regional Mutual Aid Coordinator to be filled.
- **Region Level Requests:** The state is geographically divided into six Mutual Aid Regions. Each Mutual Aid Region is comprised of multiple Operational Areas and has a Regional Mutual Aid Coordinator. The Regional Mutual Aid Coordinator is granted the authority to coordinate the mutual aid response of discipline-specific resources within the Region to support a mutual aid request by a jurisdiction also within the Region. In the event resources are unavailable at the Region level, the request is forwarded to the State Mutual Aid Coordinator to be filled.
- **State Level Requests:** On behalf of the Governor, the Secretary of Cal OES has the responsibility for coordination of state mutual aid resources in support of local jurisdictions during times of emergency. The Secretary will analyze and coordinate the request by forwarding the request to an unaffected REOC or tasking an appropriate state agency to fill the need.
- **Interstate Mutual Aid:** Mutual aid may also be obtained from other states. California is a member of the Interstate Emergency Management Assistance Compact (EMAC), a congressionally ratified organization that provides form, structure and procedures for rendering emergency assistance between states. After a State of Emergency Declaration, California can request and receive reimbursable assistance through EMAC for other member states quickly and efficiently without issues of liability. The Secretary of Cal OES and the states' EMAC Coordinator are responsible for facilitating requests for assistance pursuant to EMAC.
- **Federal Assistance:** When resources are not available within the state or through existing agreements with other states, California may request assistance from the federal government. Requests for federal assistance during an emergency will be coordinated through the State Operations Center (SOC).





### **Requests for Resources**

When local resources are exhausted and additional resources are required, resource requests will follow an established process for ordering, tracking, mobilizing and demobilizing.

For the WEROC EOC, the Logistics Section Chief will initiate requests. Requests will be prepared by the EOC Logistics Unit using WEROC Resource Request Form or the ICS 213RR Resource Request Form which are to be submitted to the OA EOC by email. The logistics unit is expected to immediately follow up the request with a phone call to ensure that the request was received. The logistics section will continue to monitor the status of the resource request until it has been fulfilled or it is no longer needed.

Resource requests must include the following information:

- Clearly describe the current situation
- Describe the requested resources with as much detail as possible; including supporting concepts such as staffing and fuel
- Specify the type or nature of the service the resource(s) will provide; including criticality and impacts
- Provide delivery location with a common map reference
- Provide local point of contact at delivery location with primary and secondary means of contact
- Provide the name of the requesting agency and/or OA Coordinator contact person
- Indicate time frame needed and an estimate of duration
- Resource requests involving personnel and/or equipment with operators will need to indicate if logistical support will be provided by requesting agency, (e.g., food, shelter, fuel and reasonable maintenance)

The Resource Request form found in the Logistics Position Guide is used to request resources, the form contains the following information:

- Incident Name and Resource Request Number
- Detailed Description of the Resource
- Requesting Agency Information
- Deployment Information
- Estimated Costs

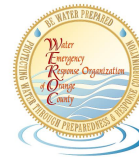
Once the request is coordinated, approved, and resources deployed, the Logistics Unit, in coordination with the Planning Section, is responsible for tracking the resources through demobilization.

### **Use of Mutual Aid Resources**

Each WEROC Member Agency agrees to abide by the following guidelines:

- WEROC will ensure coordination of resources between the OA, member agencies, and outside agencies.





- Mutual Aid resources will be requested through the WEROC EOC or alternate when more than two agencies are impacted.
- Personnel and equipment such as backhoes, graders, portable generators, pumps, valves, coupling, pipe segments, etc., will be made available to requesting WEROC water utilities when the resources is not anticipated to be needed by the providing WEROC member agency.
- Member agencies are responsible for verifying which mutual aid agreement is being utilized at the time of the response and are responsible for understanding the terms of that agreement. Additional information about several mutual aid agreements can be found in the Mutual Aid Matrix on page 60-61.
- Mutual Aid Resources include but are not limited to personnel and equipment.
- Any agency to agency mutual aid request will be reported to WEROC.

It is of utmost importance that WEROC water utilities follow policies and procedures established by SEMS/NIMS utilizing the WEROC, California WARN, and the OA mutual aid agreements. It is understandable that water utilities may want to directly contact neighbor agencies requesting aid; however this is not recommended as all messages should be forwarded to WEROC as the point of dissemination for all water and wastewater agencies. Doing so reduces the spread of false information, duplication of information/requests, and other problematic issues resulting from cross communication.

The WEROC Resource Communication Protocol (Figure 2) describes the path used to access mutual aid from WEROC and other support agencies.

### **Reimbursement for Use of Mutual Aid Resources**

It is important for agencies utilizing mutual aid agreements to fully understand each agreement of which they are signatory and to know which is being used during each transaction of resources with consideration that not all mutual aid agreements reimburse equally, if at all. Potential reimbursement for Mutual Aid Resources (i.e. equipment, supplies, and labor) used by an agency during a major emergency or disaster will be made when the emergency period has ended, according to the following guidelines:

### **All equipment, labor, and compensation must be documented in writing using the Public Assistance Forms to expedite the reimbursement process..**

- Equipment operating costs, as determined by the providing agency will be reimbursed by the requesting agency. Such operating cost should be pre-established by an agency rate sheet, and must not exceed current rate charges by established rental agencies for comparable equipment.
- Agencies supplying equipment operator (s) will be reimbursed for the full amount of the operator' salary plus benefits.
- Supplies used during a major emergency or disaster will be replaced and/or the costs of replacement paid by the requesting agency. All supply / material costs must be documented in writing to expedite the reimbursement process.
- Equipment will be returned to the providing agency in the same condition as when borrowed. If not, requesting agency will pay to restore said equipment.





- Reimbursement for labor costs (including overtime) will be determined by the agencies involved in accordance with normal reimbursement policy.

All WEROC water utilities should document all repair transactions performed following a disaster. It is recommended that all pertinent information regarding equipment costs, labor, supplies, etc., be documented to validate and expedite any requests for mutual aid reimbursement and for reimbursement of agency personnel costs (during the emergency period) by the State Office of Emergency Services. One of the most common reasons for failure to obtain reimbursement from Federal / State Disaster Assistance Agencies is the lack of adequate documentation.

Documenting a disaster simply means providing evidence or proof of what happened. Photographs of damage provide the most irrefutable evidence. Take pictures of damage to facilities, repair work, and completed restorations. Also, keep careful records of expenditures i.e. equipment, supplies, labor.

Federal and State agencies require a complete audit trail from the decision to purchase goods, to proof of payment, and proof that the work was completed. If an agency cannot provide proof that money was spent, that agency may not be reimbursed for expenditure.

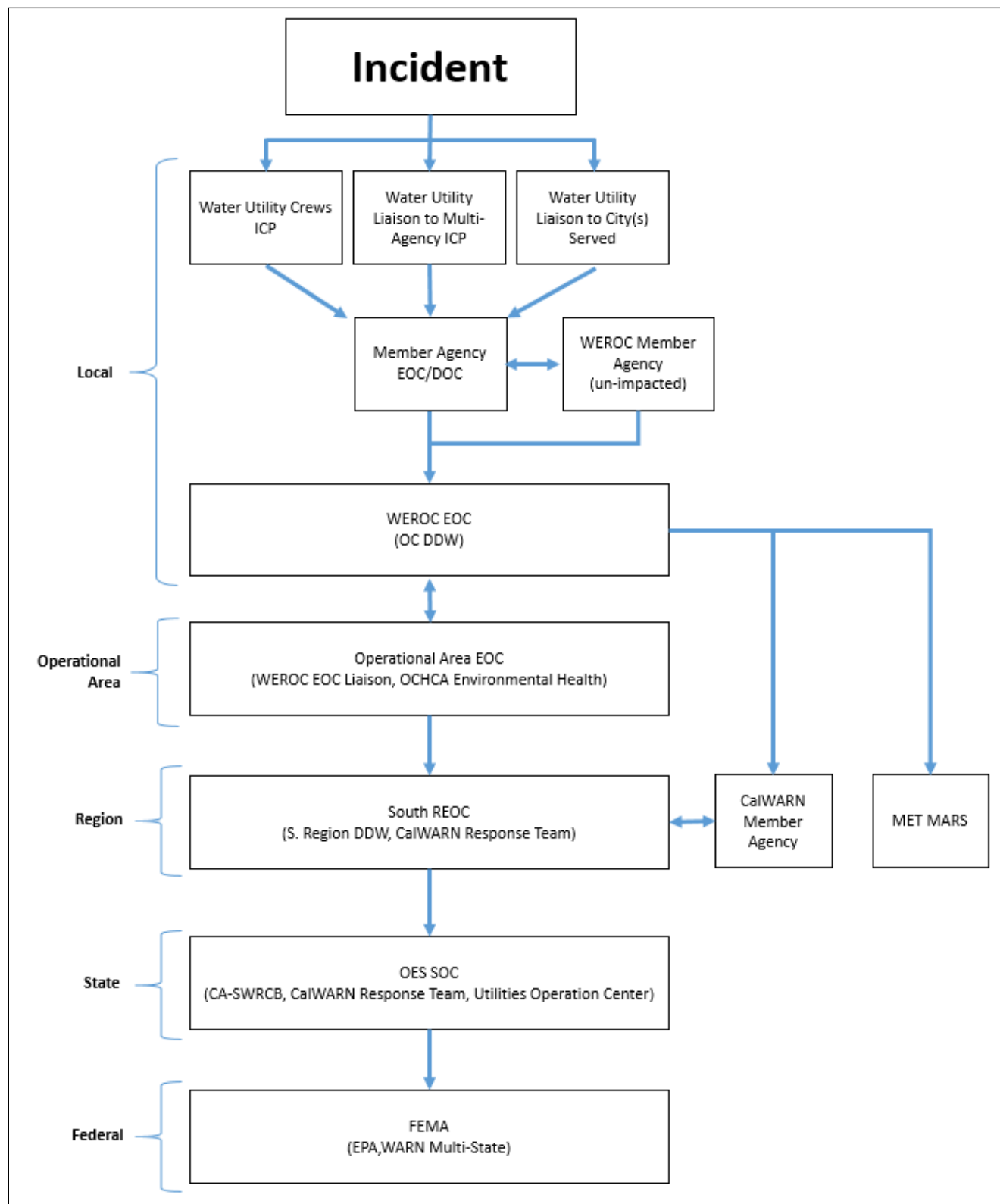
The following steps should ensure that you have adequate documentation:

1. Photograph damage and subsequent repairs
2. Document all damages and repairs
3. Clip and file press reports
4. Record all expenditures
5. Document staff/volunteer response hours on timesheets; all hours including non-response hours.
6. Document all pertinent conversations about specific damages and/or repairs to damaged facilities
7. Save all receipts, invoices, statements, and any other relevant paperwork for services rendered by a contractor or vendor.





Figure 2: WEROC Resource Communication Protocol





Water Emergency Response Organization of Orange County  
**WEROC Emergency Operations Plan**  
 March 2018



Table 2: Mutual Aid Matrix

Mutual Aid Matrix							
TITLE	Type	MEMBERSHIP	ADMINISTRATION	AUTHORITY	RELEASE OF LIABILITY	REIMBURSEMENT OF EXPENSES	NOTES
Master Mutual Aid Agreement	Mutual Aid/ Assistance	State of California; all counties, Cities, and public agencies in California who have signed agreement. Signed by Gov. Earl Warren in 1950.	For planning, State of California Office of Emergency Services (OES); Mutual Aid Regional Advisory Committee (MARAC) at regional level. In emergency, REOC (Regional Emergency Operations Center) has major authority; could go to SOC (State Operations Center).	Agreement has been codified by inclusion in California Emergency Services Act; further codified in Petris Bill (1993). <b>Once a disaster has been declared, participation is mandatory, subject to not overly depleting specific agency resources.</b>	Not expressly identified, but covered by the state's Disaster Service Worker Policy	No, unless otherwise expressly provided by agencies. Cost may be recoverable from State or Federal Govt. if disaster funds are approved. Reimbursement of response related costs requires SEMS compliance.	Follows SEMS Resource Request Structure
California Water Agency Response Network – Cal WARN	Mutual Assistance	California water and wastewater agencies that have signed agreement.	State Steering Committee State Chair, and associated organizations.	Signed Agreement : During a localized incident, agencies respond and coordinate directly. During larger incidents, agencies are asked to coordinate through the regional chairs.	YES	YES	Any participating agency can request assistance directly from any other participating water agency. Agreement provides for arbitration of disputes.
Member Agency Response System - MARS	Mutual Aid	Member Agencies of MET who have signed agreement.	Metropolitan Water District	Signed Agreement, declared disaster information.	YES	Not specifically provided in agreement, but assumed	Offers communications on a dedicated radio system.
WEROC	Mutual Assistance / Coordinating Entity	Member Agencies of WEROC who have signed agreement.	MWDOC	Signed Agreement: During a localized incident, agencies respond and coordinate directly. During larger incidents, agencies are asked to coordinate through the regional chairs	YES	Not specifically provided in Agreement.	Offers communications on a dedicated radio system.

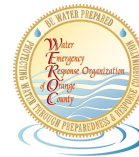




Water Emergency Response Organization of Orange County  
**WEROC Emergency Operations Plan**  
 March 2018

Mutual Aid Matrix							
TITLE	Type	MEMBERSHIP	ADMINISTRATION	AUTHORITY	RELEASE OF LIABILITY	REIMBURSEMENT OF EXPENSES	NOTES
Orange County Operational Area (Orange County Emergency Management Organization).	Coordinating Entity	All political subdivisions within the geographic boundaries of the County who have signed the agreement.	Orange Co. Operational Area Executive Board, Council, and Sub-Committees.	Signed Agreement: During declared disaster of local area, each agency retains authority.	YES	NA	Organizes all public emergency response agencies in providing a coordinated response to disasters. Comm. link to State.
Public Works Mutual Aid Agreement (PWMAA)	Mutual Aid Agreement	All who have signed agreement	LADPW	During a localized incident, agencies respond and coordinate directly. During larger incidents, agencies are asked to coordinate through the SEMS structure at the REOC.	Requesting party indemnifies the assisting party.	Requesting party pays all direct, indirect, administrative and contracted costs the assisting party incurred as a result of providing assistance within 60 days of receiving a detailed invoice.	
California Utilities Emergency Association (CUEA) Utility Operations Center - UOC	Coordinating Entity	Power, Telephone, Gas, Water, Wastewater, Pipelines (Petroleum) utilities that have applied for membership and paid dues.	Administered by board of public & private agencies. CUEA establishes institutional arrangements & facilitates mutual aid agreements, staffs the utilities desk at the State Operations Ctr.	unknown	NO	NO	CUEA staffs the UOC in time of disaster. CUEA or UOC matches up agencies offering and requesting mutual aid.





## EOC DEACTIVATION

EOC deactivation can occur for several reasons, including but not limited to the incident no longer requiring coordination, or the possible movement of operations from one EOC to the other. Deactivation can occur in phases to match the pace of an incident, so that as less coordination is required, the EOC staffing matches that demand. Special considerations should be determined for staff assigned to alternate locations such as the OA EOC, OA JIC, or field ICP. Due to the nuances of deactivation, it is important that the Planning Unit create a Deactivation Plan that encompasses all these considerations well in advance.

Recommendation: Deactivate in phases. It is more efficient and cost effective to deactivate personnel as they are no longer needed

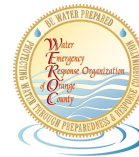
Once the decision to deactivate is made, the EOC Director and Planning Unit should brief all EOC staff of the Deactivation Plan. The briefing should include, but is not limited to:

- Concluding information regarding the event
- What remains to be done
- What resources are required to meet EOC objectives
- Phased deactivation
- How long it will take to meet the objectives
- Duties and assignments that may continue following deactivation
- The restoration and return of resources
- Order in which staff will be released and proper checkout procedures
  - Volunteer staff should be released first
- Documentation required prior to closing the EOC

Some staff may be designated to respond to and relieve staff at another location such as a member agency's EOC, WEROC EOC's, or the OA EOC. The EOC staff should be briefed on their re-assignment and the location they are to report to.

The EOC Manager will assist the EOC Director and Section Chiefs in the deactivation process by utilizing the deactivation plan. Each staff member should refer to the Deactivation section within their function checklists as a guideline, as well as any specific actions that the EOC Director has assigned. The WEROC Manager is responsible for securing the facility once staff has departed and ensuring its readiness for a future activation.





## RECOVERY

Recovery is the phase that involves restoring systems to normal. Short-term recovery actions are taken to assess damage and return vital life-support systems to minimum operating standards; long-term recovery actions may continue for many years. Recovery objectives are established during the EOC Action Planning process.

### Recovery Organization

The recovery period has major objectives which may overlap with response objectives, including:

- Re-establishment of essential public services.
- Permanent restoration of public and private property.
- Identification of residual hazards.
- Plans to mitigate future hazards.
- Recovery of costs associated with response and recovery efforts.

### Damage Assessments

Initial damage assessments will be gathered by the utilities and reported to WEROC. Damage assessment is the process of identifying and quantifying damages that occur as a result of an incident. The objective of the damage assessment is to provide situational awareness to the EOC about the state of critical and essential functions to help facilitate the move from response into recovery. It also facilitates the decision to appropriately direct resources and teams. As a component of the damage assessment, agencies also determine IDE which are used as the initial basis to justify or determine state or federal assistance.

Damage assessment is conducted in two phases outlined below:

- **Initial Damage Assessment (IDA)** – This assessment begins during the response phase and helps to determine life safety issues, identify hardest hit areas, and to estimate the damaged infrastructure within the jurisdiction. The initial damage assessment determines whether more detailed damage assessments are necessary and identifies certain areas where continued efforts should be concentrated. This includes an IDE, an estimated cost for emergency response actions, temporary measures and permanent repairs. These are educated estimates that are needed as soon as possible during the response, and are updated as information becomes available.
- **Preliminary Damage Assessment (PDA)** – This assessment is done to verify the initial damage assessment during the recovery phase (especially for state/federal assistance). A FEMA/State team will usually visit local jurisdictions and view their damage first-hand to assess the scope of damage and estimate repair costs. The assessment also identifies any unmet needs that may require immediate attention.

Unsafe structures will be evacuated immediately, hazardous conditions secured, and occupied buildings will be posted as Unsafe, Restricted Use or Inspected, as indicated. This should be verified by building inspectors or Safety Assessment Program teams.





### **Recovery Documentation Process**

When an agency declares an emergency, the documentation process must be initiated using the following forms to track all associated cost (the forms are also available on the WEROC Google Drive):

- Mutual Aid For Hire or Mutual Assistance Cost Reimbursement Agreement
- EMMA Expense Reconciliation Log
- Member Agency Building Inspector Mutual Aid Daily Expense Report Envelope
- Mutual Aid Request Checklist
- EMMA Documentation Requirements Letter
- Mutual Aid Log For Expense Tracking

### *Incident Sites*

If an agency incurs damage in various locations, each location must be documented as a separate event/project.





## AFTER ACTION REPORT

### After-Action Reports

Following deactivation, the completion of an After Action Report and a Corrective Action Plan is not only considered a best practice, but is also a component of SEMS and NIMS. Responsibility for the preparation of the report and plan is usually delegated to the WEROC Emergency Services Manager in coordination with other jurisdictions, agencies or department personnel. This process should always include the input of the EOC staff and should take into consideration any feedback provided by member agencies or any outside coordinating partners.

WEROC will use an After Action Report and Corrective Action Plan that will be used after each exercise and actual event. In general, the After Action Report includes the following concepts:

- Executive summary
- Description of the incident
- Discussion of response including a summary chronology of significant events
- Agencies involved in the response
- Mutual aid requested and provided
- Recovery activities to date
- Lessons learned
- Corrective actions
- Conclusions and recommendations for improvement

The Corrective Action Plan takes the lessons learned and recommendations for improvements and assigns each concept a timeframe for making that improvement and a person that will be responsible to ensure that it is accomplished.

The After Action Report and Corrective Action Plan will be made available to WEROC member agencies, OC OA, CalOES, DDW, RWQCB and FEMA. As a general rule, the report and plan will be considered a public document, unless otherwise required for security purposes. Any restrictions on the report and plan will be determined by the WEROC Emergency Manager and the EOC Director.

The CAL OES After-Action Report can be found in **Attachment K**.

### Recovery Disaster Assistance

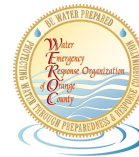
- *Stafford Act – Public Assistance* – Provides aid in the wake of a major disaster to State and local Government to help communities recover.
- *Hazard Mitigation Grant Program Section 404* – Funding can be used to fund structural and non-structural projects, and a facility does not need to be damaged to use these funds.
- *Hazard Mitigation Grant Program Section 406* – Funding is used to restore the parts of a facility that were damaged during a disaster, and the restoration must provide protection from subsequent events.





- *California Disaster Assistance Act (CDAA)* – CDAA authorizes the Director of OES to administer a disaster assistance program that provides financial assistance from the state for costs incurred by local governments as a result of a disaster event.
- *Small Business Disaster Reform Act* – Assistance for private businesses to obtain the best available collateral for a disaster loan of up to \$200,000 relating to damage to or destruction of the property of, or economic injury to, a small business.
- *Catastrophic Event Memorandum Account* – The purpose of this account is to allow utilities to recover the incremental costs incurred to repair, restore or replace facilities damaged during a disaster declared by the appropriate federal or state authorities.





## TRAINING AND EXERCISES

The WEROC Emergency Manager and Coordinator are responsible for coordination and scheduling of training and exercising of this plan. WEROC will conduct regular exercises of this plan to train all necessary EOC and member agency staff in the proper response to disaster situations.

An exercise is a simulation of a series of emergencies for identified hazards affecting a jurisdiction. During these exercises, emergency response organizations are to respond as though a real emergency had occurred. The public will be made aware of these exercises through normal media communications to eliminate confusion of a real event. WEROC will follow the recommended training cycle of trainings, tabletop exercises, and functional exercises with the goal of completing this cycle on an annual basis. Training and exercises are considered mandatory trainings for all MWDOC staff assigned to the WERO EOC.

The plan will be evaluated through actual use, trainings, and exercises. The results of the evaluations will be gathered and reviewed by the Emergency Manager and Coordinator. The Coordinator is responsible for making revisions to the Emergency Operations Plan that will enhance the conduct of response and recovery operations. The Emergency Coordinator will prepare, coordinate, publish and distribute any necessary changes to the plan to all EOC staff, member agencies and other agencies as shown on the Distribution List in **Attachment D**. The Emergency Coordinator will also review documents that provide the legal basis for emergency planning to ensure conformance to SEMS/NIMS requirements and modify as necessary.

The appropriate SEMS/NIMS/ICS training, e.g. IS-100 Basic Incident Command System and IS-700 National Incident Management System, or the equivalent, will be provided to all EOC staff appropriate with individual responsibilities. Exercises will be conducted utilizing the concepts and principles of the SEMS/NIMS.

WEROC maintains a matrix of EOC Staff Required Trainings. The matrix indicates which trainings each WEROC EOC function is required to complete.





## **ATTACHMENTS**

<b>Attachment A:</b>	<b>VEPO Indemnification Agreement</b>
<b>Attachment B:</b>	<b>WEROC Member Agency Mutual Aid Membership</b>
<b>Attachment C:</b>	<b>Authorities and References</b>
<b>Attachment D:</b>	<b>Distribution List</b>
<b>Attachment E:</b>	<b>Record of Revisions</b>
<b>Attachment F:</b>	<b>WEROC Key Contacts List</b>
<b>Attachment G:</b>	<b>WEROC EOC Phone Book Table of Contents</b>
<b>Attachment H:</b>	<b>WEROC EOC Forms Table of Contents</b>
<b>Attachment I:</b>	<b>EOC Maps</b>
<b>Attachment J:</b>	<b>Glossary</b>
<b>Attachment K:</b>	<b>After Action Report Questionnaire</b>
<b>Attachment L:</b>	<b>Water and Wastewater Regulatory Agencies</b>
<b>Attachment M:</b>	<b>Hazard Specific Equipment (Also available in Position Guides)</b>
<b>Attachment N:</b>	<b>GETS Card Subscriptions</b>
<b>Attachment O</b>	<b>WEROC Plans and Member Agency Templates</b>





## **ATTACHMENT A: VEPO INDEMNIFICATION AGREEMENT**

### **ORANGE COUNTY VOLUNTEER EMERGENCY PREPAREDNESS ORGANIZATION**

#### **INDEMNIFICATION AGREEMENT**

This indemnification agreement is entered into on the \_\_\_\_ day of \_\_\_\_\_, 2005, by and between Municipal Water District of Orange County (MWDOC), Coastal Municipal Water District (Coastal), Orange County Water District (OCWD), and the undersigned participants in the Orange County Volunteer Emergency Preparedness Organization (VEPO), (All parties are collectively referred to as "VEPO Participants".), pursuant to California Government Code §895.4.

WHEREAS, VEPO was formed in 1983 by the Orange County water community for the purposes of coordinating an emergency response by all Orange County water agencies in the event of an earthquake, flood, fire, or other regional disaster; and

WHEREAS, to accomplish this purpose each of the VEPO Participants has or will contribute the use of certain of its facilities and equipment and the services of certain of its personnel, both in preparation for an emergency and in response to any emergency situation pursuant to an Emergency Response Plan prepared by VEPO; and

WHEREAS, the VEPO Participants desire to indemnify and hold each other harmless from any liability for injury or property damage incurred by any VEPO Participant or its employees, officers or agents or to third parties in the course of or as a result of their participation in VEPO activities;





NOW, THEREFORE, in consideration of the mutual promises and covenants herein, the VEPO

Participants agree as follows:

#### 1. VOLUNTARY PARTICIPATION

Neither this Agreement, nor the VEPO Emergency Response Plan creates, or shall be deemed to create, any contractual or implied duty on the part of any signatory to provide, or attempt to provide, any real property, structures, facilities, tools, vehicles, equipment, machinery, materials, personal property or personnel to any other VEPO Participant or third party. No signatory shall be liable for its failure to provide, or attempt to provide, assistance to any other party. It is the intent of the parties that assistance under the VEPO Emergency Response Plan be provided on a strictly voluntary basis, and that no joint venture be created.

#### 2. LIABILITY FOR JOINING

Notwithstanding Government Code S895.2, it is the intent of the signatories to this Agreement that there shall be no liability assumed by, or imposed upon, any signatory solely by reason of such signatory executing the VEPO Emergency Response Plan or this Agreement."

In the event of any liability, claim, demand, action or proceeding of whatever kind or nature arising out of the rendering of assistance through VEPO, the parties involved in rendering or receiving assistance through VEPO agree to indemnify and hold harmless, to the fullest extent allowed by law, each signatory to the VEPO Emergency Response Plan whose only involvement, in the transaction or occurrence which is the subject of such claim, action, demand or other proceeding, is the execution and approval of the VEPO Emergency Response Plan and this Agreement. Such indemnification shall include indemnity for all claims, demands, liability,





damages and costs, including reasonable attorneys' fees and other costs of defense, for personal injury and property damage and is not waived as a result of the uninvolved party's negligent or willful failure to respond in accordance with the VEPO Emergency Response Plan.

### 3. COVENANT NOT TO SUE OTHER PARTICIPANTS

Each VEPO Participant agrees to assume the entire risk of loss and to indemnify and hold each of the remaining VEPO Participants harmless from any and all claims, liability, or damages for personal injury or property damage incurred by that VEPO Participant or its agents, employees or officers as a result of any defect or dangerous condition of any real property, structures, facilities, tools, vehicles, equipment, machinery, materials, personal property or other items supplied or contributed for the use of VEPO by itself or any other VEPO Participant. The right to indemnification shall not be barred by the passive negligence of the VEPO Participant which supplies or contributes the real or personal property for use by VEPO, including, but not limited to, the failure to warn of or take action to correct any defect or dangerous condition if the defect or dangerous condition was not the result of active negligence on the part of that VEPO Participant or its agents, employees or officers.

### 4. COVENANT TO INDEMNIFY OTHER PARTICIPANTS AGAINST CLAIMS BY THIRD PARTIES

Each VEPO Participant agrees to assume the entire risk of loss and to indemnify and hold each of the remaining VEPO Participants harmless from any and all claims, demands, liabilities, costs and damages (including reasonable attorneys' fees and costs of defense) for personal injury or property damage incurred by any third person, or entity, not a party to this Agreement as a result of any defect or dangerous condition of any real property, structures, facilities, tools, vehicles,





equipment, machinery, materials, personal property or other items, supplied or contributed for the use of VEPO by that VEPO Participant.

**5. COVENANT TO INDEMNIFY OTHER PARTICIPANTS FOR ACTS OF OFFICERS AND EMPLOYEES**

Except as provided in Paragraph 6 hereof, while carrying out their functions and activities under the Emergency Response Plan, each agent, employee and officer of a VEPO Participant shall continue to act within the scope and duties of his employment or relationship with that VEPO Participant and shall not be deemed to be, or act in the capacity of, an agent, employee or officer of VEPO or of any of the remaining VEPO Participants. Except as provided in Paragraph 6 hereof, each VEPO Participant agrees to assume the entire risk of loss and to indemnify and hold the remaining VEPO Participants harmless from any and all claims, liabilities or damages for personal injury incurred by any VEPO Participant, its officers, employees or agents or any third person, not a party to this Agreement as a result of the active negligence or intentional, willful or malicious acts of that VEPO Participant's officers, employees, or agents while engaged in carrying out their duties, functions or activities pursuant to the VEPO Emergency Response Plan.

**6. EMPLOYEE CLAIMS.**

Any employee, officer or agent of a VEPO Participant who is acting under the direction, supervision or control of an employee, officer or agent of another VEPO Participant pursuant to the VEPO Emergency Response Plan shall, except as otherwise provided under Labor Code §§3600.2 through 3600.6, be considered to be the special employee of the VEPO Participant which is directing, supervising or controlling the activity and the general employee of his or her regular employer while engaged in carrying out duties, functions or activities pursuant to the





VEPO Emergency Response Plan. The special employer, if any, and general employer, shall indemnify and hold all other VEPO Participants harmless from any and all claims, liabilities or damages for personal injury incurred by such officers, employees or agents while engaged in carrying out their duties, functions or activities pursuant to the VEPO Emergency Response Plan, notwithstanding any passive negligence of other VEPO Participants.

It is the intent of the parties that personnel made available through VEPO be insured against loss or injury through the Workers Compensation insurance of those who controlled and directed their work through VEPO.

#### 7. COVENANT TO MAINTAIN INSURANCE OR SELF-INSURE

Each VEPO Participant agrees to obtain and maintain insurance policies naming the remaining VEPO Participants as additional insureds or participate in a self-insurance pool, or maintain a reasonably adequate self-insurance fund as appropriate for general liability, workers' compensation, automobile and property owners' liability which will cover all activities, personnel, vehicles, equipment, real property, tools, machinery and personal property of that VEPO Participant while engaged in the VEPO Program. The ability to respond in damages shall be in the following minimum amounts:

- a. General Liability (including bodily injury): \$1,000,000 per occurrence.
- b. Workers' Compensation: \$200,000 per occurrence
- c. Automobile Coverage: Compliance with Vehicle Code Section 16430 for vehicles owned or leased by the VEPO Participant.
- d. Property Owner's Liability, if applicable: \$1,000,000 per occurrence





## 8. ARBITRATION

The parties to this Agreement acknowledge that in the event of a claim for personal injury or property damage arising out of a VEPO activity, it would probably be in the best interests of the VEPO Participants and their insurers to submit the issue, of which VEPO Participant or Participants has the ultimate duty to indemnify the others, to binding arbitration and that the party or parties determined to be ultimately responsible conduct the defense of the claim on behalf of the other VEPO Participant defendants in the event of a lawsuit.

It is the intent of the parties to encourage the use of binding arbitration to effectuate the terms of this Agreement whenever possible. Therefore, each VEPO Participant agrees that, as soon as possible after receiving notice of any claim arising out of a VEPO activity, that VEPO Participant will notify all VEPO Participants in writing of the existence of the claim or potential claim.

Upon receipt of notice of a claim or potential claim arising out of a VEPO activity from a claimant or another VEPO Participant, each VEPO Participant, which is not self-insured, will notify its insurance carrier of the existence of the claim and of the terms of this Agreement. If the insurance carriers of VEPO Participants and self-insured VEPO Participants agree to submit the issue of the obligation to indemnify under this Agreement to binding arbitration, the parties hereto agree not to object to arbitration.

Nothing herein shall be construed as a consent or undertaking on the part of any insured VEPO Participant to pay all or any portion of the costs of arbitration or other costs which it would not otherwise be obligated to pay under its insurance policy in the absence of this Agreement.





## 9. EXECUTION IN COUNTERPARTS

This Agreement shall be executed by each VEPO Participant in duplicate originals, each of which shall be considered an original Agreement. This Agreement shall not become effective as to any VEPO Participant until all VEPO Participants have executed this Agreement and have delivered an executed original to the VEPO Coordinator who will provide each VEPO Participant with a photocopy of all executed signature pages and a list of all Participants. Prior to the admission of any additional agencies to the VEPO Program, such agency shall be required to execute this Agreement and comply with this provision.

## 10. SUCCESSORS AND ASSIGNS

This Agreement shall be binding upon and inure to the benefit of the original Participants and all parties who may subsequently enter into this Agreement, and their officers, agents, employees, successors and assigns. The names of the VEPO Participants, all of which are signatories to this Agreement, are and shall be set forth on the list attached hereto as Exhibit "A" and incorporated herein by reference. Additional Participants may be added to the list from time to time upon execution of this Agreement and compliance with Paragraph 5 hereof. Such additions shall automatically constitute an amendment of this Agreement without further action by existing Participants and shall not void or invalidate this' Agreement.

## 11. MARS PROGRAM

It is the understanding and intention of the VEPO Participants that the VEPO program will be coordinated with the MARS program established by Metropolitan Water District of Southern





California and that the terms and conditions hereof shall apply with equal force and effect to activities performed under the MARS program.

## 12. CAPTIONS

The Captions heading the various paragraphs of this Agreement are for convenience only and shall not be considered to limit, expand, or define the contents of the respective paragraphs.

IN WITNESS WHEREOF, each of the VEPO Participants has caused this instrument to be executed by its authorized agent or official evidencing the consent of the legislative body hereto.

DATED: \_\_\_\_\_

COUNTY

ATTEST: \_\_\_\_\_

MUNICIPAL WATER DISTRICT OF ORANGE  
(MWDOC)

By

DATED:

ATTEST: \_\_\_\_\_

By





## EXHIBIT "A"

### VEPO PARTICIPANTS

This list constitutes a complete list of VEPO Participants (We will obviously need to adjust this list as well, as I would need to remove or change the titles of some agencies.)

- City of Anaheim
- City of Brea
- City of Buena Park
- City of Fountain Valley
- City of Fullerton
- City of Garden Grove
- City of Huntington Beach
- City of La Habra
- City of La Palma
- City of Newport Beach
- City of Orange
- City of San Clemente
- City of San Juan Capistrano
- City of Santa Ana
- City of Seal Beach
- City of Tustin
- City of Westminster
- East Orange County Water District
- El Toro Water District
- Golden State Water Company
- Irvine Ranch Water District
- Laguna Beach County Water District
- Mesa Water District
- Moulton Niguel Water District
- Municipal Water District of Orange County
- Orange County Sanitation District
- Orange County Water District
- Santa Margarita Water District
- Serrano Water District
- South Coast Water District
- South Orange County Wastewater Authority
- Trabuco Water District
- Yorba Linda Water District





## ATTACHMENT B: MEMBER AGENCY MUTUAL AID MEMBERSHIP

Agency	WEROC	CalWARN	CA Public Works	MARS/MET	OC OA/OCEMO	CA Master Mutual Aid	CUEA *
Anaheim	X	X	X	X	X	X	X
Brea	X		X		X	X	
Buena Park	X		X		X	X	
EOCWD	X				X	X	
ETWD	X				X	X	
Emerald Bay					X	X	
FV	X		X		X	X	
Fullerton	X		X	X	X	X	
GG	X		X		X	X	
GSWC	X	X					X
HB	X		X		X	X	
IRWD	X				X	X	
Laguna Beach	X		X		X	X	
La Habra	X				X	X	
La Palma	X		X		X	X	
LBCWD	X	X			X	X	
Mesa CWD	X	X			X	X	
MNWD	X				X	X	
MWDOC	X	X		X	X	X	X
Newport	X		X		X	X	
Orange	X		X		X	X	
OCSD	X				X	X	
OCWD	X	X			X	X	
San Clemente			X		X	X	
San Juan Ca.	X	X	X		X	X	
Santa Ana	X		X	X	X	X	
SMWD	X				X	X	
Seal Beach	X		X		X	X	
Serrano WD	X				X	X	
SCWD	X	X			X	X	X
SOCWA	X					X	
Trabuco CWD	X				X	X	
Tustin			X		X	X	
Westminster	X	X	X		X	X	
YLWD	X	X			X	X	





## **ATTACHMENT C: AUTHORITIES AND REFERENCES**

The following authorities and references establish:

- The legal basis (statutes, ordinances, executive orders, regulations, proclamations) for emergency operations.
- The basis for delegation of emergency authority, i.e., enabling measures sufficient to ensure that specific emergency-related legal authorities can be exercised by water agency management or their designated successors.

The California Emergency Plan, promulgated in accordance with provisions of the Act, provides statewide authorities and responsibilities and describes the functions and operations of government at all levels during extraordinary emergencies, including war. Section 8568 of the Act states in part that “the State Emergency Plan shall be in effect in each political subdivision of the state, and the governing body of each political subdivision shall take such action as may be necessary to carry out the provisions thereof.”

The WEROC Emergency Plan is, therefore, considered to be an extension of the State Emergency Plan.

### **AUTHORITIES**

The following provide emergency authorities for conducting and/or supporting emergency operations. When dictated by the situation, additional ordinances or other emergency regulations will be enacted by the WEROC Executive Board on behalf of its water utilities.

#### **Federal**

- Homeland Security Act of 2002.
- Homeland Security Presidential Directive/HSPD 5, Management of Domestic Incidents.
- Homeland Security Presidential Directive/HSPD 8, National Preparedness.
- U.S. Department of Homeland Security (USDHS) National Incident Management System (NIMS).
- U.S. Department of Homeland Security (USDHS) National Response Plan (NRP).
- Presidential Directives 39 and 62 which direct primary terrorism investigative authority to U.S. Department of Justice/FBI.

#### **State**

- California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the Government Code)
- Government Code 8607(a), and California Code of Regulations, Title 19, Division 2, Chapter 5, NDAA, Section 2900(y) Special Districts, and Sections 2400-2450 (Standardized Emergency Management System - SEMS)
- Water Code, Division 1, Chapter 2, Article I, Section 128 (California Department of Water Resources - Flood Fighting)





## **REFERENCES**

### **State**

- California State Emergency Plan
- California Master Mutual Aid Agreement
- Government Code, Title I, Division 4, Chapter 8, Sections 3100-3109:
  - 1) Declares all public employees to be disaster service workers
  - 2) Defines disaster service worker
  - 3) Defines public employees (excludes aliens)
  - 4) Describes Loyalty Oath requirements

### **Local**

- County of Orange Resolution, November 28, 1950, adopting the California Master Mutual Aid Agreement
- Orange County Volunteer Emergency Management Organization (VEPO) Indemnification Agreement, December 19, 1994 by and between Municipal Water District of Orange County (MWDOC)
- Operational Area Agreement of the County of Orange and Political Subdivisions (to include Special Districts) October 3, 1995
- A Resolution of the Orange County Volunteer Emergency Preparedness Organization (VEPO) adopting the revised (1997) WEROC Emergency Plan
- Orange County Emergency Operations Plan (2014).

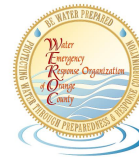




## ATTACHMENT D: EOP DISTRIBUTION LIST

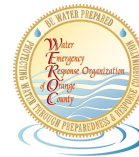
<b>WEROC EOC RESPONDERS</b>		
DATE	ISSUED TO	WEROC Function Title
		EOC Director
		EOC Manager
		Legal Advisor
		PIO
		Social Media
		WEROC OA EOC Liaison
		Planning & Intelligence Section Chief
		Finance & Administration Section Chief
		Logistics Section Chief
		Planning Unit Leader
		Runner/Plotter Unit (3)
		Situation Status Analyst
		Events Analyst
		OA/County Analyst
		Major Infrastructure Analyst
		Division of Drinking Water
		Intelligence Unit Leader
		WEROC Radio Operator
		MARS Radio Operator
		OA Radio Operator
		Resource Unit





<b>WEROC MEMBER AGENCIES</b>		
<b>DATE</b>	<b>ISSUED TO</b>	<b>MEMBER AGENCY</b>
		City of Anaheim
		City of Brea
		City of Buena Park
		City of Fountain Valley
		City of Fullerton
		City of Garden Grove
		City of Huntington Beach
		City of Laguna Beach
		City of La Habra
		City of La Palma
		City of Newport Beach
		City of Orange
		City of San Clemente
		City of San Juan Capistrano
		City of Santa Ana
		City of Seal Beach
		City of Tustin
		City of Westminster
		East Orange County Water District
		El Toro Water District
		Golden State Water Company
		Irvine Ranch Water District
		Laguna Beach County Water District
		Mesa Water District
		Moulton Niguel Water District
		Municipal Water District of Orange County
		Orange County Sanitation District
		Orange County Water District
		Santa Margarita Water District
		Serrano Water District
		South Coast Water District
		South Orange County Wastewater Authority
		Trabuco Water District
		Yorba Linda Water District





OTHER AGENCY RECIPIENTS			
DATE	ISSUED TO	AGENCY	Agency Position
		OES	Southern Region OES
		OC OA	OA/EOC Manager
		MET	Operations System Manager
		MET	Emergency Coordinator
		Health Care Agency	Emergency Coordinator





## **ATTACHMENT E: RECORD OF REVISIONS**

DATE	SECTION REVISED	REVISED BY
<b>7/08</b>	Complete Reorganization of Plan.	Kelly Hubbard
<b>9/11</b>	Updated various sections of the Plan	Kelly Hubbard
<b>3/18</b>	Complete Reorganization of Plan	Francisco Soto





## **ATTACHMENT F: WEROC KEY CONTACTS LIST**

Kelly Hubbard	Office: (714) 593-5010	Cell: (714) 715-0283
Francisco Soto	Office: (714) 593-5032	Cell: (323) 868-5970
Karl Seckel	Office: (714) 593-5024	Cell: (714) 423-3361
Rob Hunter	Office: (714) 593-5026	Cell: (404) 557-5107

### **WEROC EOC's**

South EOC	Office: (949) 455-4493	Fax: (714) 455-4492
SEOC Facility Contact (ETWD)	Office: (949) 837-7050	Alt: (949) 837-0660
North EOC	Office: (714) 288-8200	Fax: (714) 288-8206
NEOC Facility Contact (MET)	Richard Ford - Cell: (714) 577-5080	
Alt. EOC (MWDOC)	Office: (714) 593-5010	Fax: (714) 964-9389
MWDOC Facility Contact	24hrs OCWD Contact - Cell: (714) 653-2417	

### **ORANGE COUNTY OPERATIONAL AREA**

Main Line (Admin Desk)	(714) 628-7054	
Staff Directory	(714) 628-7055	
24 Hrs. Emergency Line	(714) 628-7008	
EOC-During Activation	(714) 628-7060	
EOC Liaison	(714) 628-7153	EOCLiaison@ocsd.org
Fax (Special Districts)	(714) 628-7154	
Public Works Branch	(714) 628-7128	EOCPublicWorksOps@ocsd.org
WEROC EOC Liaison	(714) 628-7187	

### **METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

Diemer Plant	Office: (714) 528-7237	Alt: (714) 528-7261
MET EOC Eagle Rock (24hrs)		Office: (800) 555-5911
MET Control Center		Office: (323) 681-4010
Water Quality Hotline		Office: (800) 354-4420

### **STATE OFFICE OF EMERGENCY SERVICES REGION I**

Los Alamitos	Office: (562) 795-2900	Fax: (562) 795-2963
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## **ATTACHMENT G: WEROC EOC PHONE BOOK TABLE OF CONTENTS**

### **Additional Contact Lists**

There are additional contact lists available in the WEROC EOCs. These lists were not included in the plan due to their high rate of change or confidentiality of information. The following lists are available in the WEROC EOC Phone Book:

- WEROC Staff Lists
- Member Agency Contact Information
- WEROC Radio System Participant List
- OES & FEMA Contacts
- MARS Emergency Response Coordinator Information
- OCEMO Phonebook
- California Water/Wastewater Agency Response Network (CalWARN) Contact List
- California Utilities Emergency Association (CUEA) Contact List
- Water Quality Emergency Contacts And Testing Labs
- California Licensed Water Hauler List
- Media Contact List

There are three copies in each WEROC EOC, one copy in the WEROC Coordinators Office, and one copy each with the WEROC Alternate Responder and the MWDOC Assistant General Manage





## **ATTACHMENT H: WEROC EOC FORMS TABLE OF CONTENTS**

Forms and documents related to WEROC EOC emergency response are available to staff in the WEROC EOCs. These documents were not included in the plan because many of the forms are currently under revision and also to make the forms easily accessible. The following forms are available in the WEROC EOC Forms Binder:

- WEROC- EOC Section/Unit Activity Log
- WEROC- EOC Staff Registration Form
- WEROC- EOC Damage Assessment Form #1
- WEROC- EOC Damage Assessment Form #2
- O.A. Request for Jurisdiction Initial Incident Impact Report
- O.A. Jurisdictional Status Report to the O.A.
- Sample- Agency Damage Assessment Report Form
- Sample-Facilities Damage Checklist Form
- Sample-Agency Radio Message Form
- Water Quality Advisory Forms
- Water Quality Notices
- OES After Action/Corrective Action Report Template
- Incident Action Plan Template
- Change of Shift Briefing Form
- Mutual Aid For Hire or Mutual Assistance Cost Reimbursement Agreement
- EMMA Expense Reconciliation Log
- Member Agency Building Inspector Mutual Aid Daily Expense Report Envelope
- Mutual Aid Request Checklist
- EMMA Documentation Requirements Letter
- Mutual Aid Log For Expense Tracking

There is one copy in each WEROC EOC near the Finance and Administration function desks and one copy in the WEROC Coordinators Office

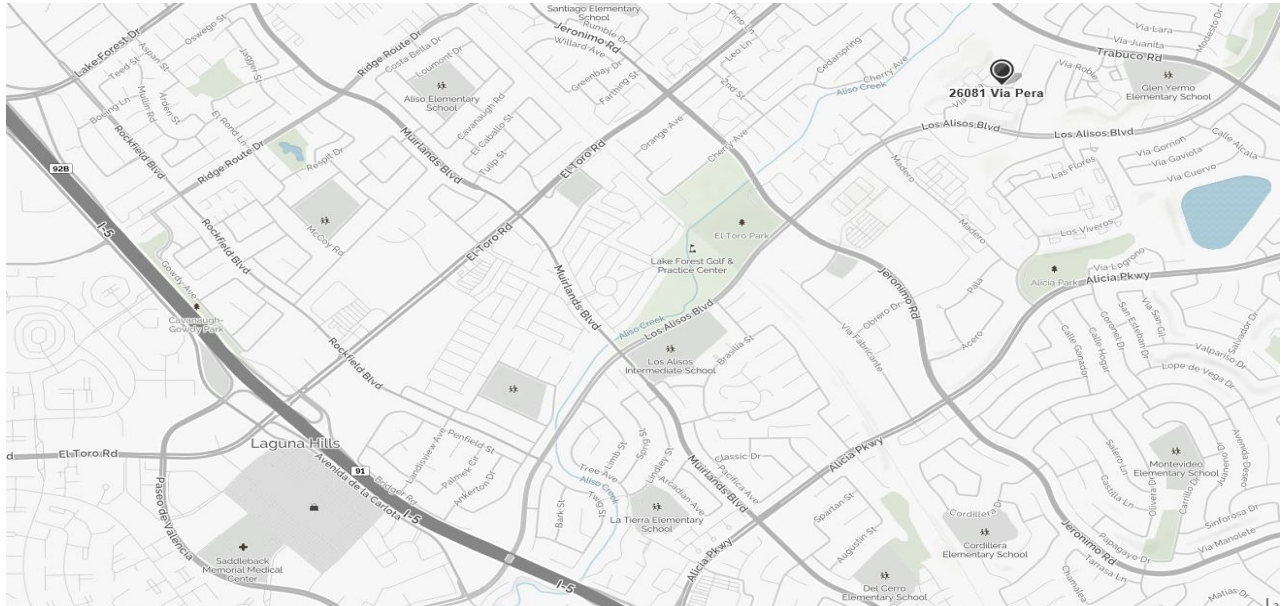




## ATTACHMENT I: EOC MAPS

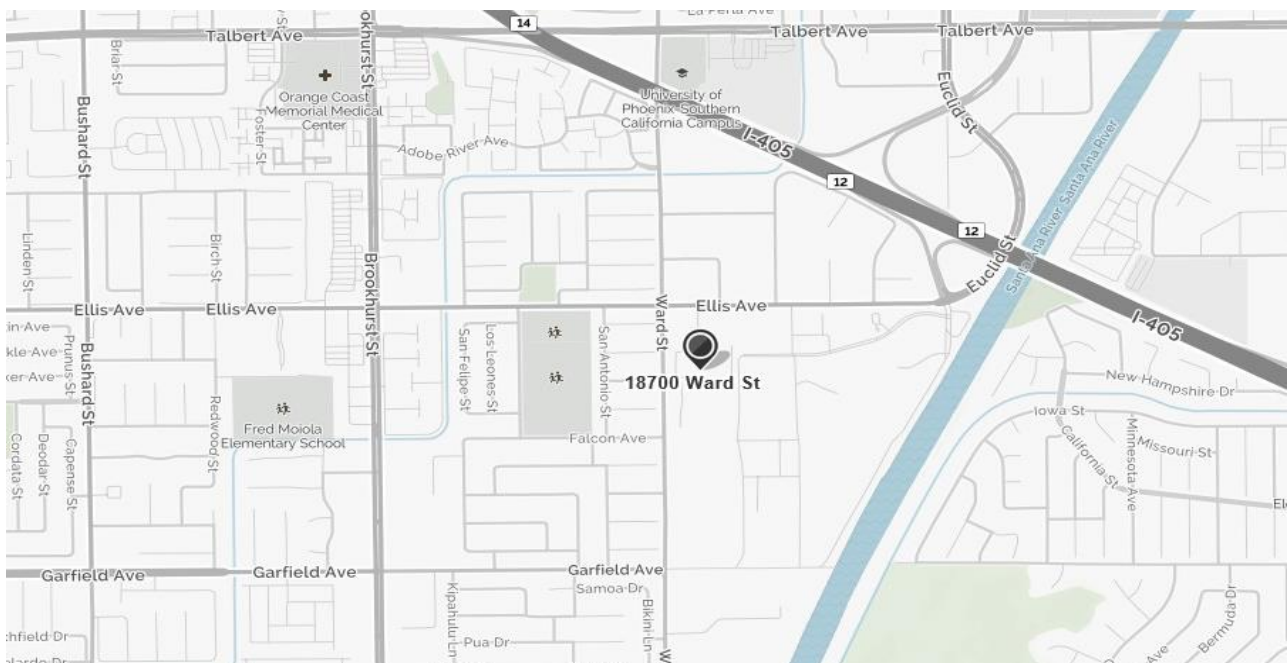
### WEROC South EOC

Address: 26081 Via Pera. Mission Viejo, CA 92691 Phone: (714) 455-4493  
 (At El Toro Water District's Prothero Filtration Plant, behind condos)



### WEROC Alternate EOC

Address: 18700 Ward St. Fountain Valley, CA 92728 Phone: (714) 593-5032  
 (At WEROC Office inside MWDOC. Report to South EOC unless instructed otherwise))







## **ATTACHMENT J: GLOSSARY**

The glossary contains definitions of terms commonly used in the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). Becoming familiar with these terms will assist WEROC EOC Staff and individual member agency personnel in performing their specific function throughout the disaster operational period.

### **A**

#### **Action Plan**

The plan prepared in the EOC containing the emergency response objectives of a SEMS level i.e. State, County, Local (City or Special District), and reflecting overall priorities and supporting activities for a designated period. The Plan is prepared by the Planning / Intelligence Chief with support from Management & Section Chiefs. Once completed, the Plan is executed by the Operations Chief.

#### **Activation**

The necessary action(s) taken by the EOC Director(s) in making an EOC operational i.e. for WEROC, in support of Orange County water agencies responding to a major emergency or disaster, or by one or more agencies in support of their own agency's response.

#### **After Action Report**

A report covering EOC activities / response actions, application of SEMS, modifications to plans and procedures, training needs, and recovery operations i.e. For WEROC, this report is prepared by the WEROC Emergency Services Coordinator with assistance from the EOC Management and Section Chiefs.

#### **American Red Cross**

A federally chartered volunteer agency that provides disaster relief to individuals and families. Major responsibilities include providing lodging, food, clothing, and registration and inquiry service.

#### **Area Command (AC)**

Area Command is an organization established (1) to oversee the management of multiple incidents that are being handled by an Incident Command System (ICS) organization or (2) to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command has the responsibility to set overall strategies and priorities, allocate critical resources according to priorities, ensure that incidents are properly managed, and ensure that objectives are met and strategies followed. Area Command becomes Unified Area Command when incidents are multi-jurisdictional Area Command may be established at an emergency operations center facility or at some location other than an incident command post.

#### **Auto Pack**

A resource for WEROC EOC staff to use during emergencies, it contains important contact information, maps to the WEROC EOC's, functional duties and responsibilities, and general EOC activation protocols.





## **C**

### **California Emergency Council**

The official advisory body to the Governor on all matters pertaining to statewide emergency preparedness.

### **California Emergency Organization**

Civil government organized and augmented or reinforced during an emergency by auxiliaries, volunteers, persons pressed into service, the private sector, and community based organizations.

### **Chain of Command**

A series of management positions in order of authority.

### **Check-in**

The process whereby pre-assigned EOC Staff “officially report in” to their EOC location for briefing and to assume a specific function following activation of the EOC.

### **Checklist**

A list of actions taken by an element of the emergency organization in response to a particular event or situation.

### **Concept of Operations**

A general notion of the methods agencies use to organize their response to disasters (such as mutual aid and the Standardized Emergency Management System). Disasters typically progress through identifiable phases and certain responses are appropriate during each of these phases.

### **Contamination**

Deposits of radioactive or other toxic materials that occur on the surfaces of structures, area, objects, people’s bodies, flora, and fauna.

### **Contingency Plan**

A sub or supporting plan which deals with one specific type of emergency, its probable effect on the jurisdiction, and the actions necessary to offset these effects.

### **Coordination**

This can be either Multi-agency or Interagency. This process is found at all SEMS levels and is the most efficient and cost effective way to meet specific objectives in support of the disaster response.

## **D**

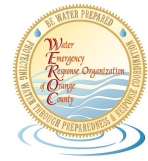
### **Damage Survey Report**

Under 206.202 of CFR 44, a Damage Survey Report is prepared by an inspection team. The team is accompanied by an authorized local representative who is responsible for representing the applicant and insuring that all eligible work and costs are identified. A Damage Survey Report Data Sheet (FEMA Form 90-91) is prepared for each site with damage over a specified amount established by regulation.

### **Deactivation**

The process of closing down EOC operations. This may be accomplished as one action or a series of actions i.e. section by section within the EOC by authority of the EOC Director. Deactivation will be initiated based upon the status of the disaster operation and water agency support needs.





### **Disaster**

A sudden calamitous emergency event bringing great damage loss or destruction over a wide area affecting the entire population of one or more counties.

### **Disaster Field Office (DFO)**

A central facility established by the Federal Coordinating Officer within or adjacent to an affected area. DFOs are used to coordinate and control State and Federal efforts which support disaster relief and recovery operations.

### **Disaster Service Worker**

Any persons registered with a disaster council or State OES to provide disaster service without pay. Disaster service workers include public employees, registered volunteers, and person pressed into service during an emergency by persons authorized to command such services.

### **Disaster Support Area**

A special facility where disaster relief resources can be received, stockpiled, allocated, and dispatched. A separate portion of the area may be used to receive and provide emergency treatment to casualties and for their transfer to adequate medical care facilities.

### **Documentation Unit**

Functional unit within the Planning/Intelligence Section of the EOC responsible for collecting, recording and safeguarding all documents relevant to the EOC operational period.

## **E**

### **Emergency**

A condition of extreme peril to the safety of persons and/or property caused by such conditions as fire, flood, hazardous material incident, sudden and severe energy shortage, etc. This condition may affect one or more water agencies but would not be considered on the level of a disaster.

### **Emergency Operations Center (EOC)**

A location from which centralized emergency management can be performed. EOC facilities are established by an agency or jurisdiction to coordinate the overall agency or jurisdictional response and support to an emergency or disaster.

### **Emergency Management**

The provision of overall operational control or coordination of emergency operations at each level of the California Emergency Organization, whether by the actual direction of field forces or by the coordination of joint efforts of governmental and private agencies.

### **Emergency Manager**

An individual duly appointed by State agencies, counties, cities and counties, and cities of the State of California, in accordance with State authority, adopted ordinance, by resolution as provided for by ordinance, or section §26622 of the Government Code, (based on what I found this would be the only section for 26622) who is responsible for administering State law and local ordinances relating to emergency management. The provisions of this article shall become operative only upon their adoption by a resolution passed by unanimous vote of the board of supervisors thereof at a regular meeting at which all members are present. Such resolution may be repealed by the board of supervisors at any time by a three-fifths vote.





### **Emergency Operations**

Those actions taken during the emergency period to protect life and property, care for the people affected, and temporarily restore essential community services.

### **Emergency Operations Center**

A centralized location from which emergency operations can be directed and coordinated.

### **Emergency Plan**

The Plan that each agency or jurisdiction has developed and maintains for responding to appropriate hazards.

### **Emergency Response Agency**

Any organization responding to an emergency, or providing mutual aid support to such an organization, whether in the field, at the scene of an incident, or to an emergency operations center.

### **Emergency Response Personnel**

Personnel involved with an agency's response to an emergency.

### **Emergency Services Coordinator**

The individual within each jurisdiction that is delegated the day-to-day responsibility for the development and maintenance of all emergency management coordination efforts. During WEROC EOC activation, this individual serves as EOC Manager

### **EOC Director**

The individual responsible for all response activities within the assigned EOC throughout the operational period.

## **F**

### **Federal Agency (Federal definition)**

Any department, independent establishment, Government Corporation, or other agency of the Executive Branch of the Federal Government, including the United States Postal Service, but not the American Red Cross.

### **Federal Assistance (Federal definition)**

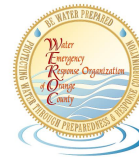
Aid to disaster victims or State or local governments by federal agencies under the provisions of the Federal Disaster Relief Act (P.L. 93-288), the Stafford Act (see Stafford Act) and other statutory authorities of federal agencies. The Federal Disaster Relief Act, PL 93-288, was amended by the Stafford Act which was signed into law November 23, 1988.

**Federal Disaster Relief Act:** see **Stafford Act**.

### **Federal-State Agreement**

A legal document entered into between the State and the federal government following a Presidential Declaration of an Emergency or Major Disaster. Executed by the Governor, acting for the State, and the Federal Emergency Management Agency (FEMA) Regional Director, acting for the Federal Government, the agreement shall contain the necessary terms and conditions consistent with the provisions of applicable laws, executive orders and regulations, as required and set forth by the type and extent of federal assistance to be provided.





## **Finance /Administration Section**

One of the five primary functions found at all SEMS levels which is responsible for all costs and financial considerations associated with an agency's disaster operation.

### **Function**

Describes the activity involved, e.g., "the Operations function" for the five major EOC levels (Management, Operations, Planning/Intelligence, Logistics, and Finance/Administration) used in the Incident Command System (ICS).

## **H**

### **Hazard**

Any source of danger or element of risk to people or property.

### **Hazardous Material**

A substance or combination of substances which, because of quantity, concentration, physical, chemical, radiological, explosive, or infectious characteristics, poses a substantial present or potential danger to humans or the environment. Generally, such materials are classed as explosives and blasting agents, flammable and nonflammable gases, combustible liquids, flammable liquids and solids, oxidizers, poisons, disease-causing agents, radioactive materials, corrosive materials, and other materials including hazardous wastes.

### **Hazardous Material Incident**

Any release of a material (during its manufacture, use, storage, or transportation) which is capable of posing a risk to health, safety, and property. Areas at risk include facilities that produce, process, transport, or store hazardous material, as well as all sites that treat, store, and dispose of hazardous material.

### **Homeland Security Presidential Directive/ HSPD-5**

Establishes a single, comprehensive national incident management system (later to become NIMS).

## **I**

### **Incident Action Plan (IAP)**

An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods. As referenced in the WEROC Emergency Plan, the Incident Action Plan refers to the field level or incident site plan.

### **Incident Commander (IC)**

The individual responsible for the command of all functions at the field response level.

### **Incident Command Post (ICP)**

The location at which the primary command functions are executed. The ICP may be collocated with the incident base i.e. water district admin. headquarters or other incident base or other incident facilities.

### **Incident Command System (ICS)**

The nationally used standardized on-scene emergency management concept specifically designed to respond to single or multiple incidents without being hindered by jurisdictional boundaries.





This system allows for facilities, equipment, personnel, procedures and communications to operate within a common organizational structure which is understood by all participants, in managing the incident.

### **Incident Objectives**

Statements of guidance and direction for planning appropriate actions to be taken in response to the disaster situation(s). They are based on realistic expectations of what can be accomplished when all allocated resources have been effectively deployed. The EOC action plan utilizes incident objectives in formulating strategies and the movement of resources.

## **J**

### **Joint Information Center (JIC)**

A facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating agencies should collocate at the JIC.

### **Joint Information System (JIS)**

Integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during crisis or incident operations. The mission of the JIS is to provide a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies on behalf of the incident commander (IC); advising the IC concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

### **Jurisdiction**

The range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority for incident mitigation. Jurisdictional authority at an incident can be political / geographical (e.g., special district, city, county, state or federal boundary lines), or functional (e.g., police department, health department, etc.)

### **Jurisdictional Agency**

The agency having jurisdiction and responsibility for a specific geographical area, or a mandated function.

## **L**

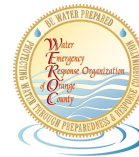
### **Liaison**

A member of the EOC Management Staff responsible for coordinating with representatives from cooperating and assisting agencies i.e. designated WEROC EOC Staff serve as liaison at the County Operational Area (O.A.) EOC.

### **Local Emergency (State definition)**

The duly proclaimed existence of conditions of disaster or of extreme peril to the safety of persons and property within the territorial limits of a county, city and county, or city, caused by such conditions as air pollution, fire, flood, storm, epidemic, riot, earthquake, or other conditions which are, or are likely to be, beyond the control of the services, personnel, equipment, and facilities of a political subdivision and require the combined forces of other political subdivision to combat.





### **Local Government (Federal definition)**

Any county, city, village, town, district, or other political subdivision of any state, any Indian tribe or authorized tribal organization, or Alaskan native village or organization that includes any rural community or incorporated town or village or any other public entity for which an application for assistance is made by a state or political subdivision thereof.

### **Local Government Emergency Planning Guidance**

A document which lays a foundation for emergency response planning for counties, cities, as well as other political subdivisions.

### **Logistics Section**

One of the five primary functions found at all SEMS levels responsible for identifying and providing services and materials needed in support of the operation.

## **M**

### **Major Disaster (Federal)—see also Emergency**

Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, or other catastrophe which in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Federal Disaster Relief Act.

### **Master Mutual Aid Agreement**

The California Disaster and Civil Defense Master Mutual Aid Agreement made and entered into by and among the State of California, its various department and agencies, and the various political subdivision of the State. The agreement provides for support of one jurisdiction by another.

### **Media**

All means of providing information and instructions to the public, including radio, television, and newspapers.

### **Mitigation**

Pre-event planning and other actions which lessen the effects of potential disasters. (See also Comprehensive Emergency Management).

### **Mutual Aid**

Mutual Aid occurs when two or more parties (or agencies) agree to furnish resources, services, personnel, facilities, etc., to each other in support of the emergency or disaster response. Mutual Aid among agencies is best carried out when pre-disaster Mutual Aid Agreements are prepared, specifying what resources are on hand, how they will be made available to the requesting agency, reimbursement costs involved, etc.

### **Mutual Aid Agreement**

An agreement authorized under the Emergency Services Act, in which two or more parties agree to furnish resources and facilities and to render services to each and every other party of the agreement to prevent and respond to any type of disaster or emergency.

### **Mutual Aid Region**

A subdivision of the State emergency services organization established to coordinate mutual aid and other emergency operations.

### **Multi-Agency or Inter-Agency Coordination (MAC)**





The participation of agencies and disciplines involved at any level of the SEMS organization working together in a coordinated effort to facilitate decisions for overall emergency response activities.

## **N**

### **National Incident Management System (NIMS)**

A system mandated by HSPD 5 that provides a consistent nationwide approach for Federal, State, local, and tribal governments; the private-sector, and nongovernmental organizations to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, local, and tribal capabilities, the NIMS includes a core set of concepts, principles, and terminology. HSPD 5 identifies these as the ICS; multiagency coordination systems; training; identification and management of resources (including systems for classifying types of resources); qualification and certification; and the collection, tracking, and reporting of incident information and incident resources.

### **National Response Plan (NRP)**

The National Response Plan is an all-discipline, all-hazards plan that establishes a single, comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to State, local and tribal incident managers and for exercising direct Federal authorities and responsibilities.

### **National Warning System (NWS)**

The federal portion of the civil defense warning system, used to disseminate warning and other emergency information from the warning centers or regions to warning points in each state.

## **O**

### **Office of Emergency Services (OES)**

Part of the Governor's office, the primary State agency responsible for the coordination and administration of statewide operations to support emergency mitigation, preparedness, response, and recovery activities within California.

### **Operational Area (OA)**

An intermediate level of the state emergency organization, consisting of a county and all political subdivisions within the county area.

### **Operational Duties**

Pre-assigned tasks (usually in checklist form) to be performed by a specific function / unit at the incident or in the EOC, in response to the emergency or disaster.

### **Operational Period**

The period of time scheduled for execution of a given set of operation actions as specified in the Incident or EOC Action Plan. Operational Periods can be of various lengths, although usually not over 24 hours.

### **Operations Section**

One of the five primary functions found at all SEMS levels. This Section is responsible for all tactical operations at the incident or for the coordination of operational activities at an EOC. It may be supported by branches or units with specific technical expertise as needed in response to the emergency situation.





## **P**

### **Plan**

As used by OES, an emergency management document which describes the broad, overall jurisdictional response to potential extraordinary emergencies or disasters.

### **Planning / Intelligence Section**

One of the five primary functions found at all SEMS levels. Responsible for the collection, evaluation, and dissemination of information related to the emergency or disaster, and for the preparation and documentation of Incident or EOC Action Plans. This Section may include Situation Status i.e. Runners & Plotters, Communications, and Documentation units.

### **Political Subdivision (California Emergency Services Act definition)**

Any city, city and county, county, district, or other local government agency or public agency authorized by law.

### **Public Information Officer (PIO)**

The function at field or EOC level that is responsible for preparing public information releases and interacting with the media throughout the operational period. At the WEROC EOC level, this function provides assistance to the WEROC water utilities in their public information efforts.

## **R**

### **Regional Emergency Operations Center**

The Regional Emergency Operations Center is the first level facility of the Office of Emergency Services to manage a disaster. It provides a single consistent emergency support staff operating from a fixed facility, whose staff are responsible to the needs of the operational areas and coordinates with the State Operations Center.

### **Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288 as amended**

Gives the President broad powers to supplement the efforts and available resources of state and local governments in carrying out their responsibilities to alleviate suffering and damage resulting from declared emergencies and major disasters.

## **S**

### **Safety Center**

A phone application administered by WEROC that allows EOC staff access to timely contact information, plans and procedures, AlertOC and WebEOC user guides, and instructions that are readily available and can be utilized during emergencies.

### **Safety Officer**

The function at the field or EOC level responsible for monitoring and assessing safety hazards or unsafe conditions, and for developing measures for ensuring personnel safety. At the EOC level, this function reports directly to the EOC Director but may coordinate duties with other functions. This function may have additional staff assigned to it.

### **Search**

Systematic investigation of an area or premises to locate persons trapped, injured, immobilized, or missing.





### **Security Officer**

The function at the field or EOC level responsible for maintaining a security perimeter, handling EOC staff check-in/check-out procedures and other related duties as assigned by the Incident Commander or EOC Director during the operational period. If necessary and practical, this function may be combined with the Safety Officer function. It may also have additional staff assigned to it.

### **Section**

The organization level responsible for a major functional area within the EOC, i.e., Operations, Planning/Intelligence, Logistics, Finance/Administration.

### **Special Districts**

A unit of local government i.e. Water, School, Sanitation, Cemetery Districts, etc. These districts are part of the State Emergency Organization and as such, coordinate with the Orange County Operational Area (O.A.) and all political subdivisions i.e. incorporated Cities, in supporting disaster preparedness and response activities.

### **Stafford Act**

Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707, signed into law November 23, 1988; amended the Disaster Relief Act of 1974, PL 93-288. This Act constitutes the statutory authority for most Federal disaster response activities especially as they pertain to FEMA and FEMA programs.

### **Standard Operating Procedures**

A set of instructions having the force of a directive, covering those features of operations which lend themselves to a definite or standardized procedure. Standard operating procedures support an annex by indicating in detail how a particular task will be carried out.

### **Standardized Emergency Management System (SEMS)**

A system required by California Government Code for managing response to multi-agency and multi-jurisdictional emergencies in California. SEMS consists of five organizational levels which are activated as necessary: Field Response, Local Government, Operational Area, Region, and State.

### **Start-up Actions**

These can be either general, or specific to a particular function at the incident or in the EOC. General Start-up Actions are those taken by the first personnel to arrive. Specific Start-up Actions are those related to a particular function.

### **State Agency (State definition)**

Any department, division, independent establishment, or agency of the executive branch of the State government.

### **State Coordinating Officer**

The person appointed by the Governor to coordinate and work with the federal coordinating officer.

### **State Emergency Plan**

The State of California Emergency Plan, as approved by the Governor, which serves as the basis for statewide emergency planning and response.





## **U**

### **Unified Command (UC)**

An application of ICS used when there is more than one agency with incident jurisdiction or when incidents cross political jurisdictions. Agencies work together through the designated

### **Unit**

An organizational element having functional responsibility at the incident or in the EOC. Units operate under the direction of a Section Chief.

## **V**

### **Volunteer Emergency Preparedness Organization (VEPO)**

Original name of the Water Emergency Response Organization of Orange County.

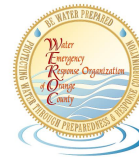




## ATTACHMENT K: AFTER-ACTION REPORT QUESTIONNAIRE

#	Response/Performance Assessment Questions	Yes	No	Comments
1.	Were procedures established and in place for responding to the disaster?			
2.	Were procedures used to organize initial and ongoing response activities?			
3.	Was the ICS used to manage field response?			
4.	Was Unified Command considered or used?			
5.	Was the EOC and/or DOC activated?			
6.	Was the EOC and/or DOC organized according to SEMS?			
7.	Were sub-functions in the EOC/DOC assigned around the five SEMS functions?			
8.	Were response personnel in the EOC/DOC trained for their assigned position?			
9.	Were action plans used in the EOC/DOC?			
10.	Were action planning processes used at the field response level?			
11.	Was there coordination with volunteer agencies such as the Red Cross?			
12.	Was an Operational Area EOC activated?			
13.	Was Mutual Aid requested?			
14.	Was Mutual Aid received?			
15.	Was Mutual Aid coordinated from the EOC/DOC?			
16.	Was an inter-agency group established at the EOC/DOC level? Were they involved with the shift briefings?			
17.	Were communications established and maintained between agencies?			
18.	Was the public alert and warning conducted according to procedure?			
19.	Was public safety and disaster information coordinated with the media through the JIC?			
20.	Were risk and safety concern addressed?			





#	Response/Performance Assessment Questions	Yes	No	Comments
21.	Did event use Emergency Support Function (ESFs) effectively and did ESF have clear understanding of local capability?			
22.	Was communications inter-operability an issue?			

**Additional Questions**

23. What response actions were taken by your agency? Include such things as mutual aid, number of personnel, equipment and other resources. *Note: Provide statistics on number of personnel and number/type of equipment used during this event. Describe response activities in some detail*

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24. As you responded, was there any part of SEMS/NIMS that did not work for your agency? If so, how would (did) you change the system to meet your needs?

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25. As a result of your response, did you identify changes needed in your plans or procedures? Please provide a brief explanation

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26. As a result of your response, please identify any specific areas needing training and guidance that are not covered in the current SEMS Approved Course of Instruction or SEMS Guidelines.

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27. If applicable, what recovery activities have you conducted to date? Include such things as damage assessment surveys, hazard mitigation efforts, reconstruction activities, and claims filed.

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### **Additional Comments**

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### **Potential Corrective Actions**

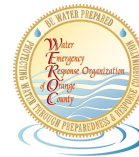
Identify issues, recommended solutions to those issues, and agencies that might be involved in implementing these recommendations. Address any problems noted in the SEMS/NIMS Function Evaluation.

Indicate whether issues are an internal agency specific or have broader implications for emergency management.

(Code: I= Internal; R =Regional, for example, OES Mutual Aid Region, Administrative Regions, geographic regions, S=Statewide implications)

<b>Code</b>	<b>Issue Problem Statement</b>	<b>or</b>	<b>Corrective Action/Improvement Plan</b>	<b>Agency/Depts. to be Involved</b>	<b>Point of Contact Name/Phone</b>	<b>Estimated Date of Completion</b>





## **ATTACHMENT L: WATER AND WASTEWATER REGULATORY AGENCIES**

### **FEDERAL**

**Center for Environmental Health** – Protects people from toxic chemicals by working with communities, consumers, workers, government, and the private sector to demand and support business practices that are safe for public health and the environment.

**Food and Drug Administration (FDA)** – Responsible for protecting the public health by ensuring the safety, efficacy, and security of human and veterinary drugs, biological products, and medical devices; and by ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation. The FDA regulates water trailers and bottled water.

### **STATE**

**State Water Resource Control Board (SWRCB)** – The SWRCB is one of six branches of the California Environmental Protection Agency. It ensures the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use. SWRCB has regulatory authority for protecting the water quality of nearly 1,600,000 acres (6,500 km<sup>2</sup>) of lakes, 1,300,000 acres (5,300 km<sup>2</sup>) of bays and estuaries, 211,000 miles (340,000 km). The SWRCB coordinates the state's nine Regional Water Quality Control Boards (RWQCB).

- **Regional Water Quality Control Boards (RWQCB)** – Serves as the frontline for state and federal water and wastewater pollution control efforts of rivers and streams, and about 1,100 miles (1,800 km) of exquisite California coastline. California is broken into 9 regional boards.
- **Department of Water Resources (DWR)** – Manages state-owned water infrastructure, such as dams, reservoirs and aqueduct. DWR works with other agencies to benefit the State's people and to protect, restore and enhance the natural and human environments.
- **Division of Drinking Water (DDW)** – Regulates public water systems; oversees water recycling projects; permits water treatment devices; supports and promotes water system security; and performs a number of other functions.

### **LOCAL**

**Orange County Health Care Agency (HCA)** – Coordinates and oversees water quality for Orange County by issuing well permits and managing the county's Cross Connection Prevention Program. Additionally, HCA monitors for sewage spills and works with the sanitary district to ensure the sewage is contained and/or issues public notices for wastewater spills in beaches and harbors.





## **CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS**

**(Orange County's boundaries fall on Region 8 and 9)**

### **NORTH COAST REGION (1)**

[www.waterboards.ca.gov/northcoast](http://www.waterboards.ca.gov/northcoast)  
5550 Skylane Blvd., Suite A  
Santa Rosa, CA 95403  
E-mail: [info1@waterboards.ca.gov](mailto:info1@waterboards.ca.gov)  
Tel: (707)576-2220  
Fax: (707)523-0135

### **SAN FRANCISCO BAY REGION (2)**

[www.waterboards.ca.gov/sanfranciscobay](http://www.waterboards.ca.gov/sanfranciscobay)  
1515 Clay Street, Suite 1400  
Oakland, CA 94612  
E-mail: [info2@waterboards.ca.gov](mailto:info2@waterboards.ca.gov)  
Tel: (510)622-2300  
Fax: (510)622-2460

### **CENTRAL COAST REGION (3)**

[www.waterboards.ca.gov/centralcoast](http://www.waterboards.ca.gov/centralcoast)  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401  
E-mail: [info3@waterboards.ca.gov](mailto:info3@waterboards.ca.gov)  
Tel: (805)549-3147  
Fax: (805)543-0397

### **LOS ANGELES REGION (4)**

[www.waterboards.ca.gov/losangeles](http://www.waterboards.ca.gov/losangeles)  
320 W. 4th Street, Suite 200  
Los Angeles, CA 90013  
E-mail: [info4@waterboards.ca.gov](mailto:info4@waterboards.ca.gov)  
Tel: (213)576-6600  
Fax: (213)576-6640

### **CENTRAL VALLEY REGION (5)**

[www.waterboards.ca.gov/centralvalley](http://www.waterboards.ca.gov/centralvalley)  
11020 Sun Center Drive, Suite 200  
Rancho Cordova, CA 95670  
E-mail: [info5@waterboards.ca.gov](mailto:info5@waterboards.ca.gov)  
Tel: (916)464-3291  
Fax: (916)464-4645

#### **Fresno Branch**

1685 E Street  
Fresno, CA 93706  
Tel: (559)445-5116  
Fax: (559)445-5910

#### **Redding Branch**

364 Knollcrest Drive, Suite 205  
Redding, CA 96002  
Tel: (530)224-4845  
Fax: (530)224-4857

### **LAHONTAN REGION (6)**

[www.waterboards.ca.gov/lahontan](http://www.waterboards.ca.gov/lahontan)  
2501 Lake Tahoe Blvd.  
South Lake Tahoe, CA 96150  
E-mail: [info6@waterboards.ca.gov](mailto:info6@waterboards.ca.gov)  
Tel: (530)542-5400  
Fax: (530)544-2271

#### **Victorville Branch**

15095 Amargosa Road - Bldg 2, Ste 210  
Victorville Ca 92394  
Tel: (760)241-6583  
Fax: (760)241-7308

### **COLORADO RIVER BASIN REGION (7)**

[www.waterboards.ca.gov/coloradoriver](http://www.waterboards.ca.gov/coloradoriver)  
73-720 Fred Waring Dr., Suite 100  
Palm Desert, CA 92260  
E-mail: [info7@waterboards.ca.gov](mailto:info7@waterboards.ca.gov)  
Tel: (760)346-7491  
Fax: (760)341-6820

### **SANTA ANA REGION (8)**

[www.waterboards.ca.gov/santaana](http://www.waterboards.ca.gov/santaana)  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348  
E-mail: [info8@waterboards.ca.gov](mailto:info8@waterboards.ca.gov)  
Tel: (951)782-4130  
Fax: (951)781-6288

### **SAN DIEGO REGION (9)**

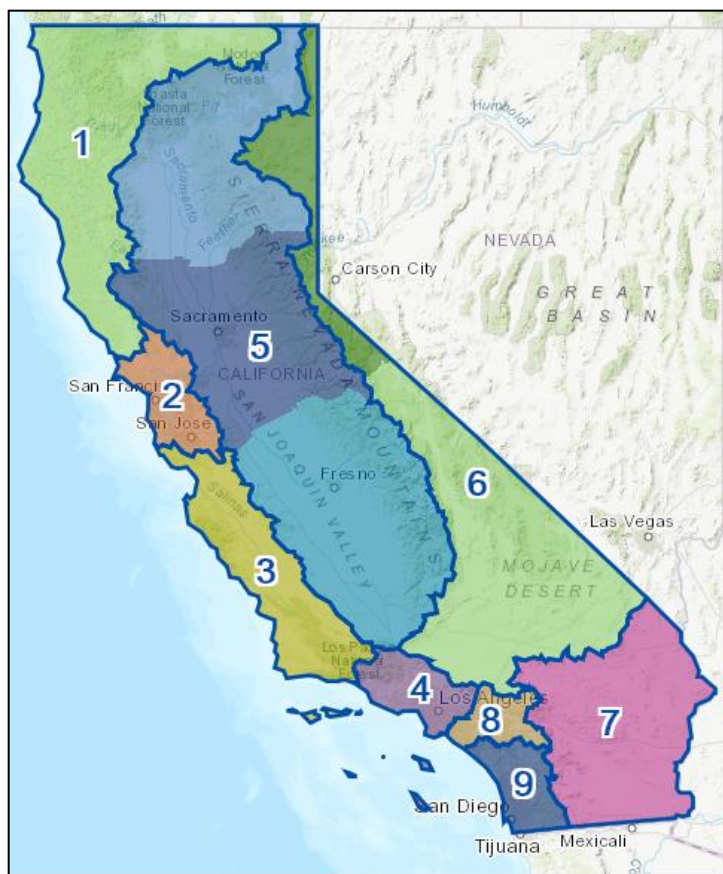
[www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)  
2375 Northside Drive, Suite 100  
San Diego, CA 92108  
E-mail: [info9@waterboards.ca.gov](mailto:info9@waterboards.ca.gov)  
Tel: (619)516-1990  
Fax: (619)516-1994

*(Map with specific locations can be found on the next page)*

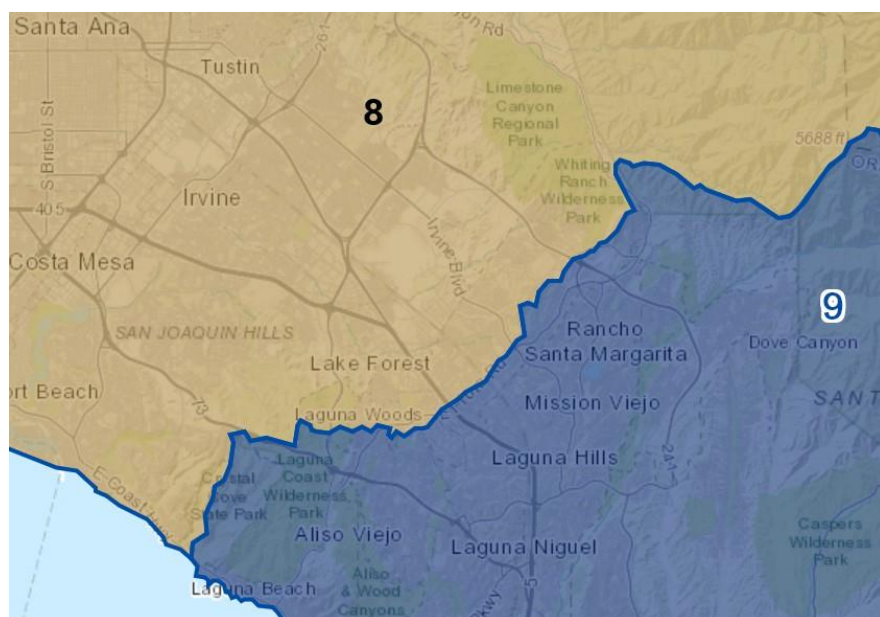




**Figure 1: California Regional Water Quality Control Board Map**



**Figure 2: Border between Region 8 and 9 in Orange County map**







## ATTACHMENT M: HAZARD SPECIFIC EQUIPMENT

This list is available in the Logistics Chief and Resource Unit Position Binder

Hazard Specific Equipment Resource Request			
Category	Item	Specifications	Other
Chemicals	<input type="checkbox"/> Chlorine	Type:	Amount:
	<input type="checkbox"/> Salt		Amount:
	<input type="checkbox"/> Sodium Hypochlorite		Amount:
Debris Removal Equipment	<input type="checkbox"/> Front Loader		
	<input type="checkbox"/> Trucks and Trailer		
	<input type="checkbox"/> Trained Operator Needed		
Emergency Lighting	<input type="checkbox"/> Lighting	Needed for:	
	Type of power: Generator or Battery	Fuel Type:	
	<input type="checkbox"/> Extra Batteries	Type:	
Food/Water	<input type="checkbox"/> Food Supply		Number of staff:
	<input type="checkbox"/> Water for staff	1 gallon per person per day	Number of staff:
	<input type="checkbox"/> Sodium Hypochlorite	1 gallon per person per day	Number of staff:
Fuel Trucks/Carrier	<input type="checkbox"/> Fuel Type	Diesel Gasoline Propane	# of Gallons:
	<input type="checkbox"/> Licensed Driver		
	<input type="checkbox"/> Mount Type	Trailer Truck	
Hose	<input type="checkbox"/> For Potable Water		Amount:
	<input type="checkbox"/> For Wastewater		Amount:
Laboratory Analysis/Services	<input type="checkbox"/> Water Quality Sample Kit	Delivery Address:	
	<input type="checkbox"/> Laboratory Identified	Where:	
Misc.	<input type="checkbox"/> Medication/ Vaccination	Yes No	
	<input type="checkbox"/> Comfort stations		
	<input type="checkbox"/> Temporary facilities	Type:	
	<input type="checkbox"/> Conference Call Line	Yes No	
	<input type="checkbox"/> Office furniture	Type: Amount:	
Portable Generator	Fuel Type:	Diesel Gasoline Propane	
	Pumping Capacity	Gallons Per Minute:	
	Hitch Size	1 7/8 inch 2 inch	
	Connection		
	Vehicle Needed to Haul Generator?	Yes No	
Portable Temporary Pumps	Type of water	Potable Wastewater	
	Pumping Capacity	Gallons Per Minute:	
	Required Power	Kilowatts (KW):	
	Connection		





Hazard Specific Equipment Resource Request			
Category	Item	Specifications	Other
Responder Equipment	<input type="checkbox"/> Non-permeable gloves	Amount:	
	<input type="checkbox"/> First Aid Kits	Amount:	
	<input type="checkbox"/> Hard Hats	Amount:	Amount:
	<input type="checkbox"/> Safety glasses	Amount:	Amount:
	<input type="checkbox"/> Other Equipment	Type:	Amount:
Safety Equipment	<input type="checkbox"/> Emergency Lighting		Amount:
	<input type="checkbox"/> Temporary Fencing		Amount:
	<input type="checkbox"/> Traffic Control Equipment	Type:	Amount:
	<input type="checkbox"/> Sanitation Supplies	(N95 Mask, Vinyl Gloves, Eye protection, Hand Sanitizer, Surface Sanitizer)	Amount:
	<input type="checkbox"/> Other Equipment	Type:	Amount:
SCADA System	<input type="checkbox"/> Temporary Telemetry Stations		
Shoring Equipment	<input type="checkbox"/> Trencher	Operator: Yes No	Amount:
	<input type="checkbox"/> Excavator	Operator: Yes No	Amount:
	<input type="checkbox"/> Shields		Amount:
Staffing	<input type="checkbox"/> Administrative		Amount:
	<input type="checkbox"/> Water Quality Tester		Amount:
	<input type="checkbox"/> Reverse Dial System		Amount:
	<input type="checkbox"/> Maintenance Operator Supervisor	Class:	
	<input type="checkbox"/> Maintenance Operator	Class:	
	<input type="checkbox"/> Reverse Dial System		
	<input type="checkbox"/> Door Hanger/ Notification		Amount:
Water Distribution System	<input type="checkbox"/> Coupling	Type: Size:	Amount:
	<input type="checkbox"/> Valves	Type:	Amount:
	<input type="checkbox"/> Reservoir/tank covers/crack sealers/ sealant	Type:	Amount:
	<input type="checkbox"/> Pipe	Type: Size:	Amount:
	<input type="checkbox"/> Pipe segments	Type: Size:	Amount:
Water Haulers	<input type="checkbox"/> Holding Capacity	How many gallons?	Amount:
	<input type="checkbox"/> Potable Water	Wastewater	Amount:
	<input type="checkbox"/> Licensed Driver?		Amount:
	<input type="checkbox"/> Connections	Size:	Amount:



**ATTACHMENT N: GETS CARD SUBSCRIPTIONS**

Last Name	First Name	Title	Card Number
SEOC	Legal Advisor	Legal Advisor	42425011
Alt EOC	Legal Advisor	Legal Advisor	78178253
SEOC		Extra Position 1	64499089
SEOC		Extra Position 2	85317524
SEOC		Extra Position 3	81714458
Alt EOC	DIRECTOR	EOC DIRECTOR	82299670
Alt EOC	LOGISTICS	NEOC LOGISTICS	49966847
Alt EOC	MAIN LINE	MAIN LINE	67033680
Alt EOC	MANAGER	NEOC MANAGER	67536619
Alt EOC	MULTI AGENCY COORDINATOR	NEOC MULTI AGENCY COORD.	04183057
Alt EOC	PLANS	NEOC PLANS	98372056
Berg	Joseph	Dir. of Water Use Efficiency	27325704
Berg	Joseph	Dir. of Water Use Efficiency	WPS
De La Torre	Harvey	Associate General Manager	84540562
HUBBARD	KELLY	WEROC PROGRAMS MANAGER	90079535
HUBBARD	KELLY	WEROC PROGRAMS MANAGER	WPS
Hunter	Robert	General Manager	91731047
SEOC	SEOC	MULTI AGENCY COORDINATOR	27388687
MWDOC COOP		MWDOC COOP BORG	54203490
MWDOC COOP		MWDOC COOP FINANCE/IT	08686273
MWDOC COOP		MWDOC COOP MGT & POLICY	73428580
NEOC	FINANCE	NEOC FINANCE	64927153
NEOC	PIO	NEOC PIO	93106944
NEOC	WEROC ICP LIAISON	WEROC ICP LIAISON	14338959
Seckel	Karl	Assistant General Manager	38475093
Seckel	Karl	Assistant General Manager	WPS
SEOC	DIRECTOR	SEOC DIRECTOR	02114807
SEOC	FINANCE	SEOC FINANCE	70383429
SEOC	LOGISTICS	SEOC LOGISTICS	75740299
SEOC	MAIN LINE	SEOC MAIN LINE	36465899
SEOC	MANAGER	SEOC MANAGER	69411554
SEOC	PIO	SEOC PIO	84182290
SEOC	PLANS	SEOC PLANS	29637844
SEOC	WEROC ICP LIAISON	WEROC ICP LIAISON	89985434
Soto	Francisco	Emergency Coordinator	86648362
Soto	Francisco	Emergency Coordinator	WPS
WEROC OA LIAISON		WEROC OA LIAISON	91311027





## **ATTACHMENT O: WEROC PLANS AND MEMBER AGENCY TEMPLATES**

### **WEROC Plans**

- WEROC Emergency Operations Plan
  - Hazard Specific Annexes
  - EOC Position Checklist
- WEROC Hazard Mitigation Plan
- Business POD Plan
- Water POD Plan
- Power Plan

### **WEROC Templates**

- Business POD Plan
- Chemical Supply Distribution Plan
- Power Outage Plan
- Water POD Plan
- Unknown Water Contaminant Plan

### **MWDOC Plans**

- Continuity of Operations Plan

### **Joint Agency Plans**

- Joint Information Center Plan
- Water & Fire Coordination Template
- Water Procurement and Distribution Plan
- OA Dam Failure Response Plan
- OCFA Wildland and Urban Interface Plan
- Water POD Plan (Future Plan)





## HAZARD SPECIFIC ANNEXES

The following hazard annexes were identified as high priority in the risk assessment. Various other hazards were also identified in the risk assessment but it was determined that the response to those hazards mirrors that of other hazards.

- Annex 1: Earthquake
- Annex 2: Tsunami
- Annex 3: Flood/Dam Failure
- Annex 4: Pandemic
- Annex 5: Power Outage
- Annex 6: Nuclear Release
- Annex 7: Unknown Water Contaminant
- Annex 8: Wildfire





## **ANNEX 1: EARTHQUAKE**

### Planning Assumptions

1. The EOC will be automatically activated following a M5.0 or greater earthquake within Orange County, or when an earthquake outside of Orange County strong enough to disrupt public phone systems or cause visible damage
2. Communications infrastructure could be damaged, causing disruption in landline, telephone, cellular telephone, radio, internet, and other communication services
3. Transportation infrastructure could be damaged and in limited operation, potentially hampering response operations and staff reporting to the EOC
4. Vital infrastructure such as potable water supplies, sewer, electrical power, natural gas lines can be compromised
5. Local response partners may not be available for hours, or even days following the event

### Earthquake Checklist

In addition to the procedures in the base plan and position guides, this checklist should be used following an earthquake.

- ☐ Determine whether communication systems are operable
- ☐ Determine the location and extent of the earthquake using resources such as the USGS website
- ☐ Determine which member agencies and/or pipelines could have the greatest potential impacts based on epicenter
- ☐ Communicate with potentially impacted member agencies and/or MET to determine extent of damage
- ☐ Determine if EOC activation is necessary. See Activation Decision Steps located in the WEROC EOP. (if the EOC was automatically activated, disregard this item)
- ☐ If the EOC is activated, follow the EOC Activation protocols on page 24
- ☐ Inform member agencies that WEROC is in the process of activating the EOC

### Earthquake Resources

1. Monitor AM radio (e.g. 600 AM) and TV for reports of damage and areas impacted
2. Monitor Web EOC for reports of damage and areas impacted – <https://webeoc.ocsd.org/eoc7/>
3. USGS – <https://earthquake.usgs.gov/> Use the USGS website to determine the epicenter and magnitude of the earthquake (If internet service is down, the EOC should be activated.)
4. Earthquake Map – <https://earthquake.usgs.gov/earthquakes/map/>
5. Fault Maps of Orange County – Located at each EOC
6. Richter scale & Modified Mercalli Intensity Scale (Figure 1)

### Notification Considerations

WEROC staff should verify that the following response partners or regulatory agencies are notified:

- DDW
- HCA
- Control 1 (OA)
- Fire Department



**Figure 1: Richter scale & Modified Mercalli Intensity Scale**

Descriptor	Richter Scale	Magnitude Intensity	WEROC EOC Activated?	Description
Very Minor	1.0-3.0	I	No	I. Not felt except by a very few under especially favorable conditions.
Minor	3.0-3.9	II-III	No	II. Felt only by a few persons at rest, especially on upper floors of buildings. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
Light	4.0-4.9	IV-V	No	IV. Felt indoors by many, outdoors by few during the day. Some awakened at night. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably. V. Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
Moderate	5.0-5.9	VI-VII	Yes, Only if within OC	VI. Felt by all, many frightened. Some heavy furniture moved; a few cases of fallen plaster. Damage slight. VII. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
Strong	6.0-6.9	VIII-IX	Yes, If within OC or disrupts communication channels or disrupts MET services	VIII. Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, and walls. Heavy furniture overturned. IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
Major	7.0-7.9	X-I	Yes, If within OC or disrupts communication channels or disrupts MET services	X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent. XI. Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
Great	8.0 and Higher	XII >	Yes, If within OC or disrupts communication channels or disrupts MET services	XII. Damage total. Lines of sight and level are distorted. Objects thrown into the air.





## **ANNEX 2: TSUNAMI**

### Planning Assumptions

1. The tsunami will impact member agencies located near the coast
2. The EOC will be automatically activated following a M5.0 or greater earthquake within Orange County, an earthquake outside of Orange County strong enough to disrupt public phone systems or cause visible damage, or other large regional event
3. WEROC and member agencies may have several hours to prepare for a distant tsunami
4. There may be a disruption to water and sewer lines
5. Local evacuations may cause traffic gridlock, requiring a law enforcement escort
6. Power outage may occur and communication systems may be damaged
7. WEROC will distribute all the information from the OA to the Member Agencies

### Tsunami Checklist

In addition to the procedures in the base plan and position guides, this checklist should be used before or following a tsunami.

#### **Pre-Event**

- ☐ The OA Liaison will send a message to WEROC of a potential Tsunami and conference call information
- ☐ Participate in OA conference call and notify agencies of potential impacts and OA recommendations
- ☐ The following agencies are in potential tsunami zones:
  - City of Seal Beach
  - City of Huntington Beach
  - City of Newport Beach
  - City of Laguna Beach
  - City of Dana Point
  - City of San Clemente
  - Laguna Beach County Water District
  - South Coast Water District
  - Emerald Bay Service District
  - Orange County Sanitation District (Boat and Harbor Operations)
  - South Orange County Wastewater Authority
- ☐ Inform agencies if evacuations are needed
- ☐ Recommend that agencies isolate or shut off their system before evacuations
- ☐ Determine if EOC activation is necessary. See Activation Decision Steps in the WEROC EOP

#### **Post Event**

- ☐ Determine whether communication systems are operable





- ☐ Communicate with potentially impacted member agencies and/or MET to determine extent of damage
- ☐ If not yet activated, determine if EOC activation is necessary. See Activation Decision Steps in the WEROC EOP
- ☐ If EOC is determined, follow the EOC Activation protocols on page 24 of the EOP
- ☐ Inform member agencies that WEROC is in the process of activating the EOC
- ☐ Monitor AM radio (e.g. 600 AM) and TV for reports of damage and areas impacted
- ☐ Monitor WebEOC for reports of damage and areas impacted

### Tsunami Resources

- *Types of Tsunamis*
  - Near Source Tsunamis: A near source tsunami (local) is one that can hit the coast within minutes following an offshore geological event. This type of locally generated tsunami is possible at many points along the Southern California coast and provides little time for warning the population and less time for evacuation
  - Distant Source Tsunamis: A distant source tsunami is one that may be generated by a very large earthquake in remote areas of the Pacific Ocean, such as the Cascadia Subduction Zone near Eureka which is considered by experts as the most threatening. Since distant tsunamis, such as from Cascadia, may take several hours to reach the Southern California coast following the event, they allow time for warnings to be issued to give coastal residents time to evacuate
- *Tsunami Alerts* - There are four levels of tsunami alerts that are issued by the West Coast/Alaska Tsunami Warning Center. These alerts should be sent to all potentially impacted member agencies upon notification:
  - Tsunami Warning means a potential tsunami with significant widespread inundation is imminent or expected
  - Tsunami Advisory means there is the threat of a potential tsunami, which may produce strong currents or waves dangerous to those in or near the water
  - Tsunami Watch is issued to alert emergency management officials and the public of an event that may later impact the watch area
  - Tsunami Information Statement is issued to inform emergency management officials and the public that an earthquake has occurred, or that a tsunami warning, watch or advisory has been issued for another section of the ocean. Tsunami preparedness and response efforts can utilize preparedness and response efforts for flood hazards, including public education programs, warning, evacuation and other measures





- *Potential Inundation and Evacuation Zone* - WEROC has identified the area to be effected in the event that the County is threatened by a Tsunami. This Zones are depicted in the Tsunami Inundation map located at both EOCs
- *Tsunami Warning System* - <http://ntwc.arh.noaa.gov/>

Notification Considerations

WEROC staff should verify that the following response partners or regulatory agencies are notified:

- Regional Water Quality Control Board
- MET
- Cal WARN
- HCA





## ANNEX 3: FLOOD/DAM FAILURE

### Planning Assumptions

1. Extreme floods could damage communications infrastructure causing disruption in landline, telephone, cellular telephone, radio, Internet, and other communication services
2. Water utilities structures may be damaged requiring resources to recover
3. Floods might limit transportation of resources, potentially hampering response operations
4. Floods may result in damage to critical infrastructure, loss of utilities (gas, water, electricity)
5. Effective prediction and warning systems have been established that make it possible to anticipate flooding occurrences. However, severe weather conditions may occur with little or no warning
6. Water and wastewater infrastructure within flood control channels could be impacted
7. A dam or reservoir failure can result from a number of manmade or natural hazards
8. A dam/reservoir failure may trigger a large flooding event

### Flood/Dam Failure Checklist

- ☐ Inform agencies of projected rainfall and flooding concerns
- ☐ During persistent heavy rain fall, contact dam/reservoir owner to obtain an overview of the situation
  - Confirm notifications have been made
  - Gather situation status summary
- ☐ Review OA Dam Plan and agency specific Dam Plan with inundation maps
- ☐ *EOC Activation Protocol*  
 The following table should be used when determining WEROC's EOC activation level. Based on the current conditions and threat to member agencies, some stages might trigger a greater response.

Flood Watch Stages		WEROC Response
<b>Stage 1</b>	Light to moderate rain	Standby/Monitor
<b>Stage 2</b>	Moderate to Heavy Rain	Standby/Monitor
<b>Stage 3</b>	Continuation of heavy rain – High threat of damage.	Standby/Monitor/Check-in with Member Agencies
<b>Stage 4</b>	Member agencies report that there is a threat to infrastructure – (Local Emergency may be declared)	Support/County Liaison/Potentially Activate EOC
<b>Stage 5</b>	Heavy damage potential – Damage to member agencies infrastructure (Local Emergency Declared)	EOC Activation/County Liaison
<b>Stage 6</b>	Damage beyond OA Resources and impacting various member agencies. Significant damage to member agencies infrastructure/Loss of water (State of Emergency Declared)	EOC Activation/County Liaison
<b>Stage 7</b>	Damage beyond state resources (Presidential Declaration)	EOC Activation/County Liaison





- ☐ Ensure all information is received by the OA EOC
- ☐ Contact potentially impacted agencies to record impacts and resource needs
- ☐ If needed, coordinate debris removal for member agencies

#### Flood/Dam Failure Resources

- Monitor radio (e.g. 600 AM) and TV for reports of damage and areas impacted.
- OC Public Works Watershed & Coastal Resources – 714-834-5173
- OC Public Works Rain Fall and Weather Data –  
<http://www.ocwatersheds.com/rainrecords/rainfalldata> .jj
- National Weather Service, San Diego Office – 858-675-8700,  
<http://w2.weather.gov/climate/index.php?wfo=sgx>
- National Weather Service Radar -  
<https://radar.weather.gov/ridge/radar.php?rid=nkx&product=N0R&overlay=11101111&loop=no>

#### Notification Considerations

WEROC staff should verify the following response partners or regulatory agencies are notified:

- Operational Area EOC – 714-628-7008
- OC Public Works – 714-834-2300
- OC Public Works DOC (when activated) – 714-955-0200 or 714-955-0333
- Army Corps of Engineers – 202-761-1001





## **ANNEX 4: PANDEMIC**

### Planning Assumptions

1. A pandemic in any given community will last about eight to twelve weeks
2. Organizations will be provided guidance and/or direction by federal, state, and/or local governments regarding current pandemic status in the area
3. Activation of each agency's COOP including MWDOC, may be required
4. A pandemic flu is not a water-borne virus, it will have no direct effect on water quality. Other pandemics could be water borne
5. Staff absenteeism will rise due to personal illness, family member illness, community mitigation measures, quarantines, school, childcare, or business closures, public transportation disruptions, or fear of exposure to ill individuals, as well as first responder, National Guard, or military reserve obligations
6. Each WEROC member agency is responsible for taking the necessary steps and precautions they deem appropriate for the situation. WEROC and its member agencies should take into consideration information released by the State Department of Public Health and the Orange County Health Care Agency
7. When antivirals and vaccines become available, they will be allocated according to the WEROC Business POD Plan

### Pandemic Checklist

In addition to the procedures in the base plan and position guides, this checklist should be used for an imminent or real-time pandemic

- ☐ Monitor the approaching pandemic through the OCHCA, CDC, and/or CDPH
- ☐ Enact pre-pandemic mitigation strategies and encourage member agencies to do the same
- ☐ Employees/Disaster Service Workers (DSW) should be reminded of their obligation to report to work during a pandemic
- ☐ Determine if a virtual work or EOC environment is appropriate and favored, ensure all technological methods are available and utilized
- ☐ Determine the appropriate EOC activation level and operational periods based on the incident.
- ☐ If the decision is made to activate the WEROC EOC, the EOC Activation and Notification Protocol located in the WEROC EOP will be utilized
- ☐ Participate in the periodic conference calls hosted by the OA EOC
- ☐ Provide member agencies and MWDOC staff with informational material
- ☐ Provide the necessary resources to ensure member agencies sustain a safe working environment
- ☐ Encourage member agencies to only allow essential functions to report for work and to have a plan and description on how those essential functions will be carried out through a prolonged period
- ☐ Utilize the Public Information Officer to ensure public is informed of the current situation and any protective actions related to water or wastewater
- ☐ Coordinate public messaging related to water and wastewater safety
- ☐ Monitor for health situation reports, medical bulletins and press releases
  - review and verified information





- distribute to appropriate personnel
- Maintain contact with OA and member agencies to ensure situation status is timely, accurate and shared
- When medications become available, activate the WEROC Business POD Plan

### Pandemic Resources

- *Alert Phases*

The designation of phases, including decisions on when to move from one phase to another, is made by the Director General of WHO. A diagram of the phases is located in figure 1 below. These phases are defined as follows:

**Phase 1** - no viruses circulating among animals reported to cause infections in humans.

**Phase 2** - animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat.

**Phase 3** - animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks.

**Phase 4** - characterized by verified human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause “community-level outbreaks.” Phase 4 indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a foregone conclusion.

**Phase 5** - characterized by human-to-human spread of the virus into at least two countries in one WHO region. Declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**Phase 6** – Pandemic phase characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way.

**Post-peak period** – The post-peak period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur and countries will need to be prepared for a second wave.

**Post-pandemic period** - At this stage, it is important to maintain surveillance and update pandemic preparedness and response plans accordingly. An intensive phase of recovery and evaluation may be required.

- OCHCA’s Pandemic Influenza Preparedness and Response Plan
- WEROC Business POD Plan

### Notification Considerations

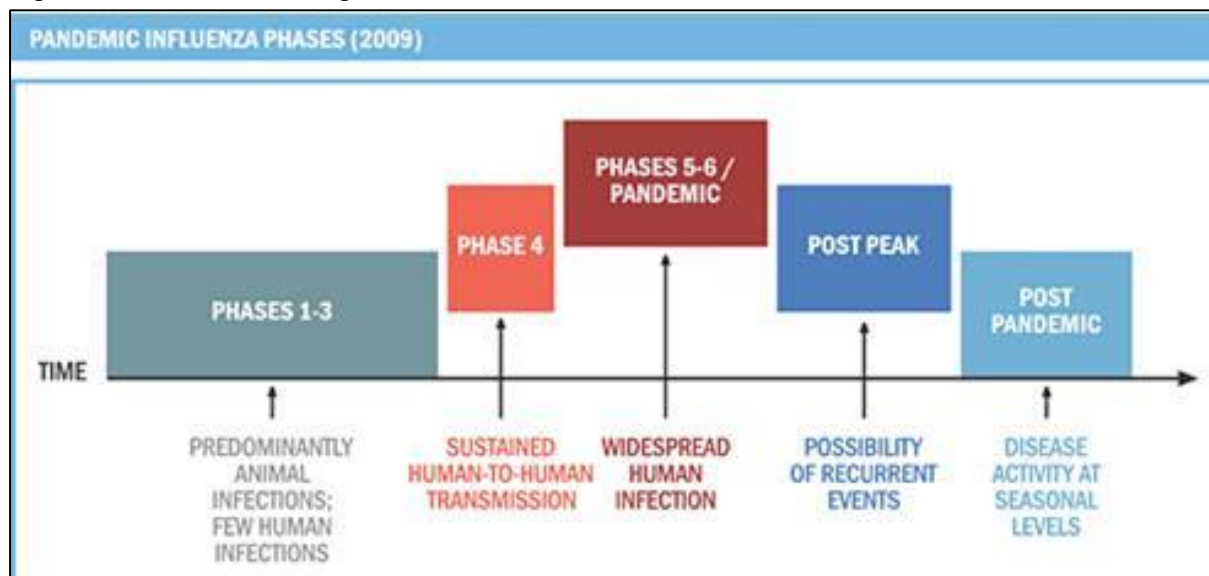
WEROC staff should verify the following response partners or regulatory agencies are notified:

- DDW
- SWRCB
- HCA





Figure 1 World Health Organization Pandemic Influenza Phases







## **ANNEX 5: POWER OUTAGE**

### Planning Assumptions

1. Many member agencies lack adequate back-up power sources to rely upon during power outages and other emergencies
2. Energy disruptions are unpredictable and may occur for a variety of reasons. A local, countywide, or regional power outage may occur at any time
3. There are environmental events that significantly increase the possibility of a power outage, such as extreme temperatures, wind storms and rain storms
4. A power outage will may disrupt WEROC and/or MWDOC operations
5. During active fires, the power company will de-energize power lines in the fire zone
6. There will be fuel coordination needs for power generators
7. Energy within Orange County is mostly controlled by non-governmental entities; therefore the County of Orange has no legal authority over how the energy resources supplied by these entities are distributed or the priority for restoration in the event of a power disruption

### Power Outage Checklist

In addition to the procedures in the base plan and position guides, this checklist should be used for a power outage.

- ☐ Determine power outage perimeter by requesting an official briefing from the OA and/or the power utility or using the power outage resources below
- ☐ The OA EOC may conduct a conference call after a CAISO Stage 3 Emergency or during a widespread power outage
- ☐ Monitor WebEOC to obtain a situational overview of the power outage
- ☐ Contact affected member agencies, if without power, determine:
  - If backup systems are available or needed
  - The duration on which backup systems can continue to operate
    - Frequency of fuel needed
    - How much fuel is needed
  - Resource needs to withstand the duration of the power outage
- ☐ Maintain contact with OA and member agencies to ensure situation status is timely, accurate and shared
  - Send a WEROC representative to the OA EOC (if needed)
- ☐ Work with the affected member agency to determine if water quality notifications are needed
- ☐ If it is decided to activate WEROC EOC, the WEROC EOC Activation Notification Protocol located in the WEROC EOP should be utilized

### Power Failure Resources

- Monitor radio (e.g. 600 AM) and TV for reports of damage and areas impacted.
- WEROC Power Plan
- Member Agency Power Plan
- SCE Outage Map- <https://www.sce.com>





- SDG&E Outage Map - <https://www.sdge.com/residential/customer-service/outage-center/outage-map>
- California Energy Emergency Response Plan, California Energy Commission
- **CAISO Alert Levels**  
When a significant imbalance between the supply and demand for electricity occurs, Cal-ISO may issue an Alert, a Warning, or a Stage 1, 2, or 3 Emergency. Table #1 outlines the CAISO Notifications

Table 1# CAISO Notifications

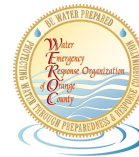
<b>CAISO Notifications</b>	
<b>Alert</b>	Cal-ISO informs power utility that operating reserves in the day-ahead market are forecasted at less than 7%, but plans to serve all customers unless loads are significantly higher or resources are lost.
<b>Warning</b>	Cal-ISO informs power utility that operating reserves in the hour-ahead market are forecasted at less than 7%, but plans to serve all customers unless loads are significantly higher or resources are lost.
<b>Emergency Stage 1</b>	Cal-ISO informs power utility that operating reserves are less than 7% in real time or are unavoidable. Consumers are urged to reduce their use of electricity voluntarily to avoid more severe conditions.
<b>Emergency Stage 2</b>	Cal-ISO informs power utility that operating reserves are less than 5% in real time or are unavoidable. Cal-ISO can order the power utility to curtail interruptible load ("voluntary interruptions"). These voluntary interruptions are intended to prevent more severe conditions.
<b>Emergency Stage 3</b>	Cal-ISO informs power utility that operating reserves are less than 1.5% in real time or are unavoidable. Cal-ISO can order the power utility to curtail firm load ("involuntary interruptions"). If ordered to curtail firm load, the power utility will implement CPUC-approved rotating outage plans in which controlled service interruptions (of about one hour) are rotated among groups of customers. These outages are intended to prevent more severe imbalance conditions, such as a total system collapse, and will be implemented until the Cal-ISO notifies the power utility that the emergency has passed.

#### Notification Considerations

WEROC staff should verify the following response partners or regulatory agencies are notified:

- SDG&E
- SCE
- CAISO
- Army Corps of Engineers, Emergency Power Planning and Response Teams, 213-452-3440+
- Generator Rental Companies
- Fuel Supply Companies





## **ANNEX 6: NUCLEAR RELEASE (SONGS)**

### Planning Assumptions

1. An emergency at SONGS may occur without warning at any time of day or night.
2. There are five Hazmat teams in Orange County (Anaheim, Huntington Beach, OCFA (2), HCA) that provide 24 hours-a-day staffing for emergency responses and are dispatched by 911 operations
3. Responding agencies will need to provide information to reduce public concern about the incident and response activities

### Risk Assessment

During a Nuclear Power Plant "General" Emergency, an atmospheric release of radioactive material (or "plume") could be dispersed inland by prevailing winds causing a number of exposed sources of drinking water to become contaminated. Several sizable reservoirs within the County qualify as exposed sources. They include: helm

#### Domestic

- Big Canyon Reservoir (owned by City of Newport Beach)
- Santiago Reservoir a.k.a. Irvine Lake (operated by Serrano WD and jointly owned by Irvine Ranch WD and Serrano WD)
- Walnut Canyon Reservoir (owned by City of Anaheim)

#### Irrigation (landscape & agriculture)

- Bonita Reservoir (operated by Irvine Company)
- Laguna Reservoir (owned by the Irvine Company)
- Lambert Reservoir (owned by the Irvine Company)
- Oso Reservoir (owned by Santa Margarita WD)
- Rattlesnake Reservoir (operated by Irvine Ranch WD)
- San Joaquin Reservoir (operated by Irvine Ranch WD )
- Sand Canyon Reservoir (operated by Irvine Ranch WD)
- Syphon Reservoir (owned by the Irvine Company)

MET also has exposed sources of drinking water i.e. Diamond Valley Lake, Diemer Filtration Plant, Lake Mathews, Mills Filtration Plant, Lake Perris, Lake Skinner, and Skinner Filtration Plant. These exposed sources are not found in the 10-mile Emergency Planning Zone found on the SONGS Emergency (Evacuation) Planning Zone Map, but do lie within the 50-mile Public Education (Monitoring) Zone surrounding the SONGS facility found on the California Public Utility Commission's SONGS Emergency Planning Zone Map (D-12-3).

### SONGS Emergency Plan Information

To facilitate WEROC response to a nuclear release at SONGS, the SONGS Emergency Plan Information insert is available to WEROC staff in both WEROC EOCs. Two sections which will help WEROC staff form a basic understanding of response to a SONGS incident are found below. The Event Code Designation briefly describes response codes used by SONGS staff. Key Phone





Numbers list the different entities that would be involved in and affected by an incident involving SONGS.

Other information not shown here but found on the full insert includes the following: Unusual Event, Alert, Site Area Emergency, and General Emergency descriptions, and Abbreviations. To view the full SONGS Emergency Plan Information insert refer to the checklist found in the WEROC EOC function binders.

### Event Code Designation:

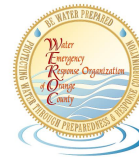
The event code comprises three characters (*i.e.* A1-2, D2-1, etc.) which designate the event category, the emergency class, and the emergency action level, respectively.

<b>Event Categories</b>	
<b>A</b>	Uncontrolled release of radioactivity
<b>B</b>	Loss of reactor coolant system inventory
<b>C</b>	Reactor core degradation or overheating
<b>D</b>	Loss of plant safety equipment
<b>E</b>	Disasters (natural or manmade)
<b>F</b>	Security contingency
<b>G</b>	Miscellaneous
<b>Emergency Classes</b>	
<b>1</b>	<b>Unusual Event:</b> Potential degradation of plant safety. No offsite response required.
<b>2</b>	<b>Alert:</b> Actual or potential significant degradation of plant safety. A radioactive release will be small fraction of EPA limits.
<b>3</b>	<b>Site Area Emergency:</b> Actual or likely failures of plant functions needed for protection of the public. A radioactive release not expected to exceed EPA limits.
<b>4</b>	<b>General Emergency:</b> Actual or imminent substantial plant damage. A radioactive release can be expected to exceed EPA limits.

### SONGS Key Phone Numbers:

Orange County	24 Hrs	(714) 628-7008
San Diego County	24 Hrs	(619) 565-3490
San Clemente*	Work Hrs	(949) 361-6100
San Juan Capistrano*	Work Hrs	(949) 443-6337
Dana Point*	Work Hrs	(949) 248-3500
CA State Parks	Work Hrs	(949) 492-8412
Camp Pendleton	Work Hrs	(760) 725-6419
	Off Hrs	(760) 725-5617
American Red Cross	24 Hrs	(714) 481-5300
CA Highway Patrol	24 Hrs	(858) 467-3333
Capistrano Unified School District	Work Hrs	(949) 489-7276
	Off Hrs	(949) 493-2748





Governor's OES	24 Hrs	(800) 852-7550
SCE Switchboard/Corporate Communications	24 Hrs	(800) 621-8516
SCE Telecom Trouble Desk (Sirens)	24 Hrs	(949) 587-5500
*Off hours contact (714) 628-7008		

### **Potential Impacts**

A serious meltdown at SONGS would result in a massive release of radioactivity that could immediately kill more than 100,000 people in South County and northern San Diego County and ultimately cause hundreds of thousands of injuries. However, the circumstances and geographic features in the vicinity of potential incidents vary greatly. Incidents may occur over a very large geographic area or at fixed facilities where there are opportunities for development of site-specific contingency plans.

The area affected by radioactive release is determined by:

- The amount of radiation released from the plant.
- Wind direction and speed.
- Weather conditions.

In the event that any open sources of water were to become contaminated from radioactive fallout, they would need to be isolated from the regional distribution system until water quality tests could be performed. In this situation, WEROC would coordinate information flow with Calif. State Office of Drinking Water; Metropolitan; and Orange County Health Care Agency (HCA) through the County Operational Area (O.A.) EOC.

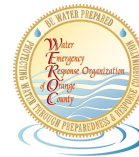
In addition to the initial damage a nuclear incident may trigger one or more secondary events, such as: explosions, radioactive fallout, fires, power failures, dam failures, transportation disruptions, accidents, overpass failures, building collapse, fuel shortages, food and/or water supply contamination or disruption of distribution systems.

### **Notification Considerations**

WEROC staff should verify the following response partners or regulatory agencies are notified:

- SONGS
- Local Police Departments
- CDPH
- OCHCA





## **ANNEX 7: UNKNOWN WATER CONTAMINANT**

### Planning Assumptions

1. The affected member agency will determine if the threat is significant enough to warrant the activation of the unknown water contaminant annex
2. Agency response to an unknown contaminant in the water system should follow the water sampling response guidelines in the Emergency Water Quality Sample Kit (EWQSK)
3. There are five Hazmat teams in Orange County (Anaheim, Huntington Beach, OCFA (2), HCA) that provide 24 hours-a-day staffing for emergency responses and are dispatched by 911 operations
4. Do not use water for any purpose including, firefighting

### Unknown Water Contaminant Checklist

In addition to the procedures in the base plan and position guides, this checklist should be used during an unknown water contaminant response.

- ☐ Receive a complete debrief from the affected member agency to include but not limited to:
  - Site location
  - How they came to the conclusion of a potential contaminant in their system
  - Area of containment (if possible)
  - The length of time the potential contaminant has been present
  - Whether a perimeter has been established to keep people of the hot zone
  - Has the DDW been contacted
- ☐ Remind the member agency of the SOP and walk them through the procedures
- ☐ Contact the following agencies and inform them of the situation (if needed by the member agency)
  - DDW
  - Control 1 – OA
  - Hazmat
  - OCIAC
  - Local Law Enforcement
  - HCA
- ☐ Dispatch a WEROC staff member to the affected member agency ICP or EOC
- ☐ Consider the support needs of the impacted agency
- ☐ Consider the activation of the EOC. If it is decided to activate the WEROC EOC, the WEROC EOC Activation Procedures are located in the WEROC EOP

### Roles and Responsibilities

#### *Division of Drinking Water (DDW)*

When notified of a potential Unknown Water Contaminant, the DDW will respond to the incident location with three Emergency Water Quality Sample Kits (EWQSK).

#### *Hazmat Team*

The Hazmat team will be responsible for working with the affected agency to physically take the samples from the contaminated water source





*Law Enforcement*

Responsible for transporting the samples to Richmond Laboratory.

Unknown Water Contaminant Resources

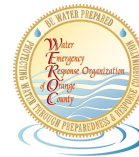
- Member agency Unknown Contaminant SOP Template
- Water Trailer SOP
- Water POD SOP

Notification Considerations

WEROC staff should verify the following response partners or regulatory agencies are notified:

- DDW
- Control 1
- OCHCA
- OCFA
- CalWARN
- CDPH





## **ANNEX 8: WILDFIRE**

### Planning Assumptions

1. Wildfires could damage communications infrastructure causing disruption in landline, telephone, cellular telephone, radio, Internet, and other communication services
2. Water utilities structures may be damaged requiring resources to recover
3. Wildfires may result in damage to infrastructure, loss of utilities (gas, water, electricity), and street closures that hamper response operations
4. Several water and wastewater entities with critical facilities in close proximity to areas of very high to extreme fire threat include: Orange, Yorba Linda Water District, Santa Margarita Water District, Moulton Niguel Water District, Trabuco Canyon Water District Irvine Ranch Water District, Brea, San Clemente, San Juan Capistrano, Anaheim, Serrano Water District, Emerald Bay Service District, Laguna Beach County Water District, and the Metropolitan District of Southern California's Diemer Water Filtration Plant.
5. Fire suppression efforts take a toll on water agencies as it requires massive amounts of water, which may lead to pressure loss and low water storage levels
6. Sediments, ash effluents, and fire suppression chemicals can contaminate the water system through open waterways and storage facilities to cause water quality degradation

### Wildfire Checklist

- ☐ Check City or OCFA twitter page for up to date information on the fire
- ☐ Determine which agencies could or have impacts and inform them of the situation
  - Atlas Maps are available at both EOC's to determine potentially impacted agencies
- ☐ If a member agency loses power to infrastructure, see Power Outage Annex
- ☐ If infrastructure is threatened by the fire contact the OA EOC Operations Section Chief or OA Liaison, or OA EOC general line to inform them of the situation. Make sure you provide:
  - Location of threatened infrastructure (GPS coordinates or Pin drop from mobile phone)
  - Impacts if the structure was destroyed
- ☐ Dispatch a WEROC staff member to the ICP and/or OA EOC. (If needed)
  - Ensure transportation routes are safe before dispatching staff
- ☐ Consider the support needs of the impacted agency
- ☐ Consider the activation of the EOC. If it is decided to activate the WEROC EOC, the WEROC EOC Activation procedures are located in the WEROC EOP
  - Use the EOC Staffing Map to ensure EOC staff are not in the impacted area
    - If EOC staff are in the impacted area, inform staff member

### Wildfire Resources

1. Cal Fire - <http://www.fire.ca.gov/>
2. Incident Information System (Fire Maps) - <https://inciweb.nwcg.gov/state/5/#>
3. Fire/Police Amateur Live Radio - <http://www.broadcastify.com/listen/std/6>
4. Water Districts and City Boundaries Map – [http://cehtp.org/page/water/water\\_system\\_map\\_viewer](http://cehtp.org/page/water/water_system_map_viewer)





Notification Considerations

WEROC staff should verify the following response partners or regulatory agencies are notified:

- OCFA
- Control 1 – OA
- DDW
- RWQCB
- HCA



**RESOLUTION NO. \_\_\_\_**

**A RESOLUTION OF THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
ADOPTING THE REVISED WEROC EMERGENCY OPERATIONS PLAN**

WHEREAS, The Municipal Water District of Orange County (MWDOC) established the goal of developing and maintaining an emergency plan; and

WHEREAS, The California Code of Regulation Section 2401 has since established the Standardized Emergency Management System (SEMS), and the President of the United States in Homeland Security Directive (HSPD)-5, directed the Secretary of the Department of Homeland Security to develop and administer a National Incident Management System (NIMS), both of which standardize response to emergencies involving multiple jurisdictions or agencies; and

WHEREAS, Government Code Section 8607 required all political subdivisions to be in compliance with SEMS by December 1, 1996, to be eligible for reimbursement of emergency response personnel costs and now pursuant to the President's Executive Order, Homeland Security Directive (HSPD)-5, local governments are required to establish the NIMS as the standard for incident management by September 30, 2007; and

WHEREAS, with this revised emergency plan MWDOC continues to conform to State SEMS and Federal NIMS guidelines for emergency plan compliance; and

WHEREAS, MWDOC has determined that it is in the District's best interest and benefit to maintain a current emergency plan that meets emergency management best practices.

NOW, THEREFORE, BE IT RESOLVED the Board of Directors of Municipal Water District of Orange County hereby adopts the WEROC Emergency Operations Plan, dated March 2018.

Said resolution was adopted on April 18, 2017, by the following roll call:

AYES:	Directors
NOES	None
ABSENT:	Directors
ABSTAIN:	None

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 April 18, 2017.

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Maribeth Goldsby, Board Secretary  
Municipal Water District of Orange County





**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert J. Hunter, General Manager

**Staff Contacts:** **Kelly Hubbard, WEROC Manager**  
**Charles Busslinger, Principal Engineer**

**SUBJECT:** **Approval of Structural Seismic Improvements to the MWDOC**  
**Administration Building and Staff Direction for Implementation**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors review; the Report on the Conceptual Seismic Retrofit Study of the MWDOC Administration Building, the staff presentation and staff report, and authorize staff to move forward with the following recommendations:

1. Proceed with conceptual Seismic Retrofit Study Work Items:

- A. Reinforce roof structure,
- B. Strengthen existing wall to roof connections,
- C. Plywood diaphragm for roof, and
- D. Additional wall to roof connectors

The conceptual cost of these items is \$400,000 for the MWDOC Administration Building in addition to an estimated \$100,000 for already approved Work Item F (non-structural improvements including window treatment) for a total expenditure of \$500,000. These investments will achieve a Life Safety building performance level plus Damage Control

<b>Budgeted (Y/N): Y&amp;N</b>	Budgeted amount: See Below	Core <u>  X  </u>	Choice <u>  </u>
<b>Action item amount: \$200,000 to \$400,000 for structural construction costs, plus \$100,000 of non-structural costs including window treatment. Costs are conceptual until bidding.</b>		Line item: 7040 – Professional Services; 8811 – Building Expense	
<b>Fiscal Impact (explain if unbudgeted): An estimate of \$233,100 has been included in the FY17-18 &amp; FY18-19 budgets for the Seismic Improvements at MWDOC. This amount is not sufficient and did not include Professional Services for the design work. The write up has more detail on budgeted vs unbudgeted expenses. Additional costs are proposed to be funded from the MWDOC Building Reserve Fund in the estimated amount of \$280k to \$480k (but could vary with bidding).</b>			



to allow functionality following expected shaking based on a review of seismic events, the newer seismic building codes, and ASCE Standard 41-13: Seismic Evaluation for Retrofit of Existing Buildings.

Alternatively, the Board could omit item D (additional wall to roof connectors) at a cost savings of \$200,000, but with a lower building resiliency.

2. In order to move forward with recommended items staff shall:
  - A. Following a decision by the Board on item 1, conduct an RFP process to prepare the Design, Bid Package, and provision of Construction Management and inspection services for the structural improvements at MWDOC Administration Building;

## **COMMITTEE RECOMMENDATION**

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Committee recommended at least moving forward with the Life Safety (3-C) option of \$300,000, however indicated that the full Board consider moving forward with the Damage Control (2-B) option of \$500,000. The Committee also discussed the options of rebuilding the current structure (\$5.8-7.2 million) or new construction at a relocation site (\$6-12.5 million) and suggested the Board discuss these options as well.

## **SUMMARY REPORT**

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Although the current building code does not require MWDOC's administration building to be retrofitted (because it is grandfathered), the current building code indicates additional structural improvements are necessary to meet a current Life Safety building performance level for predicted earthquakes, and that even more structural improvements are required to achieve a Damage Control level of performance which would allow for the building to be more quickly re-occupied and utilized following a seismic event. To determine what levels of improvement are achievable and affordable, staff contracted with IDS to complete an analysis titled 'Report on the Conceptual Seismic Retrofit Study of the MWDOC Administration Building', Attachment A. The decisions facing MWDOC are both technical and policy related when it comes to determining what level of investment to make. In this process, staff has kept in mind the following items:

- All investments must be appropriately justified.
- All costs included herein are conceptual in nature and will remain so until we are in a position to receive bids.
- The graphic below illustrates the balancing process involved between the level of investment and building performance. Staff believes the minimum level of expenditure is at or to the left of Life Safety in the spectrum. The determination of how far to the left of Life Safety is one of policy. Staff believes that additional investments beyond Life Safety to one moving into the area of Damage Control can be justified by the higher level of performance to be expected from the building following these levels of investments. Staff will be prepared to discuss the options at the committee meeting.
- With respect to a complete overview of where the total investments might take us at the completion of this effort, staff believes the total investment between recent work and work anticipated, will amount to about \$2.15 million investment in this building including:



### Previous Building Investments

○ Window replacement & walkway handrails	(2009-2014) \$ 15,826
○ Air handler work	(2013-2014) \$208,549
○ Boiler, Chiller & Energy Control System	(2014-2016) \$226,938
○ Bathroom Remodel	(2015-2016) \$143,679
○ Fire System	(2016) \$ 21,991
○ Entry Area remodel	(2015-2016) <u>\$ 72,131</u>

Total Expenditures 2009 through 2016 **\$689,114**

### Additional Building Investments

○ Pending structural improvements	(Estimated \$400,000)
○ Pending non-structural improvements MWDOC	(Estimated \$100,000)
○ Pending non-structural improvements South EOC	(Estimated \$ 50,000)
○ Professional fees for design or remodeling	(Estimated \$139,000)
○ Upcoming HVAC	(Estimated \$109,500)
○ Upcoming conference rooms/office remodel	(Estimated \$388,700)
○ Upcoming roof	(Estimated \$ 99,000)
○ Adding a generator unit for back-up power	(Estimated \$122,000)
○ <u>Painting &amp; Carpet</u>	<u>(Estimated \$50,000)</u>

Estimated Total Additional Investments **\$1,458,200 <sup>1</sup>**

<sup>1</sup> Budgeted FY 2017/2018 & FY 2018-19	<u>\$978,025</u>
Unbudgeted	<u>\$480,175</u>

**Total Overall Recent and near future costs = \$2.15 million**



# Spectrum of Building Performance Levels

(ASCE/SEI 43-13-Seismic Evaluation and Retrofit of Existing Buildings)

Life Safety & Continued Operations Focus			Life Safety Focus		
Operational (1-A)	Immediate Occupancy (1-B)	Damage Control (2-B)	Life Safety (3-C)	Reduced Safety (4-D)	Collapse Prevention (5-D)
Very little damage, power available, equipment operable	Overall damage light. Building remains safe, with minor repairs and some cleanup. Non-structural components and utilities remain secure, but may not function.	Range between Immediate Occupancy and Life Safety. Control damage to allow return to function quicker.	Structural & Non-structural damage is significant. May not be safe for continued operations without repair.	Performance range midway between Life Safety and Collapse Prevention	Building standing but low resistance to additional shaking (after shocks), Extensive Non-Structural component damage, Unsafe for occupancy.



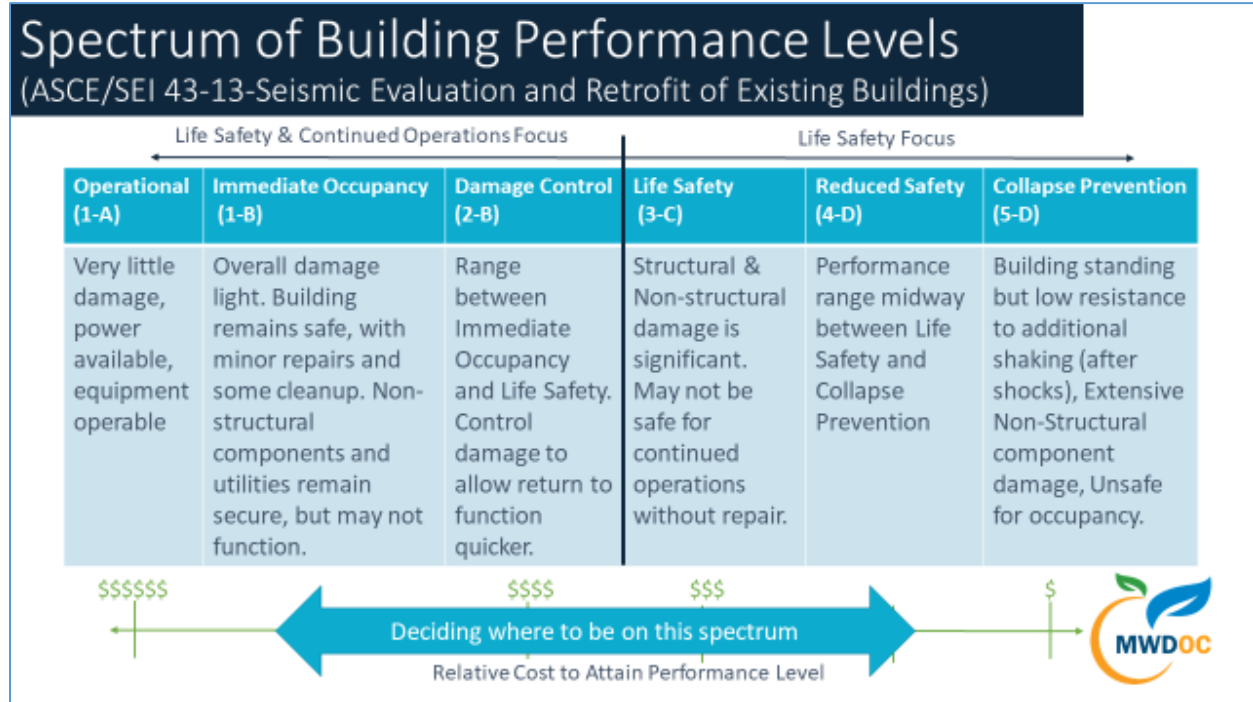


- Two other options are available to MWDOC, but for either of these options, the overall costs are considerably more than retrofitting and remodeling the existing building. These include building a new building on-site or relocating to another site to purchase/upgrade or build a new building)
  - **Cost to Rebuild On-Site = \$5.8 - \$7.2 million.** A rough estimate of the building replacement cost (no land) for a 12,800 square-foot Government Office building, using 2018 Building Costs of \$308 to \$417 per square-foot for the Orange County area (includes a 20% increase to build to essential facility criteria), plus an estimated cost of \$1.2 million for an enhanced soil foundation to protect against liquefaction, plus \$100,000 for demolition costs to arrive at a total estimated building replacement cost of \$5.3 to \$6.7 million [depending upon the type of building - concrete (more expensive) or wood/steel frame, ceiling height, and architectural finishes], for a structure meeting the Immediate Occupancy level of resiliency.  
  
To build on site would also require staff to relocate for about 18 months at an estimated additional cost (based on currently available leases at \$24 per square-foot per year and moving expenses) of \$512,000.
  - **Cost to Relocate to NEW Site = \$6.0 - \$12.5 million.** A rough estimate of relocating to another site (based on currently available properties outside of liquefaction zones), including purchase of land and a building, remodel costs, structural costs and relocation costs, are on the order of \$6.0 million to purchase and retrofit an existing building, or up to \$12.5 million to purchase, tear down, and build a new essential facility building. These costs include costs associated with providing space for Board room facilities (Board room estimated at twice the size of Conference Room 101 plus some storage). The cost estimate also includes the conference room space we have today.

Overall, the improvements proposed for action in this agenda submittal, are estimated to take about 12 months to complete.



## DETAILED REPORT



Several definitions will be useful for the discussion to describe building performance during and after a seismic event. Overall, MWD OC is looking at potential improvements along a spectrum (see above table), somewhere between Life Safety and an Essential (Immediate Occupancy) Facility. Three definitions will assist in the discussions. These are:

1. **Life Safety** – Relates to protection of people in the building during a seismic event and basically looks at prevention of serious injury or death. Under this designation, structural walls should not fail, but the building may permanently lean to one side. The structural walls can withstand some aftershocks; but joints holding the structural components together will loosen, reducing structural capacity of the building. It may not be possible to re-occupy the building until repairs are made to the structural system, and it may not even be economical to repair the building following a seismic event (i.e. a tear-down). The ability to re-occupy the building following an earthquake is not part of the design considerations when simply looking at Life Safety.

Non-structural components are likely damaged and overturned [i.e. pipes likely break, glass likely broken under pressure resulting in projectile fragments, jammed doors, lights and suspended ceilings likely fall, furniture likely overturned, interior (partition) walls are likely damaged and may fall down].

2. **Damage Control** - This is a spectrum halfway between Immediate Occupancy/Essential Facility (see section below) and Life Safety (see section above). The structural system is more robust and able to withstand more shaking than Life-Safety, thereby increasing the probability that the building can be re-occupied sooner. The building is designed and constructed with consideration for the building to be re-occupied.



Non-structural items may shift around, (i.e. they may have some damage, but overhead items remain suspended, plumbing and electrical fixtures and lines work provided there is power and water from the local utility). Schools are typically built to this standard.

3. **Essential Facility** - (also called Immediate Occupancy) – This designation is typically provided for facilities that are critically needed following a large seismic event (Fire, police, utility structures, etc.). Typically damage would be limited to minor cracking. The building structural system is largely in its pre-earthquake condition.

Non-structural systems have negligible damage and are functional. Typically, the facility can be occupied with a normal level of functioning without repairs.

### Background

In October 2017, the Board approved staff to continue several efforts to enhance the seismic resilience of the WEROC South EOC and the MWDOC Administration Building. At the time a seismic assessment had been completed for each building with recommendations for both non-structural and structural building improvements to reduce vulnerabilities. The non-structural improvements are straight forward and can provide immediate enhancements to Life Safety for both facilities. The seismic assessment of the MWDOC Administration Building also reported that there are structural deficiencies that could be addressed to improve Life Safety and operational capabilities following an earthquake (Damage Control), but that additional analysis was needed to determine the level of vulnerability reduction that could be achieved with various investments.

In October 2017, the Board approved staff to contract with IDS Group for the following:

1. Prepare plans for support and bracing of elements (non-structural) of the South EOC and provide engineering support services for plan check approval and construction observation.
2. Prepare plans for non-structural retrofit elements of the MWDOC Administrative Building and provide engineering support services for plan check approval and construction observation.
3. Additional engineering analysis and evaluation of up to three seismic performance levels for potential structural retrofit of the MWDOC Administration Building (what is included in this action item).

In coordination with IDS for the design plan elements (items 1 & 2 above), staff are already in the process of proceeding with the non-structural improvements at the WEROC South EOC and the MWDOC Administration Building. Those design improvements have been submitted to the Cities of Mission Viejo and Fountain Valley respectively for building permits. Once the permitting process is complete, staff will move forward with one Notice Inviting Bids to complete the non-structural improvements for both sites and come back to the Board for consideration of awarding a construction contract for those projects in June 2018. The estimated costs for the non-structural improvements to the South EOC are \$50,000 and the estimated costs for the non-structural improvements to the MWDOC Administration building are \$100,000.



### Seismic Retrofit Study of the MWDOC Administration Building

The purpose of the Seismic Assessment of the MWDOC Building (dated 9/11/2017) was to evaluate how the MWDOC Administration Building would perform in an earthquake with the primary concerns being the Life Safety protection of building occupants and to determine the likely ability of the facility to continue serving as an EOC following anticipated shaking. The initial study outlined non-structural improvements that could be made to improve Life Safety and structural enhancements to allow the possibility of re-occupying the building quickly following an earthquake.

The report suggested that the retrofits needed to meet full Essential Facility (Operational) requirements (where the building can be occupied and functional following most any hazard) would be extremely costly and difficult to achieve (structural investment that could exceed the replacement cost of the building), but that some level of improved building resilience/performance could be achieved. Having two facilities ready to activate as an EOC (the WEROC South EOC and the MWDOC Admin Building), is a seismic risk management strategy which mitigates the concerns of either facility meeting the essential facility standards.

As the technical understanding of earthquakes has improved since these buildings were constructed (the MWDOC Building was constructed circa 1972 and the South EOC was built in 1977), the corresponding building codes have been changed to reflect this understanding. The current building code indicates additional structural improvements are necessary to meet a Life Safety building performance level for predicted earthquakes, and additional structural improvements are necessary to achieve a Damage Control level of performance to more quickly re-occupy the building following an event. To determine what levels of improvement are achievable and affordable, staff contracted with IDS to complete a second analysis titled 'Report on the Conceptual Seismic Retrofit Study of the MWDOC Administration Building', Attachment A.

This seismic retrofit study evaluated seismic hazards likely to impact the MWDOC Administration Building and the potential design strategies to manage the risks of each hazard. The seismic hazards were evaluated based on earthquake scenarios identified in the City of Fountain Valley General Plan and additional earthquake faults that are known considerations for this area. The study then considered seismic events from the perspective of likelihood of occurrence and size of event. For instance, an extreme earthquake event is less likely than smaller earthquakes that occur on a more regular basis. IDS provided a matrix chart that evaluates the seismic hazard levels against the desired building performance level with recommended strategies and estimates costs associated with each hazard.







### Seismic Recommendations by Staff

Staff recommends that the minimum improvements the District should make at the MWDOC Administration Building is to ensure that the building would perform at or better than (to the left of) Life Safety performance level in the spectrum based on today's building codes and greatest predicted earthquake risk. Staff further recommends that the Board consider bringing the MWDOC Administration Building up to a Damage Control performance level for the purpose of improving the building performance to improve the probability to conduct business and EOC operations from this facility following a San Andreas type event (the building will not be able to be occupied and functional under all future events, as this would be cost-prohibitive).

Listed below are conceptual cost estimates (a – f) for the six potential items of work. Staff has ruled out investment e. (improve soils foundation to deal with liquefaction) as being cost prohibitive. Staff believes either a \$300,000 or a \$500,000 investment (this includes the estimated \$100,000 estimated costs for the non-structural cost improvements) are the two options on which to concentrate. The lower cost option essentially provides Life Safety, but the additional \$200,000 boosts the resiliency of the building to the Damage Control level for a San Andreas event. Staff recommends proceeding with the \$500,000 investment.

<b>IDS Magnitude Cost Estimates for MWDOC Administration Building Seismic Work</b>		
	<b>Work Items</b>	<b>Rough Order of Magnitude Cost</b>
At minimum: Complete work items to achieve Life Safety (3-C) Building Performance Level for Newport- Inglewood (extreme) event.	a. Reinforce Corners of Roof Structure at Atrium	\$40,000
	b. Strengthen Existing Wall to Roof Connections	\$60,000
	c. Add Plywood (Diaphragm) to strengthen roof structure	\$100,000
	f. Brace/Improve Non-Structural Items (currently in progress) *	\$100,000
	<b>Life Safety (3-C) Total</b>	<b>\$300,000</b>
Recommend: Complete work items to achieve Damage Control (2-B) Level for San Andreas (reduced) event	d. Add additional Wall to Roof Connections	\$200,000
	<b>Damage Control (2-B) Total</b>	<b>\$500,000</b>

\*This does not include the cost of the non-structural work at the South EOC; Item e. improve soils foundation was deemed cost-prohibitive and is not recommended.

Given the size and number of windows around the perimeter of the atrium (46), a large part of the cost of the non-structural improvements is to install fragment retention Safety Film on all interior and exterior windows to greatly enhance the protective capability of glass in a very unobtrusive manner. These thin, clear, pliable films can be applied quickly over the existing interior surface of the glass window. The film may not prevent the glass from



breaking, but it holds the glass fragments together and reduces the destructive capability of flying glass fragments. Since buildings with large, expansive windows pose considerable risks to occupants, Safety Film helps to reduce the possibility of injuries due to flying glass in the event of an earthquake. The safety film has a 10-year expected life, at which time the film will need to be replaced.

### Next Steps

Following the recommendation from the Board for structural improvements, staff will move forward with the necessary steps to implement the identified building improvements. As noted earlier, staff are already in the process of proceeding with the non-structural improvements at the WEROC South EOC and the MWDOC Administration Building (Work Item F). Plans for those design improvements have been submitted to the Cities of Mission Viejo and Fountain Valley for permit review. Once the permitting process is complete, staff will move forward with one Notice Inviting Bids for both sites and come back to the Board for consideration of an award of a construction contract for those projects in June.

For the structural improvements at the MWDOC Administration Building, staff plans to prepare a Request for Proposals for the Design, Bid Package, and provision of Construction Management and inspection services for the structural improvements at MWDOC Administration Building. It is staff's intention to bring this contract to the Board at such time as the overall plans for the building (remodel) are ready for the Board review. We believe the overall project timeline would be as follows:

<b>Schedule for Completing Structural, Non Structural and Remodel Improvements at the MWDOC Administration Building</b>	
<b>Steps:</b>	<b>Timeline:</b>
Secure RFP for Design, Bid Package & Construction Management	May-June 2018
Review Remodel proposal with the Board	June 2018
Board Award of Contract for Design, Bid Package & Construction Manager	August 2018
Plans, specifications & Building Permits	Aug-Nov 2018
Advertise for Bids	Dec 2018
Board Consideration for Award of Construction Contract	Jan 2019
Construction	Jan 2019 – May 2019

### IDS Group Contracts

IDS was originally selected through a competitive basis to complete the initial South EOC structural review and the structural review of the MWDOC offices was added as a change order. Below is a chart of the work IDS has completed to date, as well as work that is in process at both facilities:



<b>Listing of Work Under Progress with IDS</b>		
<b>Status</b>	<b>Work Description</b>	<b>Costs</b>
Completed	South EOC Seismic Study	\$3,700
In Progress	WEROC South EOC Seismic Plans and Contractor Oversight – Non-Structural	\$11,100
<b>WEROC SUBTOTAL</b>		<b>\$14,800</b>
Completed	MWDOC Seismic Study	\$7,800
In Progress	Admin Plan Seismic Plans and Contractor Oversight – Non-Structural	\$8,700
Completed	Admin Building Additional Engineering Analysis	\$6,600
<b>MWDOC SEISMIC SUBTOTAL</b>		<b>\$23,100</b>
<b>TOTAL IDS GROUP SEISMIC CONTRACTS</b>		<b>\$37,900</b>
<b>MWDOC Office Remodel and space Study</b>		<b>\$29,236</b>
<b>Total Work with IDS</b>		<b>\$67,136</b>

**Attachments include:**

- 1. IDS Report on the Conceptual Seismic Retrofit Study of the MWDOC Administration Building', Attachment A**
- 2. Staff PowerPoint Presentation**



September 11, 2017

Ms. Kelly Hubbard  
Emergency Services Manager  
WATER EMERGENCY RESPONSE ORGANIZATION OF ORANGE COUNTY  
18700 Ward Street  
Fountain Valley, CA 92708

**Subject: Seismic Assessment of the MWD OC Administrative Building**  
**18700 Ward Street, Fountain Valley, CA 92708**  
IDS Job Number: 17S020.01

Dear Ms. Hubbard:

Per your request, IDS Group, Inc. (IDS) has performed a seismic assessment of the Municipal Water District (MWD OC) Administrative Building located at 18700 Ward Street in Fountain Valley, California for the Water Emergency Response Organization of Orange County (WEROC). This letter presents our opinions, observations, conclusions and recommendations based upon our assessment.

### **Background**

WEROC has been preparing a thorough assessment of their Emergency Operations Center (EOC) facilities and this requested seismic assessment is part of that program.

We understand that the Administration Building was built circa 1972 as a one-story masonry building with a wood-framed roof structure on shallow concrete foundations. A previous seismic study was completed in 1995 by Dames and Moore. Recommendations from that study were implemented in 1999, to bring the building's structural system up to the 1997 Uniform Building Code for non-essential facility performance. The building's fire suppression systems were upgraded in 2015 to meet current building codes.

We understand that this building serves as MWD OC's primary administrative building and is also designated as their backup Emergency Operations Center (EOC). The EOC's principal function is to provide an office space to host emergency water resources personnel during critical events. This space is intended to be used as a communications and resource coordination hub. For this study, the building is considered as a Risk Category IV (essential services) facility.

### **Purpose**

The purpose of this project is to provide a seismic assessment of the WEROC MWD OC Administration Building for consideration as an EOC, and make recommendations, as needed. We understand that their primary concerns are the:

- 1) Life-safety protection of employees or volunteers working at the facility.
- 2) Ability of the facility to continue serving as an EOC following anticipated shaking.



## Scope

Our scope of services involved the following:

1. Visit the site to verify building framing conformance with available record drawings, and document the condition of the building including identifying areas of obvious damage, corrosion, cracking or settlement.
2. Perform a seismic assessment of the building using the available building information and field information in accordance with the seismic requirements of the 2016 California Building Code and ASCE 7-10, providing the necessary calculations as needed for the various parts of the structure.
3. Prepare this building assessment letter report recommending seismic modifications/ retrofits, as required per the 2016 California Building Code and prepare simple structural drawings as needed for the recommended seismic retrofit (if any). Recommendations related to life safety performance are to be identified separate from recommendations related to essential facility performance.

## Building Description

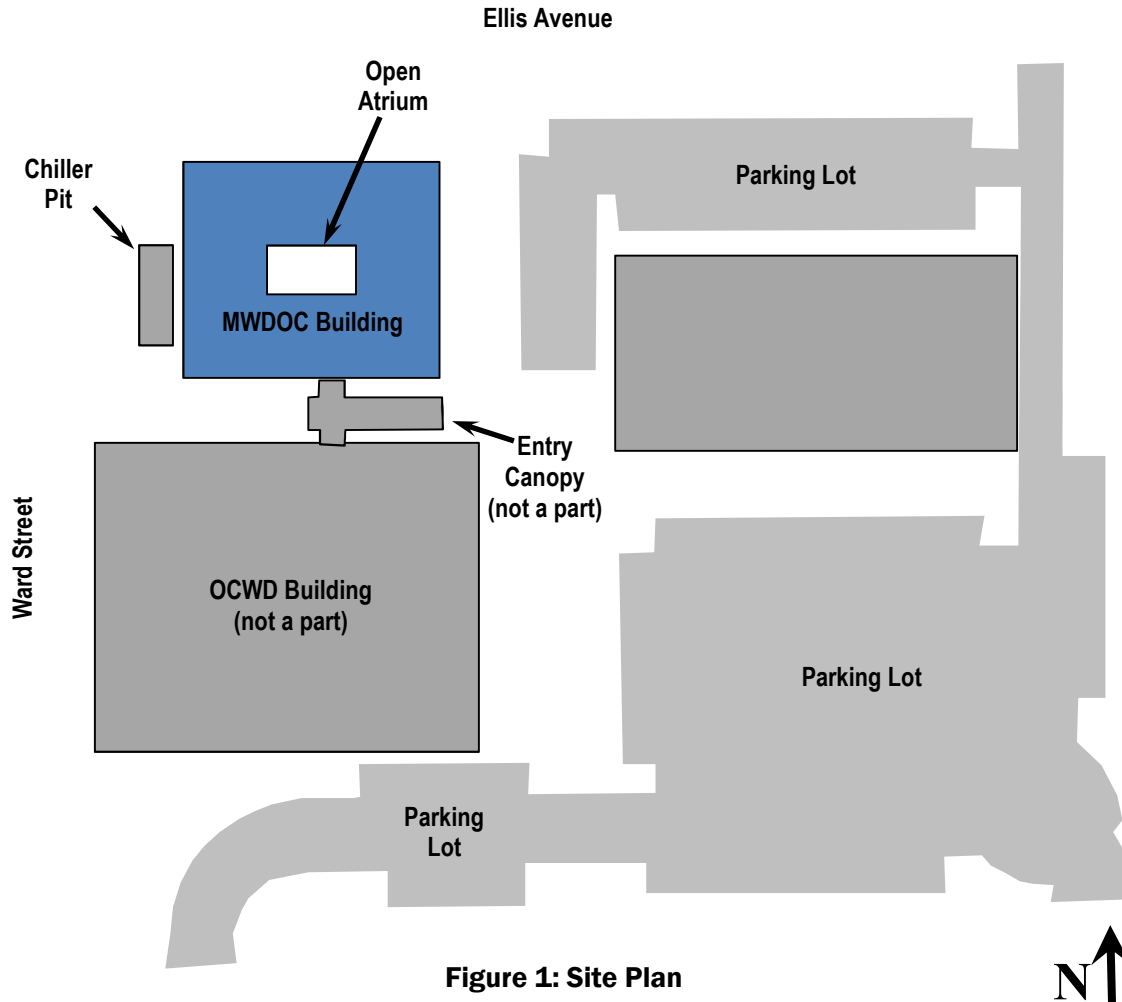
Structural drawings for the MWDOC Administration Building were not available in the documents provided. The description provided below was primarily obtained from the available architectural drawings for the Administration Building remodel and construction of the OCWD building [Ref. 1], site observations and the Dames & Moore report [Ref. 3].

The building is a one-story masonry building with a wood framed roof that was constructed circa 1972 [Photos 1 to 6]. It is rectangular in plan having overall dimensions of 144'-8" by 120'-11" and has a rectangular shaped open courtyard at its center that measures approximately 35 feet by 55 feet in plan [Photos 7 & 8]. The building has an overall height of approximately 19 feet at the top of its mansard roof while the perimeter masonry walls are approximately 11 feet tall where they meet the roof framing [Photo 4].

The building is partitioned into offices, conference rooms, kitchen, storage and mechanical equipment areas; a separate lobby structure extends from the south side of the building [Figure 1]. A concrete masonry vault structure exists in the northwest corner of the building [Figure 2].

The building is founded on a level pad elevated several feet above the surrounding grade with the utilities such as gas located below grade to the west. There is an OCWD Administrative building connected via the lobby structure that extends to the south of the MWDOC building. Other buildings and asphalt paved parking areas are located nearby as shown in Figure 1 below.



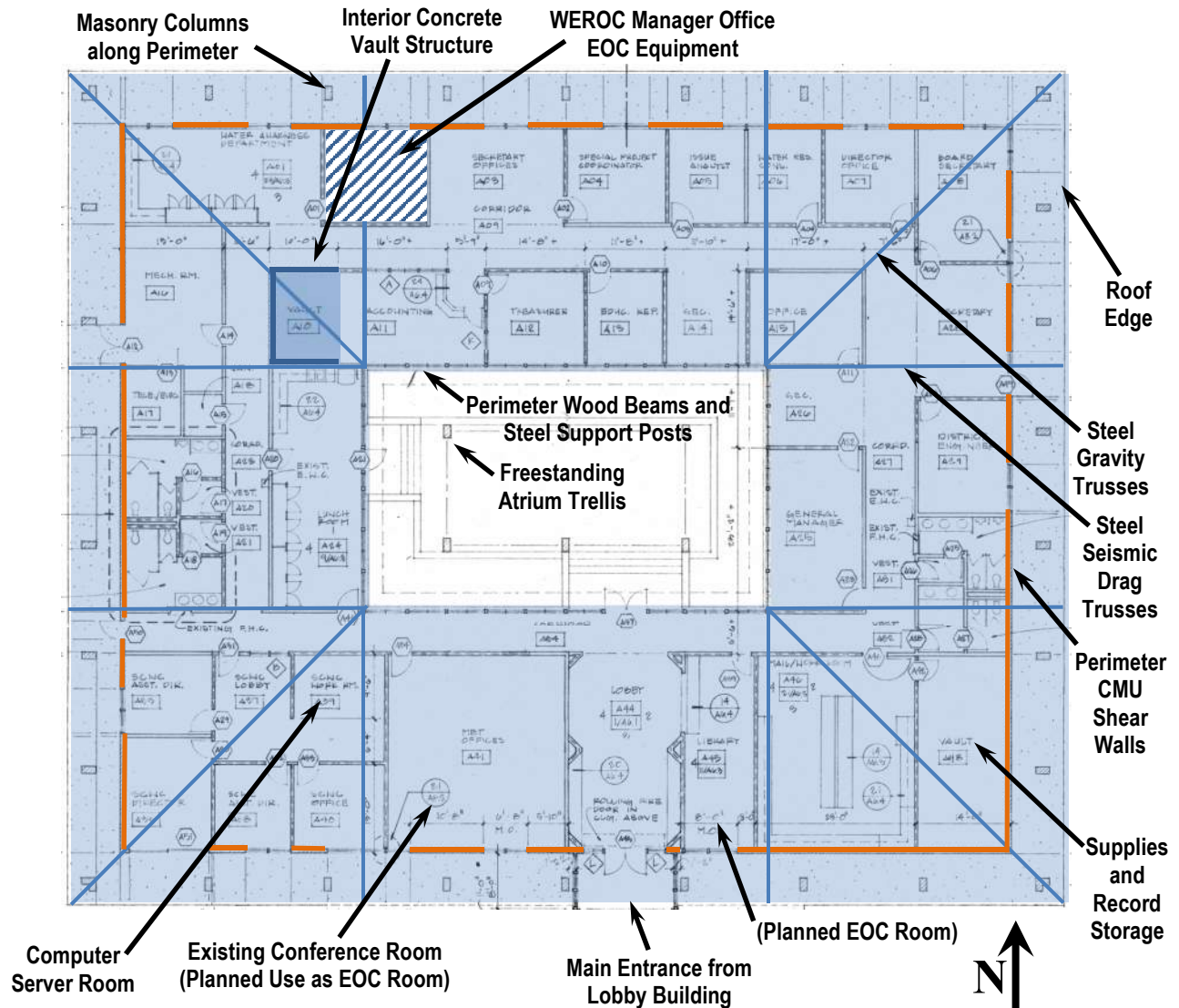


**Figure 1: Site Plan**

The vertical load resisting system of the building relies on plywood roof sheathing typically supported by sawn 2x wood rafters spaced at 24 inches on center and steel trusses oriented diagonally across the building corners. The roof framing typically bears on the perimeter masonry walls and a series of 6x wood beams supported by steel tube columns along the perimeter of the atrium. The walls and the interior columns are supported on continuous and spread concrete footings.

The building's lateral force resisting system [shown in Figure 2] relies on the plywood roof diaphragm that transfers the seismic forces out to the perimeter concrete masonry walls. These walls transfer their forces to continuous concrete footings and into the site soils.





**Figure 2: Building Plan Showing Lateral Force Resisting System**

We understand that a seismic retrofit was performed in 1999 to bring the facility up to the 1997 Uniform Building Code. Drawings from that retrofit were not available for review, however some elements of a retrofit were observed during our site survey. Those elements primarily included out-of-plane wall anchors spaced at approximately 8 feet on center along the perimeter masonry wall. These anchors appeared to consist of vertical steel angles bolted to the perimeter walls and existing wood framing. Where the roof framing was parallel to the perimeter wall, anchors included a horizontal steel strap extending approximately 4 feet into the wood diaphragm and fastened with screws into 2x blocking.



## Summary of Site Observations

David Pomerleau, structural engineer and Maja Milosevic design engineer with IDS visited the site on August 9, 2017 to observe readily accessible areas of the building. No testing or destructive investigation was conducted during this visit. In general, the building's construction appears to be consistent with the available plans. While the primary lateral force resisting system relies primarily on the perimeter masonry shear walls which are generally visible, the other elements of the system and connections between the elements were not generally visible due to the finishes or other obstructions. Overall, the building appears to be in good condition. The following items were noted during our site visit:

- Seismic Retrofit Connections – Out-of-plane connections of the perimeter masonry walls to the roof diaphragm are typically spaced at approximately 8 feet on center. Two primary versions of this connection were observed. One connection had the angles and strap connections on the inside face of the wall with blocking between the roof framing members [Photo 9]. These connections were typically observed at the building corners. Some locations revealed apparent installation deficiencies [Photo 10]. Another connection appeared to have most of the seismic connection on the exterior face of the wall. This connection was not visible, but its presence was inferred from the pattern of bolts observed protruding through the perimeter masonry wall at a spacing similar to the other seismic connections [Photo 11]. Seismic retrofit connections are also apparent at the corners of the atrium area. In these locations, bolted plates with welded connections to the steel drag trusses were observed [Photo 12].
- Interior Partition Bracing – Interior partitions have incomplete, steep, widely spaced or insufficiently attached bracing to roof framing members [Photos 13 to 16]. Some of these braces were fastened at framing locations without blocking or stability bracing. [Photo 15].
- Computer Equipment Not Anchored – Computer equipment, including the main servers for the building, that are presumed critical to the emergency operations generally have no seismic restraint or seismic straps and anchors were not engaged [Photos 17 to 20].
- Contents Not Anchored – Tall and narrow book cases located in offices as well as the building corridors are not anchored [Photos 21 and 24]. Several maps in the front conference room have support clips without sufficient seismic restraint.
- Piping Not Sufficiently Anchored – Piping is insufficiently supported and braced, especially in the ceiling above the computer server room where line breakage could flood the computer equipment [Photos 25 and 26]. Photo 26 shows some small diameter lines that have the potential to impact the structural framing due to the swaying or movement of the mechanical unit above the ceiling of the computer room. This type of impact could cause a leak. Fire sprinkler lines exist both protruding through the suspended ceiling of the computer room and



in the attic space above the computer room. If the system were to discharge or open, the computer system would be flooded.

- Mechanical Equipment Not Sufficiently Anchored – Mechanical equipment located within the building's mechanical room does not have sufficient seismic restraint [Photo 27]. Additionally, mechanical units suspended within the ceiling space have no lateral bracing [Photo 28].
- Suspended Ceilings – The ceilings generally have suspension and bracing including compression posts at brace locations [Photo 29]. However, improper bracing conditions were still observed [Photos 30 to 32]. Ceiling grids are generally not anchored along their perimeter. Additionally, the perimeter ceiling support angles are generally too narrow and irregularly anchored to properly support the ceiling grid. The grid near the concrete vault in the northwest corner have perimeter support angles insufficiently fastened to the concrete vault.
- Light Fixture Supplemental Support Wires Generally Present – The light fixtures in the ceiling system generally have supplemental support wires on all four corners of each fixture [Photos 29, 31 and 32]. Limited locations have improperly installed wires [Photos 33 and 34].
- Concrete Vault – The concrete vault located in the northwest corner of the building has been modified from the configuration shown on the available record drawings. It appears that a wall has been removed from this vault leaving only three walls as shown in Figure 2 above. Additionally, horizontal steel tube reinforcement elements appear to have been added to the top of the vault [Photos 35]. The ceiling system surrounding this vault is rigidly connected to the vault with some of the fasteners improperly or incompletely installed [Photo 36].
- Loose Tiles – Roof tiles were observed to be loose and could become detached and pose a falling hazard.

### **Summary of Structural Review**

IDS reviewed the available record drawings in reference to the building's seismic force resisting system and performed preliminary calculations based on the seismic force requirements of the 2016 CBC.

IDS also used the Tier 1 Checklists from the ASCE Standard 41-13 [Ref. 7] to provide a basic screening for seismic deficiencies. ASCE 41 is a national standard widely used for the seismic evaluation of structures. Its Tier 1 procedure is a screening type of methodology intended to quickly identify potential seismic deficiencies of various structural systems and non-structural elements.

The following issues were identified through our review:



- Liquefaction – We reviewed the Seismic Hazard Zones map for this area [Ref. 7], and determined that the site is located within a regional area identified as a liquefaction zone. The USGS defines this as an area “where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions indicate a potential for permanent ground displacements such that mitigation” would be required. Since the building is understood to be supported by shallow foundations, we would anticipate structural damage even though the building is relatively light. This damage could also include breaking of glass around the interior atrium area as the building displaces. Along the front/south side of building, the atrium glazing occurs along the main building corridor which could create issues for immediate occupancy and use. Additionally, soil instabilities may also result from the spreading of the raised pad that the building rests on. These instabilities would add to building displacements which could affect glazing and the operation of doors. More broadly, depending on the amount of liquefaction that occurs, the site’s utilities, its overall function, the city and the surrounding area are expected to have increased damage and loss of functionality due to liquefaction.
- Insufficient Wall Anchorage – Wall anchorage connections having straps to wood blocking are insufficient to resist the anticipated lateral forces required by the current Code based on the observed connections at each corner of the building. Other connections along the sides of the building away from the corner were not visible and their capacity is unknown.
- Adjacent Structures – There is insufficient gap between the Administration Building and the Lobby Building to the South. However, damage resulting from impact of these two buildings is not anticipated to be significant since the structural and non-structural systems at the interface essentially mirror each other.
- Fire Suppression Piping – Fire suppression piping appears to be generally compliant regarding seismic restraint detailing, but locations were observed throughout the structure where vertical restraints at support locations are not compliant and impact with adjacent items which could damage the sprinkler lines could occur.
- Contents and Furnishings – Contents and furnishings are generally unanchored and unbraced.
- Lights, Ceilings and Partitions – Support and bracing of lights, ceilings and partitions was found to be deficient.

## Conclusions and Recommendations

In general, the building was found to be in relatively good condition for its age and structural system and seismic restraint and bracing systems were generally found to be present. We note that the building was originally designed, constructed and even retrofitted as a non-essential facility.



However, the Immediate Occupancy performance level desired for Emergency Operations use is a high level of performance that is often difficult to consistently and completely achieve. Based on our site visit and observations of the building, as well as preliminary calculations, the MWDOC Administration building is insufficient to provide immediate occupancy performance following a major earthquake.

While some occupant injuries might occur during the earthquake, the overall risk of life-threatening injury because of structural damage is expected to be low. While the Administration building has numerous beneficial features that will contribute to better performance such as a masonry shear wall lateral system, modern single-story construction, and previous seismic retrofit; it also has many features that detract from its ability to serve as an essential facility.

The current Building Code does not require upgrade of the existing seismic force resisting system unless alterations are considered such as change of occupancy, increase of building mass or size, and modifications of the existing lateral force resisting system. However, in its current configuration, we do not believe that the Administration building will meet the structural and non-structural performance objectives desired by WEROC.

We do not believe that there are any substantial issues that would prevent the building from performing at the Life-Safety performance level similar to other office occupancy buildings of this type and vintage.

For this building to serve as an essential facility serving critical functions following a major earthquake, the following items, at a minimum, would be necessary:

1. Upgrade of the Seismic Force Resisting System – The previous seismic retrofit was not performed to the force levels and detailing requirements of the current codes for essential services performance. Additionally, that retrofit focused on building structural issues and did not include review of non-structural performance or contents. More specific information would be required of the existing seismic retrofit and a complete assessment of as-built conditions would be required to provide more specific recommendations. Several key deficiencies of the building include adequacy of the out of plane wall anchors. Consideration of liquefaction effects is also necessary to achieve the desired performance. However, regarding liquefaction, the consideration of the performance of the overall facility and utilities is also recommended.
2. Glazing – Performance of the building glazing, especially along the front hallway at the building entrance and outside the conference room intended to serve EOC functions, should be considered. Damage to this glazing may present safety hazards in these areas.
3. Ceiling and Light Support and Bracing Improvements – Ceiling edge angles and restraints do not comply with current code. Bracing and light supports should be reviewed and improved



throughout the building to reduce the likelihood of ceiling damage and falling panels that could inhibit the operation of the building following a major earthquake.

4. Anchor Non-Structural Elements and Equipment – Anchorage and bracing of non-structural elements and equipment is necessary to prevent or reduce falling objects and potential damage to equipment necessary for emergency operations. Additionally, we recommend consideration of moving the computer server room to an area free from overhead piping and possibly providing a room with a dry fire suppression system that would not impair the server if it were to be implemented.
5. Secure Loose Roof Tiles – Securing of loose roof tiles is recommended to prevent or reduce the potential for falling objects.

## References

1. Grillas, Pirc, Rosier, Alves; “MWDOC/OCWD Office Complex, 10500 Ellis Avenue, Fountain Valley, California;” Sheets T1.1, T1.2, C1.1, C1.2, C3.1, C3.2, C4.1, C5.1, C5.2, A2.1 to A2.4, A3.1 to A3.8, A4.1 to A4.3, A5.1, A5.2, A6.1 to A6.5, A7.1, A7.2, A8.1 to A8.6, {OCWD structural drawings only} S1.1, S2.1, S3.1 to S3.3, S4.1, S4.2, S5.1 to S5.4, M1.1, M1.2, M2.1, M3.1 to M3.6, M4.1, M5.1, M6.1, P1.1, P2.1, P3.1 to P3.5, E1.1, E2.1 to E2.5, E3.1 E3.2, E4.1, E4.2, E5.1, E5.2, E6.1, E7.1, E8.1, L2.1 to L2.4, L3.1, F3.1, I3.1, I3.2; Not for Construction Set; Dated 6/9/89.
2. Thornton Tomasetti/Coil & Welsh; “Tenant Improvements for Orange County Water District Administration Building (MWDOC), 10500 Ellis Ave., Fountain Valley, CA 92708; Sheets S-0, to S-2, Dated 1/17/03.
3. Dames & Moore; 1996 EqRiskReductionStudy MWDOC Bldg.
4. PDC Interiors; “MWDOC Entry/Conference Room, MWDOC Reception Floor Plan;” Proposed Sheet A1.0, Dated 3/4/2016.
5. California Building Standards Commission; “2016 California Building Code, California Code of Regulations Title 24.”
6. American Society of Civil Engineers (ASCE); “Minimum Design Loads for Buildings and Other Structures (ASCE/SEI 7-10).”
7. American Society of Civil Engineers (ASCE); “Seismic Evaluation and Retrofit of Existing Buildings (ASCE/SEI 41-13).”
8. State of California Division of Mines and Geology; “State of California, Seismic Hazard Zones – Newport Quadrangle;” released April 15, 1998.



## Limitations

This letter report is intended for the sole use of Water Emergency Response Organization of Orange County in its evaluation of the subject property. It is not intended for use by other parties, and may not contain sufficient information for purposes of other parties or other uses. This letter report is based on our observations of readily accessible areas, review of available drawings, rough engineering calculations related to the building's lateral force resisting system and our engineering judgment and experience. Our assessment is limited to the building's primary structural systems in relation to seismic performance. Evaluation of site related seismic hazards such as liquefaction and slope stability is limited to a review of available regional hazard documentation. Evaluation of nonstructural items such as architectural elements, furnishings and interior equipment, and electrical, mechanical, and plumbing systems are not considered in this evaluation. Evaluation of site utilities serving the building is excluded. Evaluation of other hazards affecting essential services performance such as fire, flood and wind are excluded. Testing, destructive or otherwise, was not performed. Our limited investigation should not be considered a review of the design, nor an inspection of latent conditions that have not manifested damage to date. Other conditions affecting the structure that were not inspected, anticipated, or accessible including all public safety issues, are beyond the scope of this report. Our professional services have been performed with the degree of care and skill ordinarily exercised, under similar circumstances, by reputable consultants practicing in this field at this time.



Thank you for allowing us this opportunity to be of service on this project. If you have any questions regarding this letter report, please do not hesitate to contact us.

Sincerely,

**IDS Group, Inc.**

Handwritten signature of David Pomerleau in blue ink.

David Pomerleau, SE  
Project Manager

Handwritten signature of Said Hilmy in black ink.

Said Hilmy, Ph.D., SE, LEED AP  
Principal







**Photo 1: Building Overview from Southeast Corner**



**Photo 2: Building Overview from Southwest Corner**





**Photo 3: East Side of Building**



**Photo 4: North Side of Building**





**Photo 5: South Side of Building at Entry Lobby**



**Photo 6: North Side of Building**





**Photo 7: Free Standing Trellis in Atrium**



**Photo 8: Free Standing Trellis in Atrium**





**Photo 9: Typical Out of Plane Wall Anchorage Connection**

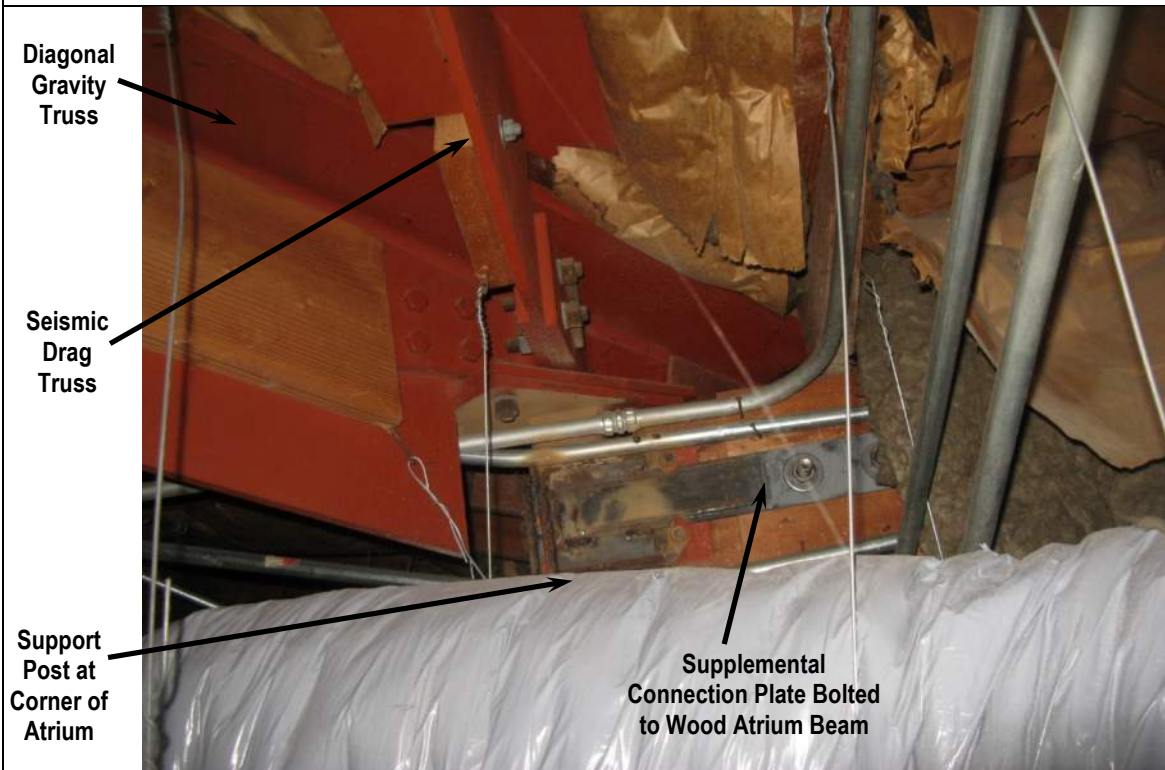


**Photo 10: Close-up Showing Gap at Seismic Blocking**



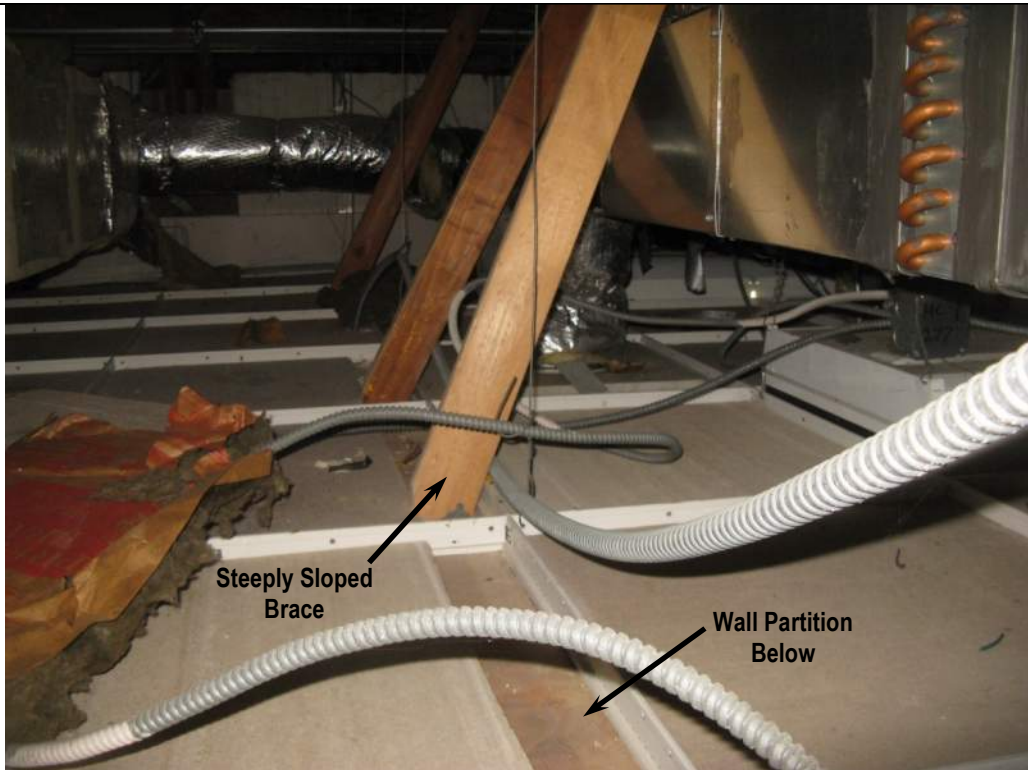


**Photo 11: Wall Anchorage Connection Presumed to Exist on Far Side of Wall**



**Photo 12: Roof Seismic Connection at Atrium Corner**





**Photo 13: Steeply Sloped Partition Bracing**



**Photo 14: Interior Partition Bracing Connection**



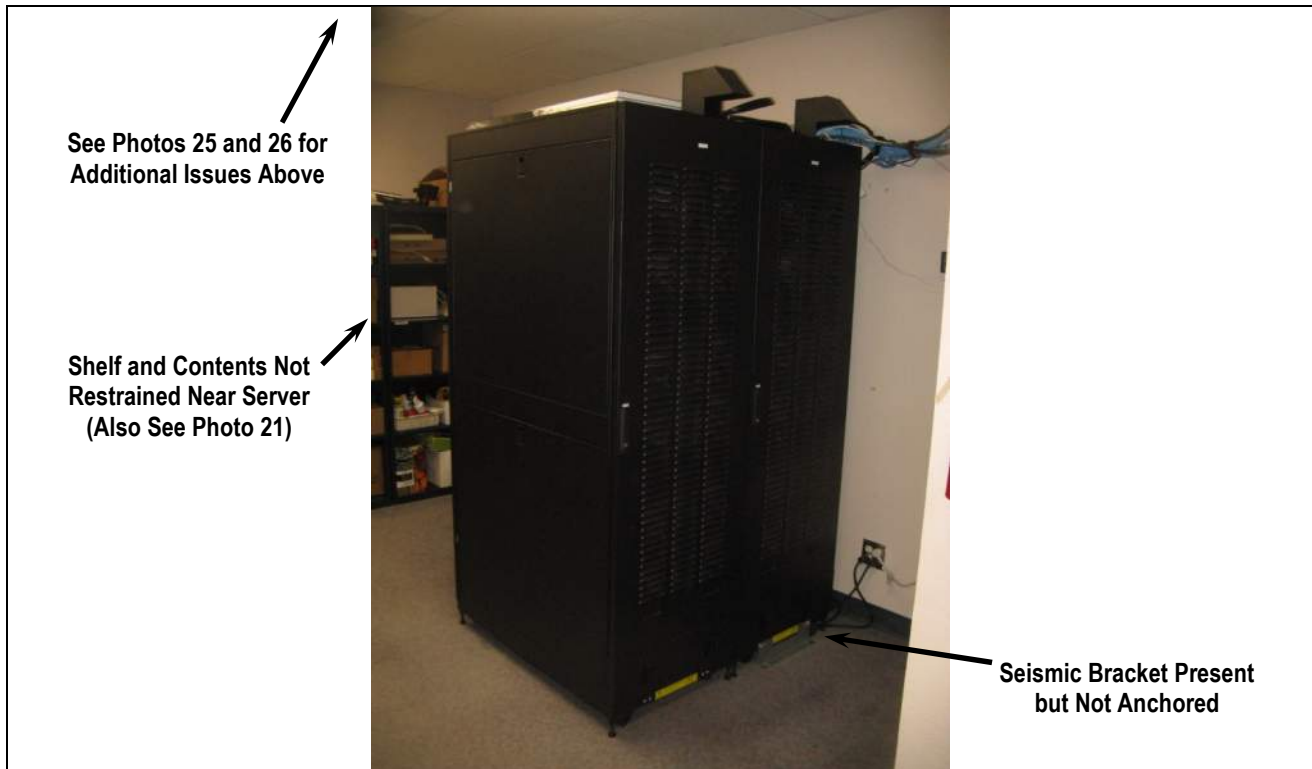


**Photo 15: Partition Brace to Unbraced Roof Framing**

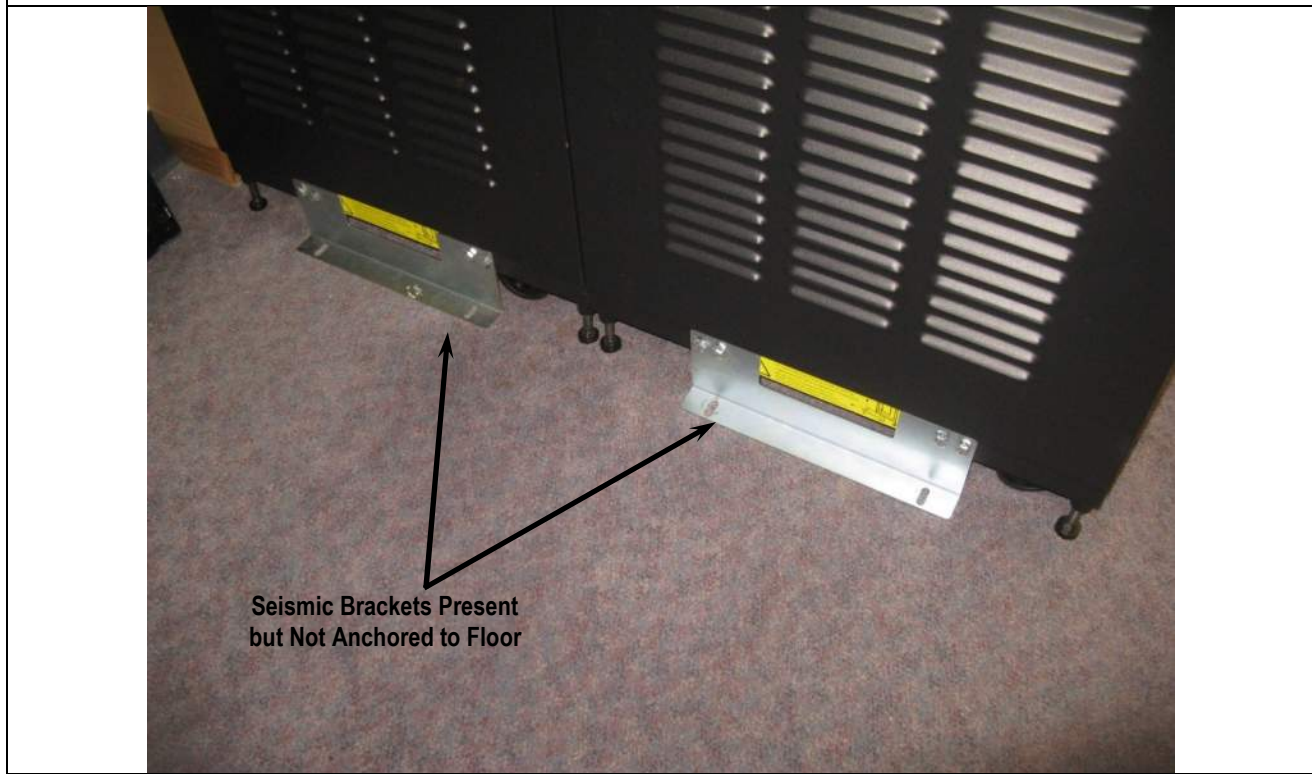


**Photo 16: Widely Spaced, Steeply Sloped and Inadequate Brace Connection**





**Photo 17: Computer Server Cabinet Not Anchored**



**Photo 18: Computer Server Cabinet Not Anchored**





**Photo 19: Typical Unanchored Office Computer Equipment**



**Photo 20: Unrestrained Communications Equipment**





**Photo 21: Unrestrained Contents in Computer Server Room**



**Photo 22: Unanchored Tall Narrow Contents in Hallway**





**Photo 23: Storage Room at Southeast Corner**



**Photo 24: Storage Room at Southeast Corner**



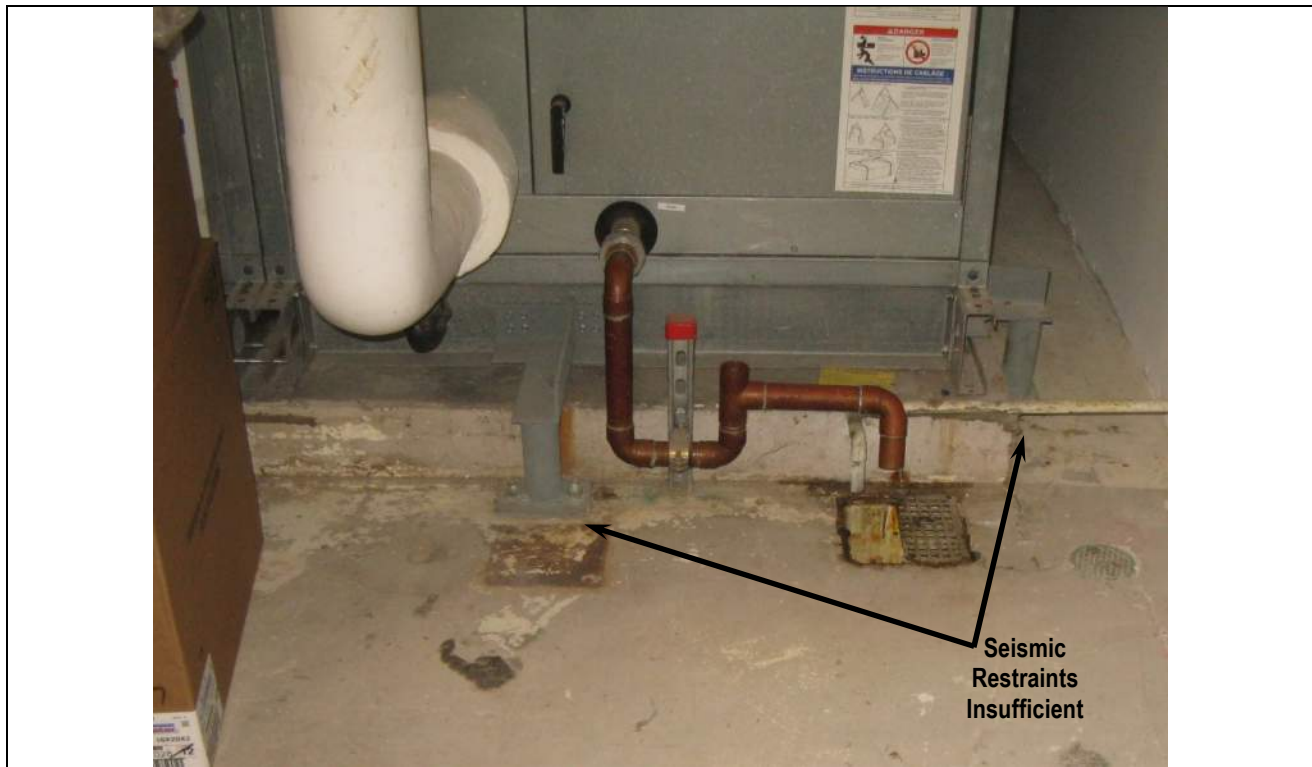


**Photo 25: Piping in Ceiling Above Computer Room**



**Photo 26: Water Piping in Ceiling Above Computer Room**





**Photo 27: Mechanical Unit in Mechanical Room**

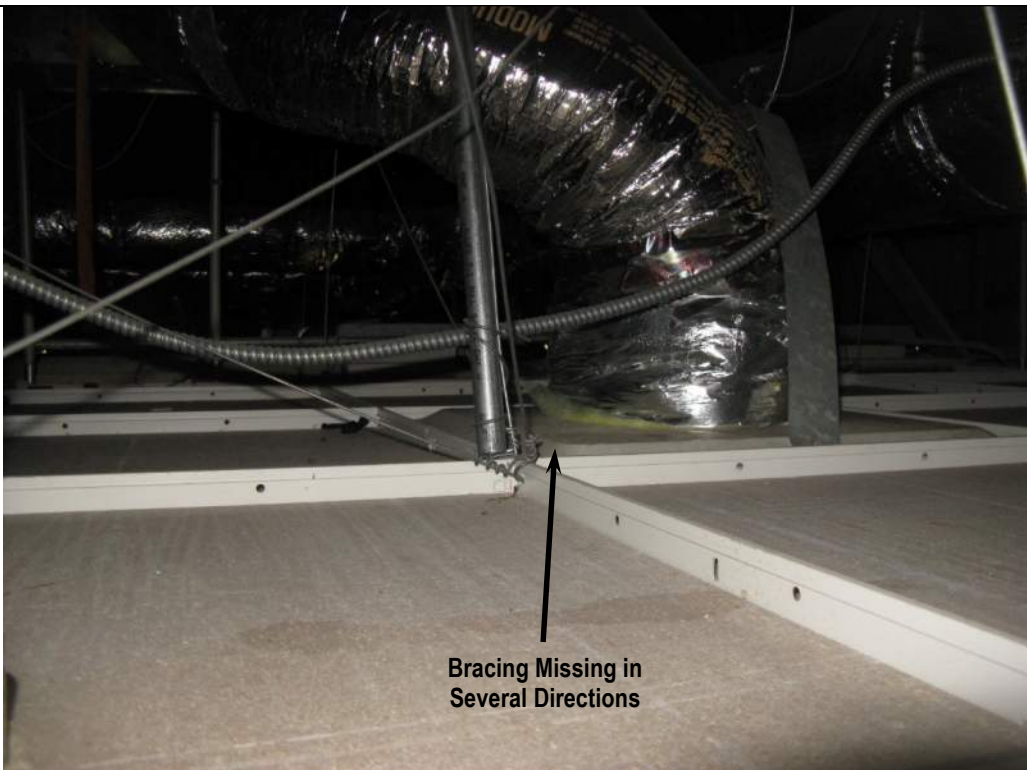


**Photo 28: Typical In-Line Mechanical Unit without Seismic Bracing**



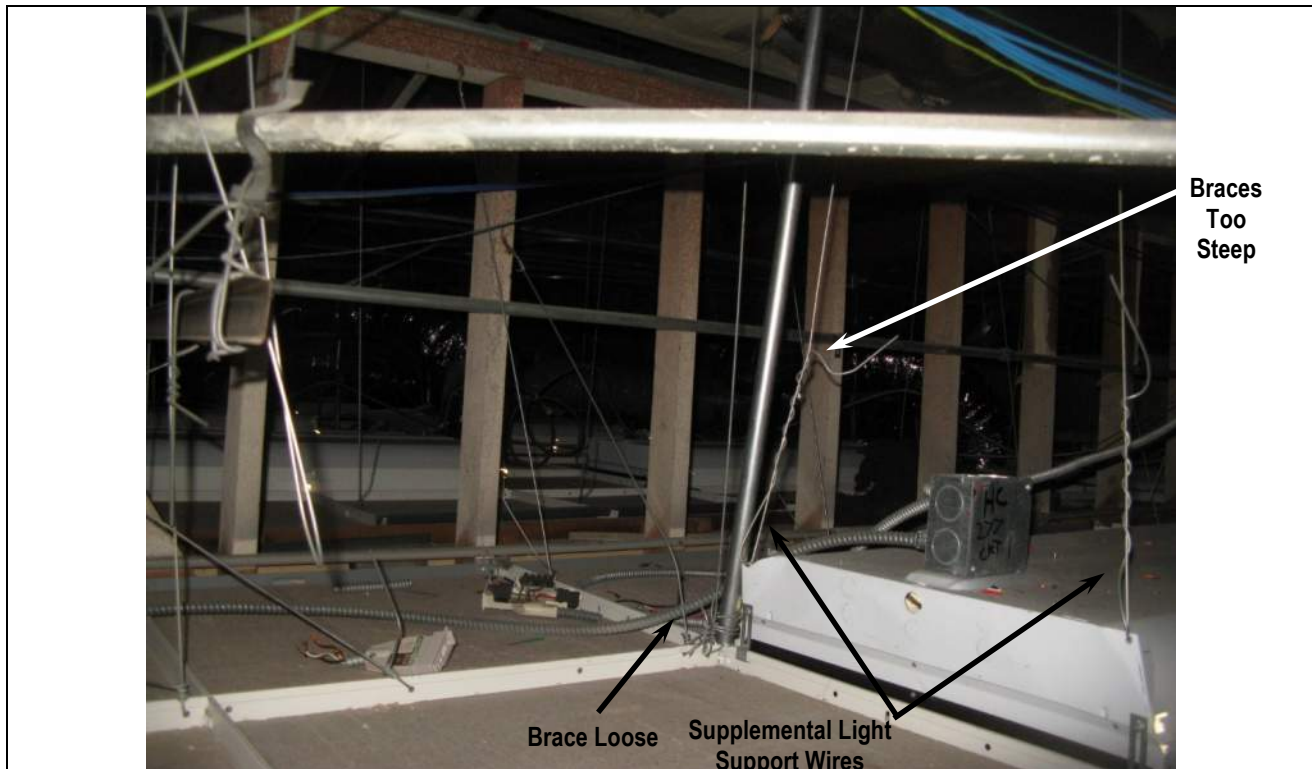


**Photo 29: Typical Ceiling Bracing with Compression Post**

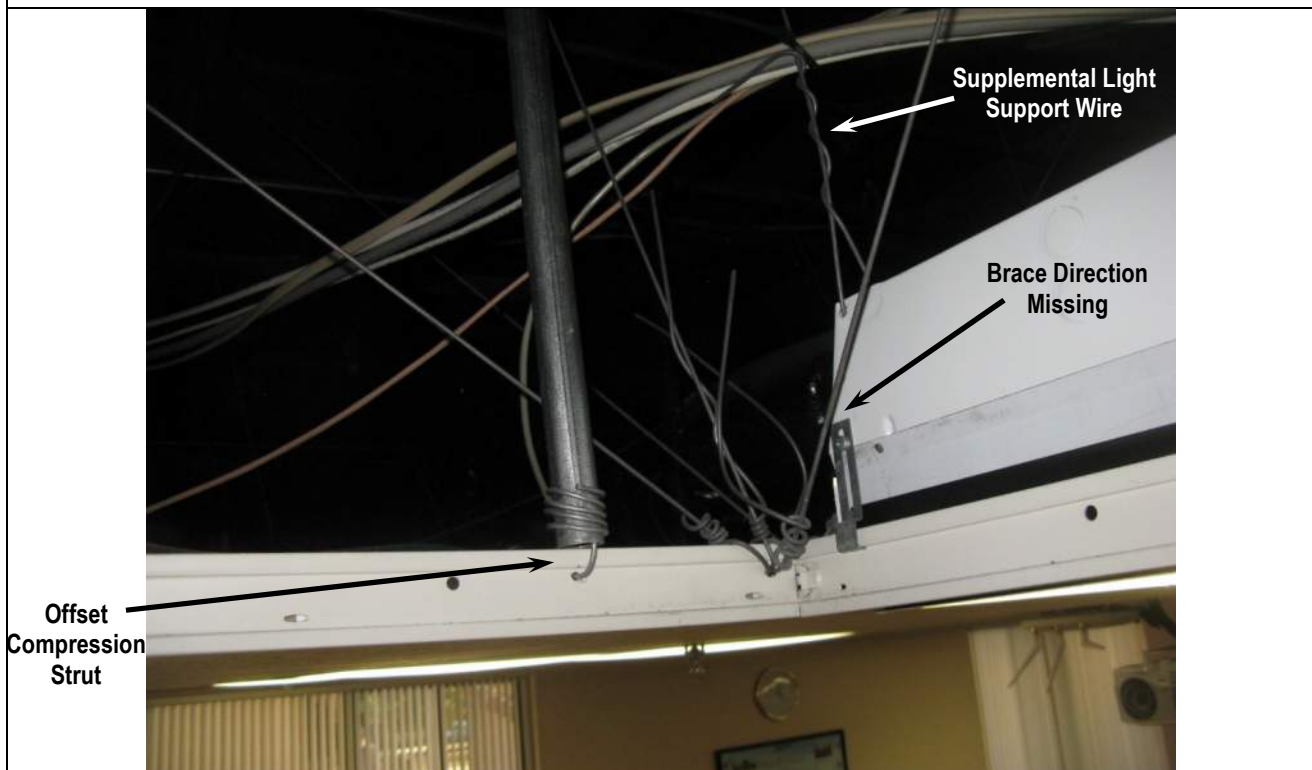


**Photo 30: View of Incomplete Lateral Bracing**



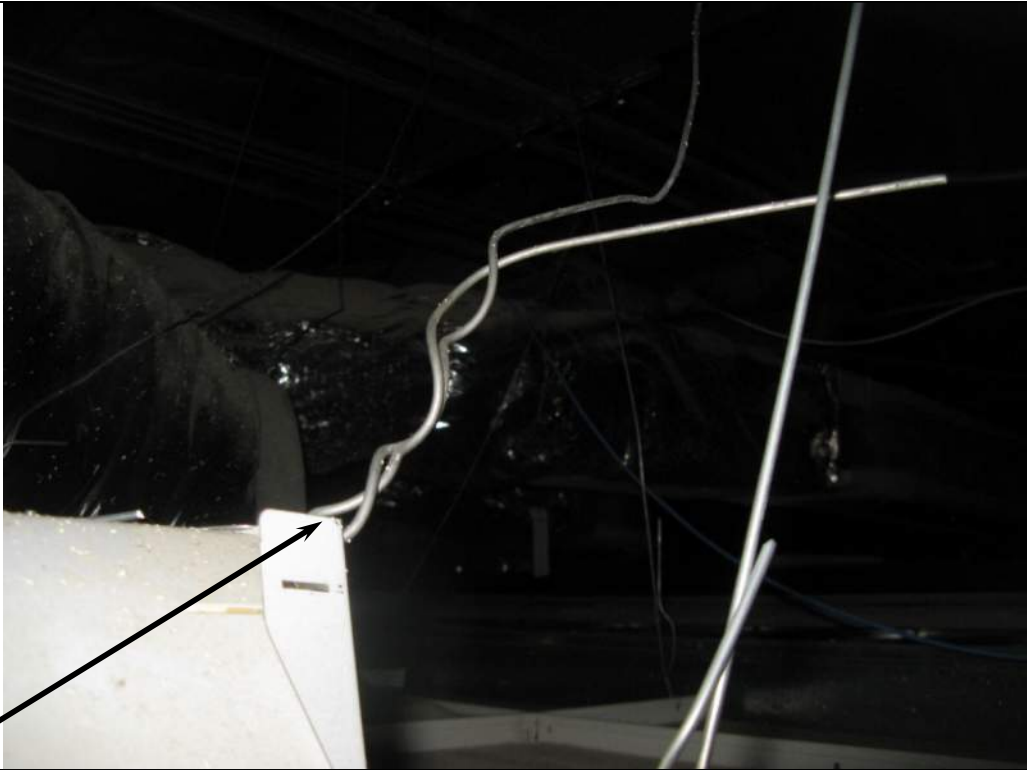


**Photo 31: Incomplete/ Improper Ceiling Bracing**



**Photo 32: Improper Ceiling Bracing Above Front/Main Conference Room**



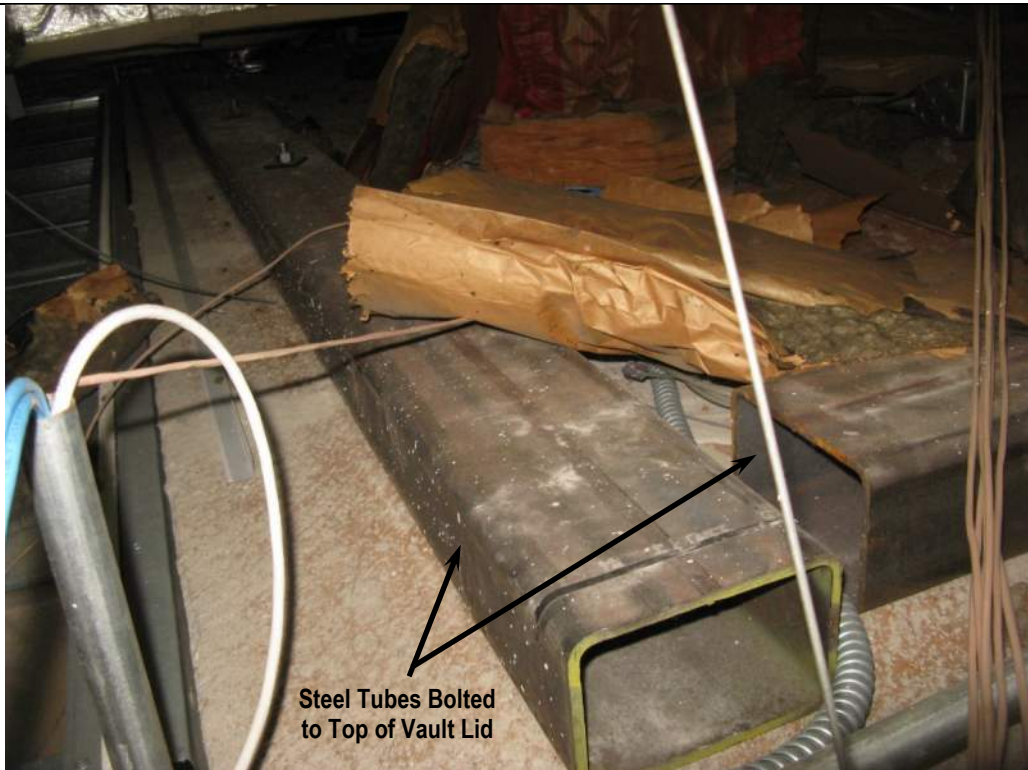


**Photo 33: Improper Light Support Wire**



**Photo 34: Improper Light Support Wire**





**Photo 35: Reinforcement of Vault Lid**



**Photo 36: Ceiling at Northwest Vault Lid**





## Potential Structural Improvements to Administrative Building (based on Seismic Assessment)

Municipal Water District of Orange County



# Background

- Focus of MWDOC Admin Building Seismic Assessment
  - Life Safety - protection of people in the facility
    - During and immediately after a seismic event
  - Ability of the facility to continue to function after a seismic event:
    - for business purposes, and
    - serve as a backup WEROC EOC if the South EOC was unavailable
- Expert Analysis
  - IDS Group - Structural Engineering Division
    - Structural Engineering Design Services
    - Assessment, Repair and Alterations of Existing Facilities
    - Earthquake Risk Mitigation and Retrofit





# Performance-Based Seismic Design

- 'Current Seismic codes are essentially aimed at the preservation of life and safety... not to limit damage'\*
- Current Seismic code design for non-essential facilities are intended to provide life safety:
  - No damage in a minor earthquake
  - Limited structural damage in moderate earthquake
  - Resist collapse in a major earthquake
- Building Performance Objectives (Levels) aim to achieve a reliable estimate of performance under different earthquake hazard scenarios



# Spectrum of Building Performance Levels






## (ASCE/SEI 43-13-Seismic Evaluation and Retrofit of Existing Buildings)

Life Safety & Continued Operations Focus				Life Safety Focus		
Operational (1-A)	Immediate Occupancy (1-B)	Damage Control (2-B)	Life Safety (3-C)	Reduced Safety (4-D)	Collapse Prevention (5-D)	
Very little damage, power available, equipment operable	Overall damage light. Building remains safe, with minor repairs and some cleanup. Non-structural components and utilities remain secure, but may not function.	Range between Immediate Occupancy and Life Safety. Control damage to allow return to function quicker.	Structural & Non-structural damage is significant. May not be safe for continued operations without repair.	Performance range midway between Life Safety and Collapse Prevention	Building standing but low resistance to additional shaking (after shocks), Extensive Non-Structural component damage, Unsafe for occupancy.	





# Definitions




-  **Life Safety** – Relates to protection of people in the building during a seismic event to prevent serious injury or death. Under this designation:
  -  Structural walls should not fail but the building may permanently lean to one side. The structural walls can withstand additional aftershocks, but the structural components will have weakened.
  -  It may not be possible to re-occupy the building until repairs are made to the structural system, and it may not be economical to repair the building following a seismic event.
  -  The ability to re-occupy the building following an earthquake is not part of the design considerations.
  -  Non-structural components are likely damaged and overturned (i.e. pipes likely break, glass likely broken under pressure resulting in projectile fragments, jammed doors, lights and suspended ceilings likely fall, furniture likely overturned). Interior (partition) walls are likely damaged and may fall down.





# Definitions (cont.)

## **Damage Control** - This is a spectrum halfway between Immediate Occupancy/Essential Facility and Life Safety:





-  The structural system is more robust than Life-Safety, increasing the probability the building can be re-occupied sooner. (i.e. The building is designed with consideration of the building being re-occupied.)
-  Non-structural items may shift around, (i.e. they may have some damage, but overhead items remain suspended, plumbing and electrical fixtures and lines work provided there is power and water from the local utility).
-  Schools are typically built to this standard.





# Definitions (cont.)

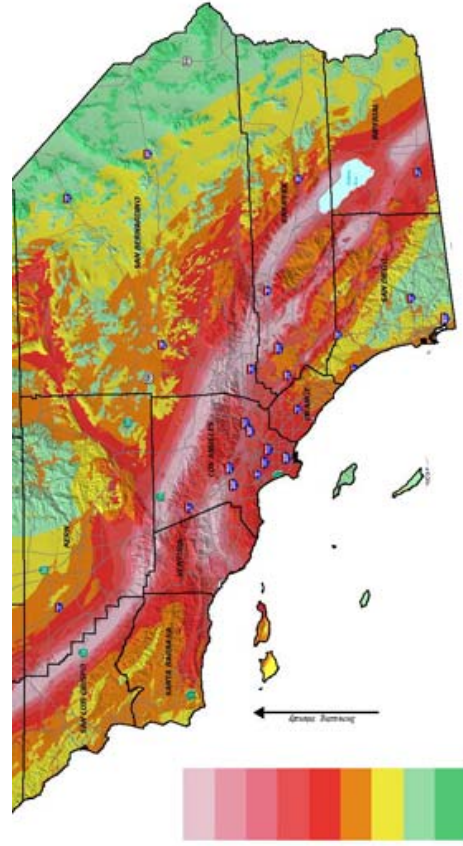
## Essential Facility - (also called Immediate Occupancy) –

-  This designation is typically provided for facilities that are critically needed following a large seismic event (Fire, police, utility structures, etc.).
-  Damage is limited. The building structural system is largely in its pre-earthquake condition.
-  Non-structural systems have negligible damage and are functional.
-  Typically, the facility can be occupied with a normal level of functioning without repairs





# Seismic Risk



Level of Earthquake Hazard

## Function of 3 Elements\*:

- 🔹 Likelihood of an Earthquake Occurring & its Intensity (Hazard)
- 🔹 Performance Characteristics of a Building (Vulnerability)
- 🔹 Resulting Losses - Injuries, Damage, and Interruption of Operations (Consequences)

\* FEMA 389 - Communicating with Owners and Managers of New Buildings on Earthquake Risk-2004



# Seismic Risk Management

## Strategies to limit Seismic Risk effects:

- 🔹 Design Strategies
  - 🔸 Reduce Hazards –
    - Relocate building or
    - Improve foundation soils
  - 🔸 Reduce Vulnerability –
    - Increase building's capacity to withstand an earthquake
- 🔹 Business Strategies
  - 🔸 Diversify Operations
    - Alternate EOCs that are geographically dispersed
- 🔹 Event Response Strategies
  - 🔸 Train Staff
  - 🔸 Prepare for Rapid Inspection, Repair, and Recovery
  - 🔸 Stockpile supplies for temporary operations





# Seismic Assessment Results

- 🔹 Complete the Non-structural recommendations to reduce potential injuries and improve immediate operational capabilities
  - 🔸 In progress
- 🔹 Report raised concerns about potential building damage and impacts to operational performance.
  - 🔸 Attaining Essential Facility requirements would be extremely costly and difficult to achieve,
  - 🔸 Some operational performance level improvement could be accomplished.
- 🔹 Additional evaluation to clarify reasonable retrofit options
  - 🔸 Determination of Acceptable Risk/Investment





# Building Components

(ASCE/SEI 41-13 Seismic Evaluation and Retrofit of Existing Buildings)

## Structural

- Roof
- Walls
- Foundation

Structural Performance is Rated  
(High to Low) S-1 to S-5

## Non-Structural

(in Progress)

- Ceilings
- Partitions
- Windows (Safety Film)
- Mechanical/Electrical Equipment
- Furniture
- Utilities

Non-Structural Performance is Rated  
(High to Low) N-A to N-D





# Examples

(Non-Structural – Lights & Ceilings)

## 2011 Christchurch, NZ M7.1



Bracing Missing,  
Wire Supports  
incorrectly tied





# Examples (Non-Structural – Partition Bracing)

1994 Northridge M6.7



Partition Wall Braces need to be properly connected to structural system

Not Braced



Not  
Connected  
Correctly





# Examples

(Non-Structural – Windows)



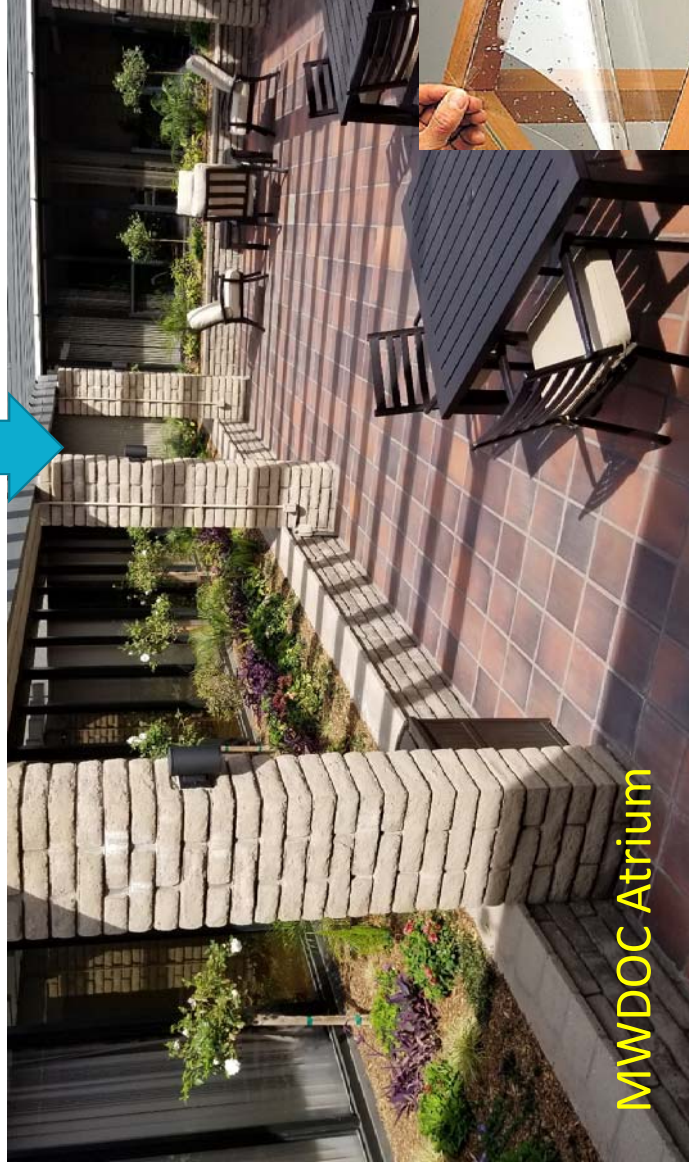
## 2014 Brea M5.1

Windows under pressure during earthquakes can explode, sending glass projectile fragments everywhere.

## 2011 Christchurch, NZ M7.1



101 windows at MWD OC Admin Building (46 in the atrium)



Safety film holds glass fragments together reducing the risk of injury.





# Examples (Non-Structural - Utilities)



Water Pipes – Some additional work is needed.



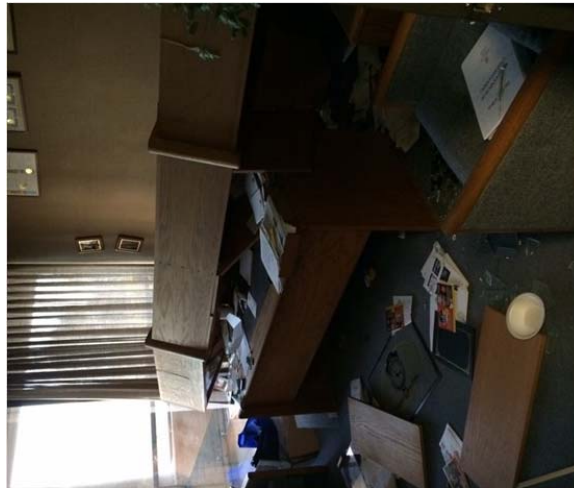
Piping too close to  
adjacent beam





# Examples (Non-Structural – Furniture Bracing)

2014 Brea M5.1



Contents & Furnishings – need  
anchoring and bracing



Unbraced  
Furniture  
Cabinets



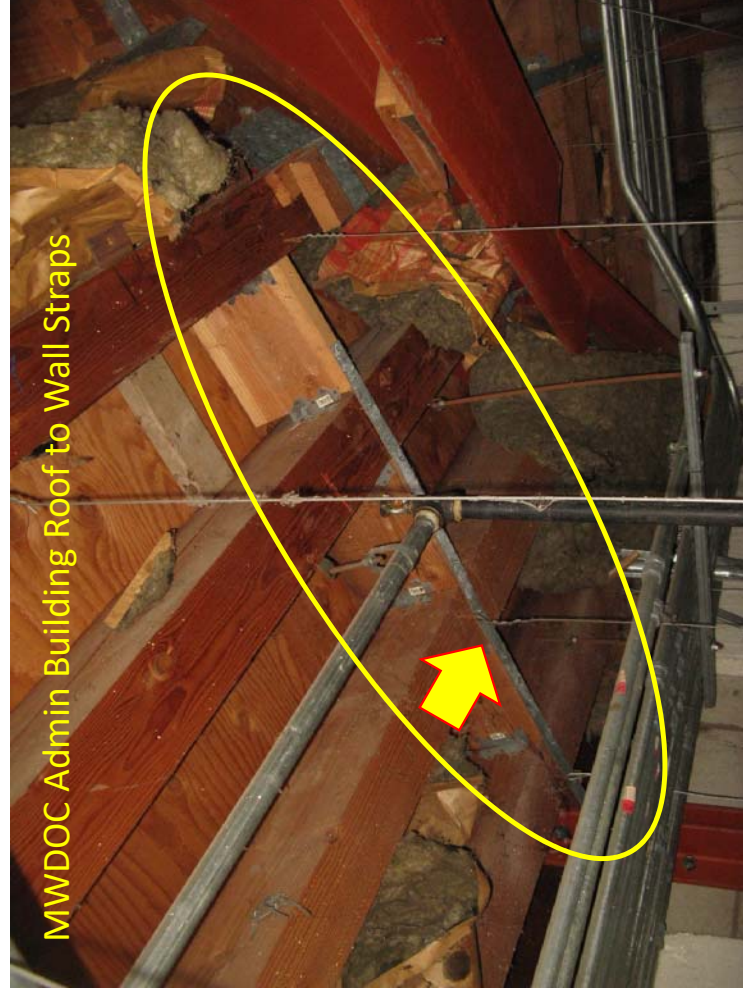
# Structural – Roof



a. Reinforce Corners of Roof Structure in Atrium  $\approx$  \$40,000



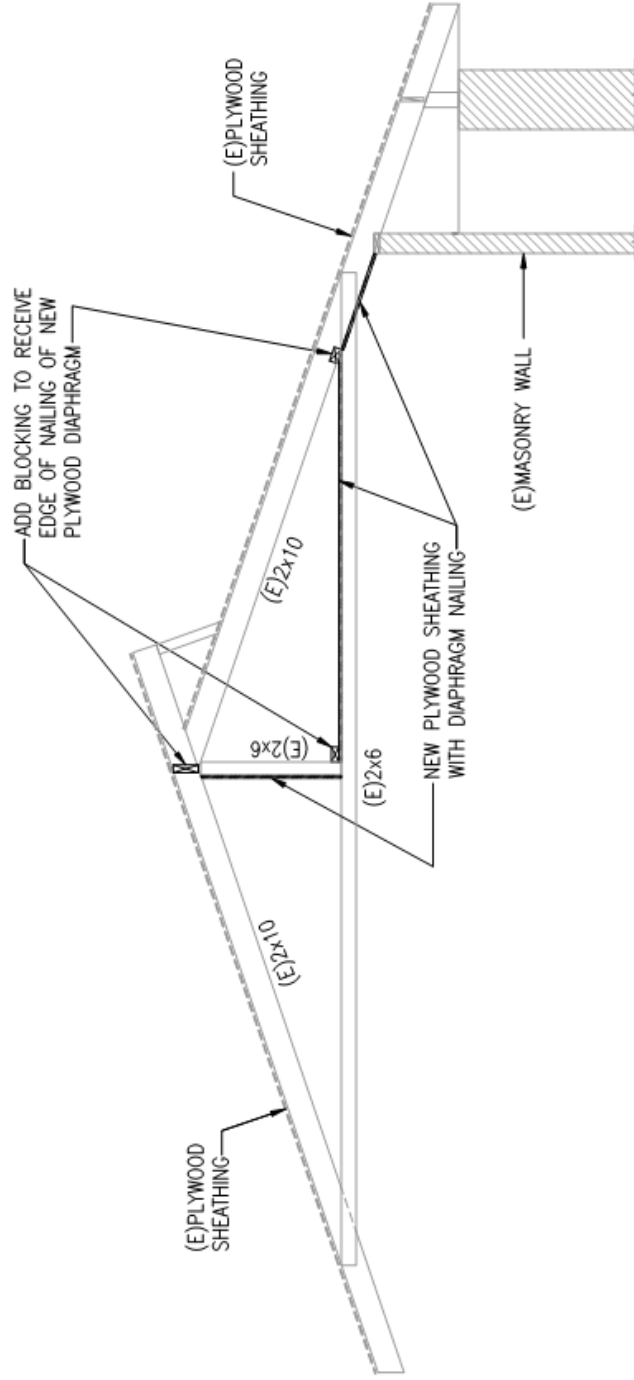
# Structural – Wall to Roof Connections



- b. Strengthen Existing Wall to Roof Connections ≈ \$ 60,000
- d. Add additional Wall to Roof Connections ≈ \$200,000



# Structural Roof – Plywood Diaphragm



c. Add Plywood (Diaphragm) to Strengthen Roof Structure ≈ \$100,000



# Seismic Assessment Structural Options\*

Scope of Work Item – Options to Reduce Vulnerability (MWDOC Admin Building)	Rough Order of Magnitude Cost
a. Reinforce Corners of Roof Structure at Atrium	\$40,000
b. Strengthen Existing Wall to Roof Connections	\$60,000
c. Add Plywood (Diaphragm) to strengthen roof structure	\$100,000
d. Add additional Wall to Roof Connections	\$200,000
e. Improve Soils under the Building against Liquefaction	\$1,400,000
f. Brace/Improve Non-Structural Items (currently in progress)	\$100,000

\* IDS Group - Conceptual Seismic Retrofit Study of MWDOC Administrative Building Feb. 26, 2018

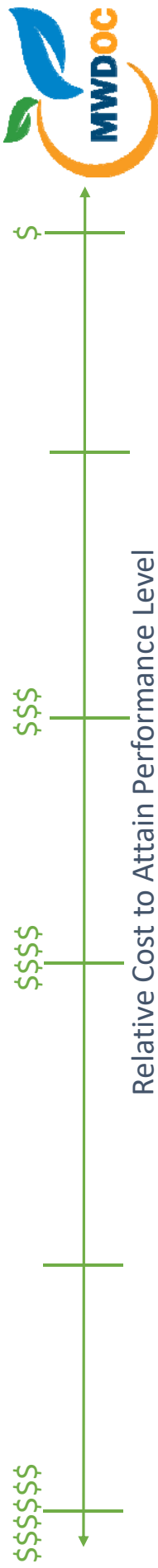




# Spectrum of Building Performance

(ASCE/SEI 43-13-Seismic Evaluation and Retrofit of Existing Buildings)

Life Safety & Continued Operations Focus				Life Safety Focus		
Operational (1-A)	Immediate Occupancy (1-B)	Damage Control (2-B)	Life Safety (3-C)	Reduced Safety (4-D)	Collapse Prevention (5-D)	
Very little damage, power available, equipment operable	Overall damage light. Building remains safe, with minor repairs and some cleanup. Non-structural components and utilities remain secure, but may not function.	Range between Immediate Occupancy and Life Safety. Control damage to allow return to function quicker.	Structural & Non-structural damage is significant. May not be safe for continued operations without repair.	Performance range midway between Life Safety and Collapse Prevention	Building standing but low resistance to additional shaking (after shocks), Extensive Non-Structural component damage, Unsafe for occupancy.	





ASCE 41-13 / IDS		Target Building Performance Level					
		➡ Increasing Life Safety & Continued Operations			➡ Increasing Life Safety		
Example Event, Event Type, (Building Type)		Operational (1-A)	Immediate Occupancy (1-B)	Damage Control (2-B)	Life Safety (3-C)	Reduced Safety (4-D)	Collapse Prevention (5-D)
Structure Condition		Very little damage, equipment operable	Building remains safe, only minor repairs, negligible N-S damage	Building returns to function quicker, negligible N-S damage	Structure is stable, but significantly damaged, N-S Overturned	Significant Damage, limited ability to resist aftershocks, Significant N-S damage	Building barely Standing, Likely Significant N-S damage
(Based on pga at site)							
Newport-Ingle. M7.4 (Extreme)	.79	**	\$1.9 Million a-f	\$1.9 Million a-f	\$300,000 a,b,c,f	\$200,000 a,b,c	\$100,000 a,b
Compton (Extreme)	M7.3 .56	**	\$1.9 Million a-f	\$1.9 Million a-f	\$200,000 a,b,f	\$100,000 a,b	\$100,000 a,b
San Andreas (Reduced)	M8.0 .42	**	\$1.9 Million a-f	\$500,000 a-d, f	\$200,000 a,b,f	\$100,000 a,b	\$40,000 a
20% in 50 yrs (Reduced)	.30	\$1.9 Million a-f	\$1.9 Million a-f	\$200,000 a,b,f	\$140,000 a,f	\$0	\$0
50% in 50 yrs, (Frequent)	.20	\$300,000 a,b,c,f	\$200,000 a,b,c	\$140,000 a,f	\$0	\$0	\$0

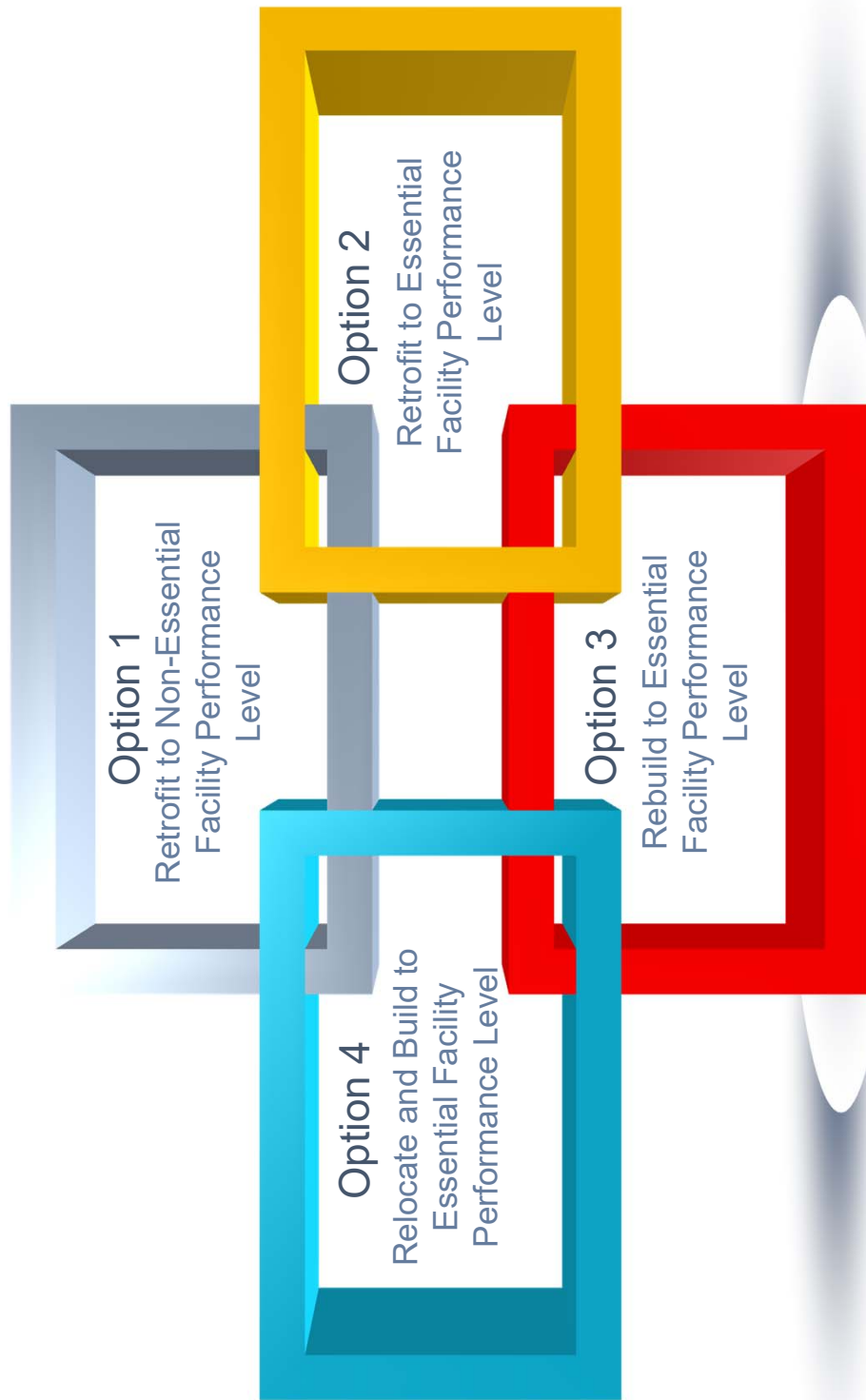


Increasing Damage Potential

\*\* Approaches Building Replacement Cost



# Options





# Option 1



## Costs & Benefits

Benefit	Cost
Non-Essential (New Building) Standard for a Newport-Inglewood Scale Event (M7.4) – No Consideration for Re-occupancy	<b>\$300,000</b>
Additional Damage Control for up to a San Andreas Scale Event (M8.0) –improve likelihood to re-occupy	<b>\$500,000</b>
Downside	
Non-essential facility that may not be operable for a Compton (M7.3) or Newport-Inglewood (M7.4) scale event	

Total Investment	Budgeted	Unbudgeted
Structural to Damage Control (above)	<b>\$233,100</b>	<b>\$266,900</b>
Other Upcoming (roof, HVAC, remodel)	<u><b>\$744,926</b></u>	<u><b>\$213,274</b></u>
Previous Investments (2009 -2016)	<b>N/A</b>	<b>N/A</b>
	<b>\$978,026</b>	<b>\$480,174</b>
		<b>≈ \$2,147,300</b>





# Option 2



## Costs & Benefits

Benefit	Cost
Building may incur some damage, but can be cleaned up and re-occupied for all predicted scale events	<b>\$1,900,000</b>
Make foundation modifications Retrofit Structural & Non-Structural components.	\$1,400,000 \$500,000
<b>Downside</b>	
Cost and operational disruption during construction. NOT recommended by IDS	

Total Investment	
Structural to Essential Facility (above)	<b>\$1,900,000</b>
Previous Investments (2009 -2016)	<b>\$689,100</b>
Other Upcoming (roof, HVAC, remodel)	<b><u>\$958,200</u></b>
	<b>≈ \$3,557,300</b>





# Option 3



## Costs & Benefits

Benefit	Cost
Rebuild to Essential Facility Standard. Building may incur some damage, but can be cleaned up and re-occupied for all predicted scale events	\$5.8-\$7.2 M
18-month Relocation (\$24 per S.F. per Yr.)	\$460,800
Moving Costs (2 moves)	\$52,000
Tear Down existing building	\$ 99,000
Make foundation modifications	\$1,200,000
Rebuild to Essential Facility Standard	\$3.95 - \$5.34 M

### Downside

Cost, relocation disruption to operations (move twice)





# Option 4

Option 4  
Relocate and Retrofit/  
Build to Essential  
Facility Performance  
Level

## Costs & Benefits

Benefit	Cost
Relocate to non-liquefaction site - Retrofit existing building or Build a new Essential Facility. Building remains in pre-earthquake condition for all predicted events	\$6.0 - \$12.5M
Purchase Property (1 acre) Median Rate	\$5.37M
Tear Down existing building (if rebuilding)	\$180,000
Retrofit/Build to Essential Facility Standard	\$600K/\$6.9M
Moving Expenses	\$26,000

## Downside

## Cost



### CBRE MARKETVIEW ORANGE COUNTY CAPITAL MARKETS

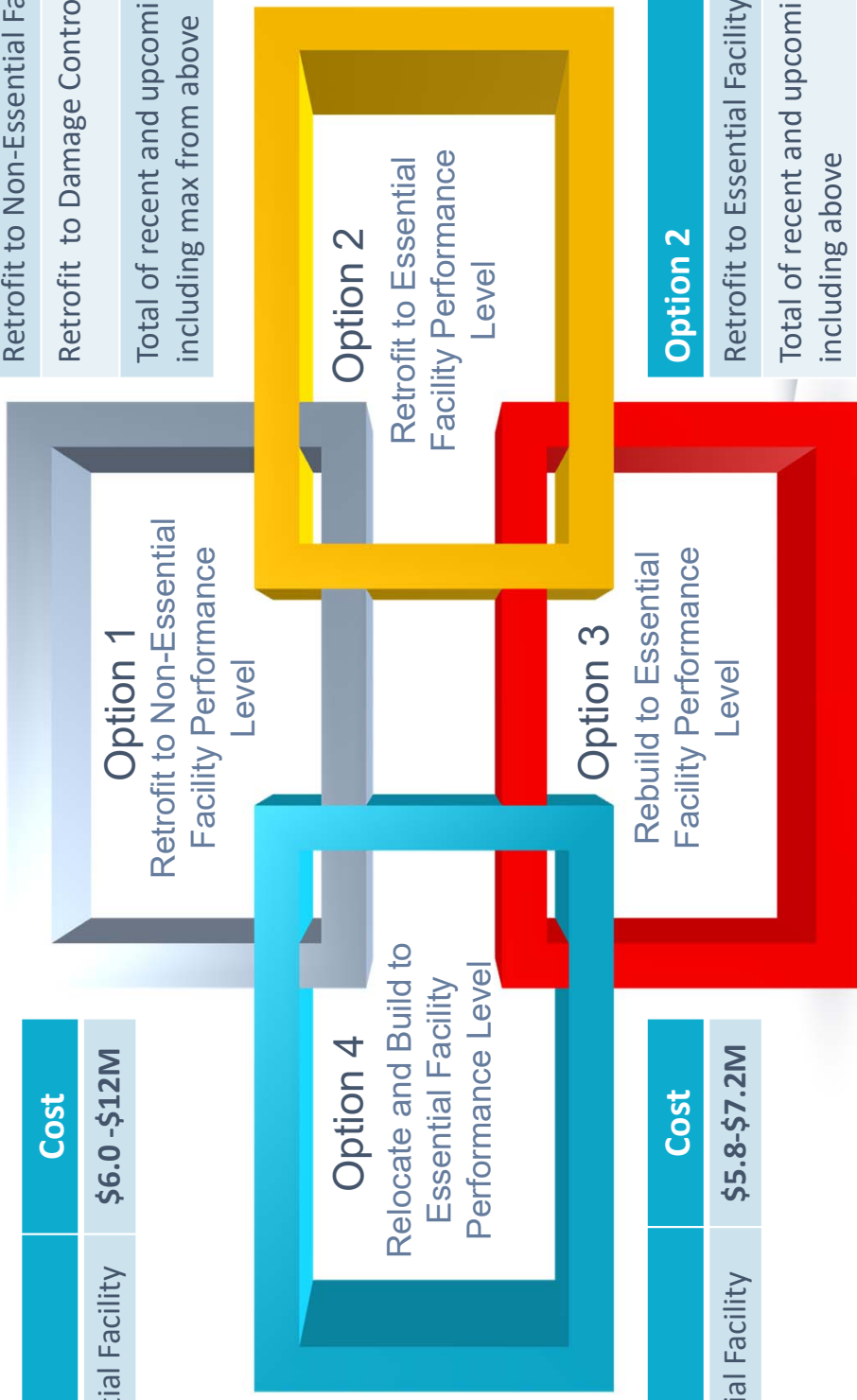




# Options

Option 4	Cost
Relocate to Essential Facility	\$6.0 - \$12M

Option 1	Cost
Retrofit to Non-Essential Facility	\$300K
Retrofit to Damage Control Facility	\$500K
Total of recent and upcoming including max from above	\$2.1 M



Option 3	Cost
Rebuild to Essential Facility	\$5.8-\$7.2M

Option 2	Cost
Retrofit to Essential Facility	\$1.9M
Total of recent and upcoming including above	\$3.5M



# Staff Recommendations



	Work Items	Rough Order of Magnitude Cost
At minimum: Complete work items to achieve Life Safety (3-C) Level for Newport-Inglewood (extreme) event.	a,b,c,f	\$300,000
Recommend: Complete work items to achieve Damage Control (2-B) Level for San Andreas (reduced) event	a,b,c,d,f	\$500,000

**Staff recommends the higher level of investment to ensure that the building would perform at or better than a Life Safety performance level and moving up to a Damage Control performance level.**





# Next Steps

	Non-Structural	Dates
1	Permitting	April 2018
2	Notice Inviting Bids	May 1 2018
3	Bid Opening	June 7, 2018
4	Board Consideration for Award	June 20, 2018
5	Construction	Jul-Sep 2018

	Structural	Timeline
1	RFP for Design and Construction Mgmt.	May-June 2018
2	Board Consideration of Award of Design, Construction Mgmt. Contract	Aug 2018
3	Design & Permitting	Aug-Nov 2018
4	Advertise for Bids	Dec 2018
5	Board Consideration for Award of Contract	Jan 2019
6	Construction	Jan - May 2019





# Questions





# Why Accept Higher Risk for Existing Buildings?

- Existing buildings do not immediately become 'deficient' when the code changes (as knowledge of earthquakes improves)
- Past building codes have traditionally accepted higher risk, both in national standards and local ordinances
- Existing Buildings have a shorter remaining life than new buildings (less chance of a major event occurring within the remaining building life)
- Implementing performance enhancing features into a new building is less expensive than implementing them in an existing building





**ACTION ITEM**

April 18, 2018

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

**FROM: Robert Hunter, General Manager**

**Staff Contact: Hilary Chumpitazi**

**SUBJECT: ADOPT BUDGET FOR FISCAL YEAR 2018-19**

**STAFF RECOMMENDATION**

---

Staff recommends the Board of Directors adopt a Resolution approving the MWDOC budget for fiscal year 2018-19. Attached is the third draft of MWDOC's budget; Pertinent aspects of the third draft budget include:

1. The third draft budget includes a proposed increase in the fixed rate of \$0.35 per retail meter (2.9%) to a total retail service charge of \$12.25 per retail meter. OCWD's contribution increases \$30,447 to \$499,012.
2. The third draft has a budget total of \$217,169,805 and a consolidated general fund budget of \$9,865,799 (revenue).
3. The total revenue amount for the Core budget is \$8,589,018, an increase of \$531,619 or 6.6% over the current year's budget. \$240,000 (45%) of this increase is derived from increased interest revenue.
4. The proposed third draft budget includes a planned reserves draw of \$5,277. Reserves will remain essentially fully funded.
5. The first unfunded CALPERS liability annual payment of \$207,000 is initiated as part of a ten-year program.
6. The final 1% migration of pension benefit costs from MWDOC to the employees is included with the employee contribution increasing from 6% to 7%.
7. The salary merit pool is at 4% of salaries and wages plus the 1% from the migration of pension costs.
8. No increase in the staffing level is included in the budget.
9. Building improvement expenses increase to \$531,827.
10. Outside funding for Water Use Efficiency (WUE) from rebates and grants is approximately \$3 million; an increase of \$100,000 over this year's projected actuals.

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



11. Total outside funding (WUE & Local Resource Project (LRP) sources) is budgeted to be approximately \$19.3 million; or 2.25 times the total core budget.
12. The new schedule for the budget process impacts the timing of Choice budget elections by Member Agencies. Therefore, the Choice budget estimates in the third draft budget should not be considered final.
13. Additional funding of the Southern California Water Coalition outreach effort for the California WaterFix is included in the budget at an estimated participation level of \$30,000.

No adjustment has been made for the potential modification in the LAFCO fee structure.

A reminder that memberships outlined in the Budget (Exhibit D) are approved by the Board with approval of the budget and therefore, each membership will not be brought to the Board for approval on an individual basis. Any new memberships not included in the budget will be brought to the Board for consideration.

Similar to memberships, budget approval for conferences includes Board and Staff approval for attendance at "standard conferences". Standard conferences are those listed on Exhibits E and F and approval includes staff travel/attendance at any out of state conferences listed on Exhibits E and F. Subsequent to the budget adoption, any new, out of state conferences will be brought to the Board for consideration.

## **COMMITTEE RECOMMENDATION**

---

Committee recommends the Board approve the third draft budget for fiscal year 2018-19.

## **CHANGES FROM THE PRIOR DRAFT TO CURRENT DOCUMENT**

---

The financial change between the second and third draft budget is change from a contribution to reserves of \$15,295 to a draw of \$5,277 (net change of \$20,572). There have been several changes between the second and third draft budgets, including:

- A total of \$21,600 in expenses was added by restoring participation in the Association of Metropolitan Water Agencies (AMWA) and one of the three budgeted meetings.
- \$5,000 reduction in Professional Fees.

## **MAJOR YEAR-TO-YEAR CHANGES IN THE CURRENT BUDGET**

---

The year-to-year changes in the total Core expenses between FY2017-18 and FY2018-19 are \$398,426 (4.8%). Unlike last year, there is not a significant shift between Core and Choice programs. The largest year-to-year, Core expense changes include:

- A decrease in the WEROC capital improvements expense of \$256,169
- The new \$207,000 expense for the CALPERS unfunded liability contribution
- A decrease of \$120,757 in professional fees
- An increase in MWDOC's building expense of \$175,427
- The increase that is shown for the contribution to the election reserve is an artifact of how we are presenting the reserves in this year's budget. While the



contribution to the election is the same as last year (\$304,000) it is displayed as a specific line item expense this year. In past years the “election expense” was only shown as a line item in an election year when the expense was actually incurred as opposed to being contributed to a reserve. This more detailed convention makes more visible the annual contribution to the election reserve as well as the biennial election expense from the reserve (Budget Exhibit C).

## DETAILED REPORT

---

The FY2018-19 MWDOC budget is developed through a transparent and iterative process. Key topics discussed below include:

1. MWDOC Budget Process & Schedule
2. Budget Principles
3. Reserves
4. Budget Input from Member Agencies
5. MWDOC Priorities & Practices Overview
6. Key Initiatives
7. Core/Choice Programs
8. Water Rates and Charges

A short discussion on each item follows:

### **1. MWDOC Budget Process FY2018-19**

MWDOC has made several changes to the annual budget process for FY2018-19. Foremost among these changes is the acceleration of the budget process by one month (schedule attached). Under the new schedule, the Year End Projections and Conceptual Budget (assumptions) are discussed at the January Administration & Finance (A&F) Committee meeting with the first draft budget presented at the February 14, 2018 A&F Committee meeting and the second draft budget at the March 14, 2018 meeting. The Elected Officials Forum was held on April 5, 2018. The final budget is scheduled for approval by the MWDOC Board of Directors at the April 18, 2018 Board meeting.

The schedule changes were implemented in order to facilitate the budget and rate schedules of our Member Agencies. Because the Choice budget elections and commitments will lag behind the new schedule, MWDOC will bring back to the Board of Directors a revised final Choice budget in September 2018 that will reflect the reconciliations and final program commitments of our Member Agencies. These changes will not impact the rates and charges passed in April for Core activities. Therefore, the third draft budget focuses primarily on Core budgets and activities.

Another modification to the budget process is the early identification of Reserve Fund impacts. The stated goal of the Board of Directors is to have reserves fully funded and that the budget should be balanced relative to meeting those reserve targets. In other words, if the combination of previous fiscal year's audited reserve balances and the current fiscal year year-end projections indicate that the reserve target will be exceeded then the



proposed budget should include a draw from the reserve balance down to the target. Conversely, if the projected total will drop the reserve balance below the target then the proposed budget should increase the budgeted contribution to reserves back up to the target. The first half of this process is discussed further below.

## **2. MWDOC Budget Principles for FY2018-19**

Staff continues to utilize the following Budget Principles to develop the budget:

- **Principle #1: Budget Investments Align with MWDOC's Priorities & Values**  
The Budget should reflect the mission and goals of MWDOC and align proposed activities with the valued benefits of the Board and our stakeholders. The budget process should be transparent and readily facilitate public review and input.
- **Principle #2: Activities Based on a County-wide Perspective**  
MWDOC's service area extends to Orange County's borders and the budgeted activities must comprehensively address issues, needs, and benefits for the entire service area and our regional involvement in the service area and operations of the Metropolitan Water District of Southern California (MET).
- **Principle #3: Efficient Program Design & Performance**  
The budgeted programs must consider complementary and cooperative designs to maximize benefits from other regional and local water resource programs to maximize value.
- **Principle #4: Full Cost Recovery**  
The budget will be developed so as to support full cost recovery of all expenses via the rates and charges without the unplanned use of reserves.
- **Principle #5: Compliance with Administrative Code**  
The proposed budget and budget process should fully comply with applicable sections of the MWDOC Administrative Code.

## **3. Projected Reserve Fund Balances**

The MWDOC designated reserve targets for FY2018-19 and the financial audit balances at the beginning of FY2017-18 are summarized in the table below and indicate a total unfunded reserve balance of \$581,257 (i.e., Total Target (C7) (-) Total Current Balance (D7)). Our analysis of projected expenses and budget variances for the third draft budget estimates a total of \$248,889 to be available for contribution to reserves from the FY2017-18 operations. These funds are allocated to the General Operations (E2) and the Building Reserves (E4) as indicated in the table column E "FY2017-18 Projected Year End Reclass to Reserves". An additional \$304,000 (E5) is shown as the annual contribution to the Election Reserve for a total projected contribution of \$552,889 (E7). The total unfunded



balance after these projected contributions is only \$28,368 (i.e., Total Target (C7) (–) Total Projected Balance F7)). Therefore, the theoretical goal for rate setting in the FY2018-19 budget would be to have \$28,368 more in revenues than expenses to reach the reserve targets. This amount is significantly less than the accuracy of the budget process with a functional budget target of essentially breaking even. The third draft budget calls for a draw on reserves of \$5,277.

	A	B	C	D	E	F
1	Designated Reserves	# Days Cash	FY 2018-19 Target Reserve*	FY 2017-18 Current Balance	FY 2017-18 Projected Year End Reclass to Reserves	FY 2018-19 Projected Reserve Balance
2	General Operations	90-180	\$ 3,377,754	\$ 3,156,569	\$ 221,185	\$ 3,377,754
3	Grant & Project Cash Flow		1,500,000	1,500,000	-	1,500,000
4	Building Reserve	10-15	406,479	350,407	27,704	378,111
5	Election Reserve	N/A	608,000	304,000	304,000	608,000
6	OPEB Reserve est.9/2016	N/A	209,006	209,006	-	209,006
7	TOTALS		\$ 6,101,239	\$ 5,519,982	\$ 552,889	\$ 6,072,871

#### 4. Budget Input from Member Agencies

The November 2017 MWDOC budget letter to Member Agencies invited their formal participation in the process including the suggestion of activities and comments. To date three agencies have submitted comment letters: Orange County Water District, South Coast Water District and Irvine Ranch Water District.

- **OCWD** has submitted two letters. The first identified four Metropolitan Water District (MWD) issues of importance: (1) Establish a permanent regional in-lieu program that encourages the storage of additional water during periods when MWD is at risk of losing excess imported water supplies, (2) Modify the Water Supply Allocation Plan rules to include Groundwater Basin Agencies in a more consistent manner, (3) Determine the terms necessary to phase-out the MWD Conjunctive Use Program (CUP) storage agreement, and (4) Obtain MWD's approval to pump potable water into MWD pipeline facilities.

OCWD's second letter provides three comments for consideration by MWDOC's Board of Directors: (1) MWDOC should reduce the number of Washington DC trips from a total of nine to five; (2) OCWD does not support the inclusion of memberships for the Association of Metropolitan Water Agencies and the California Council for Environmental & Economic Balance;



and (3) MWDOC should maintain their reserves at less than the target level at the upper end of the range and apply the amount released from reserves to the unfunded CALPERS liability.

- **South Coast** submitted comments relative to MWDOC's Reliability Study including the recent system reliability presentation. They specifically requested that MWDOC "continue to participate in and evaluate efforts to assess and implement Orange County water reliability projects and especially the 15 MGD Doheny Ocean Desalination Project".
- **IRWD's** budget letter concurred that MWDOC's draft budget represents "appropriate costs associated with MWDOC's important goals and objectives for the coming year." IRWD also requested that MWDOC review the proposed expenditures related to travel to Washington, D.C., streamline where possible and coordinate with Member Agencies.

## 5. **Priorities & Practices Overview**

Key priorities and practices include MWDOC's major areas of concentration:

- Metropolitan Water District of Southern California (MET)
- Regional Water Reliability
- Water Use Efficiency (WUE)
- Water Emergency Response
- Communication
- Legislation & Regulation
- Administration & Finance

These are discussed below.

### **Metropolitan Water District of Southern California (MET)**

MWDOC was formed in 1951 to serve the majority of Orange County as a MET Member Agency and make imported water available to all of Orange County. This remains a primary function. This responsibility has taken various forms over the decades from participation in MET's commitment to build transmission lines, to facilitating local projects, and oversight and participation in MET's rate setting and programs. A major effort continues to be ensuring that policies, supplies, programs and projects developed and implemented by MET have significant value to the residents and ratepayers in Orange County and to Southern California.

MET is key in providing and underwriting supply reliability and regional system reliability in Southern California. Many of MWDOC's initiatives are aimed at maintaining a close working relationship with MET and other MET Member Agencies in order to guide the efforts at MET in a constructive manner and in the best interest of the region and Orange County. Key issues will include Integrated Resource Plan (IRP) policy discussions, local and regional resource investments, water supply allocations, supply and system reliability projects and programs, groundwater replenishment and storage, the State Water Project investments



(including the California WaterFix), Colorado River Aqueduct, Water Quality, water use efficiency, and Communication activities and legislation.

MWDOC appoints four MET Directors who sit on the MET Board and directly advocate on behalf of the district and its Member Agencies. These four MET Directors work with the other three Directors from Orange County (Anaheim, Fullerton, and Santa Ana) as well as MET Directors from outside of Orange County. Our Orange County MET contingent and the overall MET Board are faced with ensuring the economic health of MET which directly impacts the economic health of Orange County, the region and the State. To this end, our Directors have advocated for financial issues at MET to ensure its viability over the long run, maintain an appropriate level of reserves, and preserve financial policies that minimize and level long-term costs and rates impacts, while allowing new investments where needed. Significant upcoming investments include the California WaterFix, potentially the Carson Indirect Potable Reuse (IPR) project, and Local Resource Program (LRP) funding approvals.

Significant MET issues during the current fiscal year include court decisions in the 2010/2012 San Diego County Water Authority (SDCWA) lawsuit with Metropolitan, the start of updating the IRP, the establishment of groundwater storage programs including Cyclic Storage and In-Lieu, the California WaterFix, the FY2018-19 & FY2019-20 budget and rate proposal, and WUE activities.

### **Regional Water Reliability**

The improvement of water supply and system reliability is key for the ratepayers and residents of Orange County and is a central part of MWDOC's mission. MWDOC has taken a variety of roles in ensuring OC water reliability ranging from the construction, financing and operating of the Allen-McColloch Pipeline to facilitation of local projects to the objective analysis of alternative projects for future reliability. However, reliability cannot be improved by OC investments alone. It is imperative that our reach in this area is both local and regional, to MET and DWR.

Over the years, MWDOC has actively conducted or participated in a variety of reliability studies including various versions of the MET Integrated Resource Plan (IRP) and reliability assessments of all or part of Orange County. Central to current reliability discussions is MWDOC's 2016 OC Reliability Study which is being updated and extended in the current fiscal year. Included in this effort are analyses of new climate change models for the Colorado River system, an analysis of the potential reliability benefits of increased storage projects, and project specific project assessments for increased supply and system reliability. MWDOC's perspective is unique in that we have a regional focus instead of the more restrictive view on the benefits and costs of a single retail agency. Specific projects include the California WaterFix, the Carson IPR project, both the Doheny and Poseidon desalination projects, the San Juan Watershed project and the Cadiz project; as well as more generic water storage projects.

Other significant actions during the current year include resolving water quality issues associated with low demand flows, evaluating emergency water alternatives for South Orange County, evaluating potential institutional arrangements to support OC reliability projects including groundwater storage and the Doheny project, coordinating MET PCCP lining projects and maximizing benefits to our Member Agencies, evaluating potential



storage programs utilizing Strand Ranch, working with NGO environmental groups and the academic community on habitat restoration frameworks for the Bay Delta, evaluating MET emergency storage reliability and resolving meter issues between our Member Agencies and MET.

### **Water Use Efficiency (WUE)**

Sound water management policy requires a continuing effort to improve water use efficiency. This requirement is intensified by the permanent water use efficiency standards that go well beyond the current 20% by 2020 framework. Providing the technical expertise and the program support along with securing funds for water use efficiency efforts is a priority for MWDOC and our Member Agencies and a function MWDOC has been providing since 1989.

In addition to running the WUE rebate and landscape technical assistance program, MWDOC has been coordinating a water loss control program for many of our Member Agencies. This program has moved beyond water loss audits into field activities including meter testing and water leak detection. Orange County is now a state leader in terms of experience and data. This has allowed MWDOC to provide hard data to state regulatory agencies and direct developing regulations. MWDOC's expertise has also been critical in workgroups addressing the numerous water use efficiency legislative and regulatory proposals.

### **Water Emergency Response**

MWDOC provides the administrative umbrella for the Water Emergency Response Organization of Orange County (WEROC). Significant changes were implemented this past year to improve and strengthen its state of readiness to assist in a time of emergency. WEROC develops the resources, tools, trainings and grant funding targeted at enhancing Member Agency and WEROC EOC Staff preparedness and resilience. This past year WEROC provided critical response coordination during the Canyon 2 Fire, as well as provided unique and needed preparedness programs. These included the training for the response to an unknown contamination event with the DDW's Emergency Water Quality Sample Kits (EWQSK). A major upgrade has been implemented with the migration of the radio system to the County's 800 MHz system.

Significant effort has also been directed at assessing the status of the Emergency Operations Centers (EOC), the optimization of EOC location and number, and the seismic integrity of the facilities. These evaluations will impact expenditures in FY2018-19.

### **Communication**

Communication with our Member Agencies and the public we serve is a critical component of MWDOC's core function. Communication related to critical water resource issues, water supply and system reliability, and water resource projects and investments are all essential elements of the Communications Program. To maximize both effectiveness and efficiency MWDOC is working with our Member Agencies on coordinated communication efforts. MWDOC generally provides program efforts at the regional level and above while providing necessary assistance to the retail agencies for communications with the local ratepayers.



Central to that effort this year has been a focus on the California WaterFix, a renewed effort in social media and the launching of our new website.

MWDOC has provided water-related education programs for 45 years, since 1973. Through partnerships with the Discovery Cube and Inside the Outdoors, MWDOC provides Orange County students with grade-specific lessons that focus on topics like the water cycle, forms of water and water as an environmental resource. The high school program was revised this year to include a digital resource guide for students and teachers, a contact list of subject matter speakers (including Member Agency contacts) and a “Traveling Scientist” classroom presentation. This classroom component provides students an overview of the science, economics, and history of Orange County water.

MWDOC’s Public Affairs group interacts with the public and our Member Agencies through several activities and avenues. MWDOC hosts regular meetings of the Public Affairs Workgroup to facilitate unified regional messaging and communications support. MWDOC’s Public Affairs group also produces the special events of the annual OC Water Summit and the Water Policy Dinners and is responsible for the MWDOC MET inspection trips and tours.

## **Legislation & Regulation**

Governmental Affairs continues to work at the local, state and national levels with our Member Agencies, organizations, delegations, agencies and bureaus to advance Orange County’s agenda. Central to this effort are policy, legislative and regulatory developments and opportunities. There has been a flood of legislative activity in Sacramento in FY2017-18 for water issues including the proposals to implement the vision of the Governor’s framework for “Making Conservation a California Way of Life” (AB 1668 - Friedman & SB 606 Hertzberg/Skinner), the public goods charge (SB 623 – Monning and the budget trailer bill language), the recently introduced water shutoff policy requirements (SB 998 - Dodd), and efforts to delay or halt the California WaterFix, such as AB 1876 – Frazier which skews the Delta Stewardship Council in favor of those in the Delta region. Work on these and other bills is expected to remain intense through the end of the session (August 31, 2018).

## **Administration & Finance**

The administration and financial functions are essential to the success and compliance of MWDOC and our Member Agencies. Working in conjunction with the technical staff, the Finance team executes the monthly accounting and billing of water deliveries under various programs, rebates, in-lieu credits, LRP payments and choice programs accounting. This year’s annual audit again received an unmodified (unqualified) opinion from the independent auditors.

Among many other tasks, the Administrative team has been coordinating staff and contractors to conduct several building evaluations, space efficiency assessments, and renovation plans. These efforts have been central to an ongoing effort to maximize efficiency and ensure safety and code standards are in compliance. MWDOC will complete a series of seismic assessments this fiscal year that will influence next year’s expenditures. These assessments are also critical to our redesign and refurbishment of main meeting room (101), the conversion of the library into new conference space (102) and the more efficient redesign of the copier and storage rooms. Room 101 will become available for an



alternate EOC. The repurposing of the library has been facilitated by the successful document management project over the last year.

## **6. MWDOC Key Initiatives for FY2018-19**

Five items were identified as the largest, year-to-year, Core expense changes.

- i. The WEROC capital improvements expense decrease of \$256,169 is a combination of the significant one-year capital funding last year of WEROC's capital reserve fund and the completion of capital projects including the radio conversion. This also had the synergistic effect of eliminating the annual lease for the Catalina repeater site at \$21,000. Next year's capital projects are primarily at the South EOC.
- ii. The MWDOC Board of Directors approved a new ten-year program in 2017 to address the CALPERS unfunded liability. This added a new annual expense of \$207,000 beginning in FY2018-19. The OPEB liability has been previously funded. However, it is anticipated that addition funds will be required as new actuarial evaluations are periodically performed.
- iii. The third draft budget includes a decrease of \$120,757 in professional fees in the Core budget that is close to offsetting the \$152,995 that is projected to be unspent in the current budget. The decrease is derived from several sources including Water Use Efficiency, Finance, Government Affairs and Public Affairs.
- iv. An increase in MWDOC's Core building expense of \$175,427 reflects several major replacement and remodeling projects. These include the roof replacement, HVAC upgrade, seismic structural, and office remodel/refresh projects. Most are driven by the age of the building (e.g., 25-year old roof).
- v. The contribution to the election reserve shows as an increase of \$304,000 over last year. As noted earlier, this is an artifact of how we are presenting the reserves in this year's budget. The election reserve is funded through annual payments in an amount that would fund seven director elections every four years. The total cost is based on the actual cost of the previous election. Payments are adjusted for the savings from non-contested elections.

New funding for the Southern California Water Coalition outreach effort for the California WaterFix is included in the budget at an estimated participation is \$30,000.

Besides the items previously discussed above, the key initiatives for the FY2018-19 budget include:

### **Metropolitan Water District of Southern California (MET)**

- Continue to work closely with MET on budget and rate issues, support for the California WaterFix, development of WUE and IRP policy implementation, and management of water in Southern California.
- Protect MWDOC and local agency interests in MET via continued participation in the series of SDCWA lawsuits against MET. While MET primarily prevailed at the Appeals Court level on the 2010/2012 case, final resolution was remanded



to the lower court. In addition, there is a series of addition cases that SDCWA has filed for each rate set by the MET Board (i.e., 2014, 2016, and 2017).

- Promoting Orange County positions in policy formation and actions including MET investments in supply projects like the California WaterFix, Carson Regional Recycling project, LRP funding policy and decisions, modifications to allocation policies and procedures, and MET's groundwater policies.
- OCWD identified four MET issues of importance: (1) a permanent regional in-lieu program, (2) modification of the Water Supply Allocation Plan rules, (3) determination of the terms necessary to phase-out the MET Conjunctive Use Program (CUP) storage agreement, and (4) resolution of MET's approval to pump potable water into MET pipeline facilities.

## Regional Water Reliability

- Advance projects from the OC Water Reliability Study. The following work is anticipated:
  - Supply and system reliability project evaluations to meet the projected gap between Orange County water demand and available supplies. The supply reliability projects are intended to manage and reduce the allocation periods associated with droughts. The system reliability projects are intended to increase reliability during emergencies or disasters (e.g., earthquakes and fires). The goal is to optimize public investment to reliably meet demand without standing assets. Project implementation considerations and options from a regional perspective are critical components of the evaluations. The portfolio of projects include:
    - California WaterFix
    - Carson Regional Recycling Project
    - Huntington Beach Desalination Project
    - Doheny Desalination Project
    - San Juan Watershed Project
    - Cadiz Project
    - Groundwater Banking Options including Strand Ranch and storage within the Orange County Basin
    - South Orange County Emergency Supply Agreement review and supplemental supplies
- South Coast Water District requested that MWDOC continue participation in and evaluation of efforts to assess and implement OC reliability projects and specifically the 15 MGD Doheny Ocean Desalination Project.
- On-going work with OCWD on basin issues (In Lieu delivery, Cyclic Storage, SARCCUP).
- Obtain concurrence for the introduction and conveyance of local water in the East Orange County Feeder No. 2 (EOCF#2). This has never been done, but when accomplished, will open up a number of options for Orange County.
- Evaluation of MET emergency storage and accuracy of outage duration estimates for system components.
- Resolution of distribution system metering and water quality issues including MET administrative code changes to facilitate meter range improvements and low flow policies in Orange County.



## Water Use Efficiency (WUE)

- Continue with implementation of the Water Use Efficiency Master Plan including methods to firm up funding options for local agencies. Begin integrating recycled water use into the Water Use Efficiency Programs by accelerating recycled water connections through customer incentives.
- Continue Rebate Programs and emphasize landscape opportunities
- Continue to convene the Water Loss Control Work Group and evaluate the feasibility, implementation and expansion of shared services to include meter accuracy testing and leak detection.
- Phase III of the Water Loss Control Technical Assistance will continue in conjunction with Water Systems Optimization in providing this assistance to Member Agencies.
- MWDOC will continue to use the Droplet rebate administration platform for both Turf Removal and Spray-to-Drip rebate processing including electronic signatures.
- Landscape Design Assistance will continue to assist rebate program participants.
- The States' new Long Term Water Use efficiency framework will require significant research to better understand and inform stakeholders on the standard setting. This research may be focused locally or through partnerships beyond Orange County such as the California Water Efficiency Partnership (previously known as the California Urban Water Conservation Council).
- Metropolitan WUE policy development will be a main focus for the department especially in helping to prepare agencies for compliance with new state mandates. Staff will also seek to maximize access to Metropolitan Water Use Efficiency program funding for regional and local program implementation. Staff will advocate for Program refinements that ensure Orange County program needs are met and continue to evolve.
- Staff will provide leadership for the California Water Efficiency Partnership as they transition the organization in FY2017-18.
- Secure program funding; MWDOC is currently projecting approximately \$2.9 million for WUE program funding.

## Water Emergency Response - WEROC

- WEROC will continue a multiple year training and exercise programs that focuses on responding to an unknown contamination of our water supplies and utilizing protocols for the Emergency Water Quality Sample Kits (EWQSK). This program involves the participation of four Fire Hazardous Materials Teams, Law Enforcement, Division of Drinking Water, Cities, the County, and our Member Agencies. Again this coming year, each of the WEROC EOC staff members will participate in about 40 hours of training to participate in the training program and help WEROC remain at a high state of readiness.
- WEROC staff will continue to implement the recommendations of the WEROC EOC Site Study; including components of the seismic evaluation, electrical evaluation and generator sharing at the South EOC site.



- Modifications to the MWDOC Administration Building to facilitate its use as a back-up EOC are being incorporated into MWDOC Building Improvements and will provide additional functionality of the space for trainings and meetings.
- A comprehensive review and update of the WEROC EOC Emergency Operations Plan, supporting documents and agency planning documents will be completed.

## Communication

- The Public Affairs Department looks to amplify efforts to facilitate community awareness and involvement with issues and challenges related to the reliable delivery of potable water. The MWDOC Orange County Reliability Study deemed the California WaterFix as the single most cost-effective project to ensure Orange County's long-term water reliability.
  - MWDOC will continue the communications campaign focusing on the WaterFix and EcoRestore. With this year's launch of the new website, the social media campaign will be able to increase leverage and effectiveness.
  - Recent project developments for the WaterFix have included the announcement of a phased approach with one 6,000 cfs tunnel in the first phase and a second tunnel to be constructed in the second phase. This modification has produced considerable confusion about project costs and benefits. The ongoing effort to communicate these changes will continue into FY2018-19.
  - Consistent messages will be needed to finish the State Water Project with the tunnel option, which is essentially a storm water capture project. EcoRestore will also be included in the messaging and campaign, to educate leaders and the public that environmentalists agree doing nothing is not an option and the combined projects are best for the state water infrastructure and for the Delta ecosystem.
  - The campaign will again primarily target decision-makers and those with influence upon the decision-makers, although local government and grass root elements are included in the plan, as well.
  - The plan has an emphasis on social media, targeting specific audiences, as well as "listening" to public sentiment about the project and identifying any growing concerns or opposition.
  - Staff is aware other agencies and organizations are preparing outreach campaigns as well, and will communicate with them and coordinate when appropriate.
  - Other aspects of the ongoing OC Reliability work will merit significant communication efforts during the fiscal year including the project and demand evaluations for both supply and system reliability.
- An important component of the communication plan is the public outreach through the Water Policy Dinners and the Water Summit, both of which are included in the budget.
- Critical to the success of our communication is the active coordination with our Member Agencies. This will continue in both the structured format of formal meetings and the informal cooperation between agencies.



- The Core/Choice designations of the current education programs for grade school and high schools will not be changed.
- Added to the budget is the continued funding of the Southern California Water Coalition WaterFix communication program.

## **Legislation & Regulation**

- As previously discussed, a large volume of state water-related legislation was introduced over the past year and much of it is still active. Many of the items are critically important to the water industry and our Member Agencies. Intense activity is anticipated through the end of this year's session. Post-election, a new set of legislation will commence in January 2019. MWDOC will continue and refine communication with our Member Agencies and regional partners on these items.
- MWDOC's efforts on Governmental Affairs will also focus on funding and regulatory programs at the state and federal levels. We have accelerated efforts with the Orange County and California delegations and select Committee Members to marshal support, funding and beneficial modifications for state and national programs. At the state and federal level, significant efforts will be made in tracking both funding opportunities for Orange County projects and relevant legislation.
- The State Water Resources Control Board continues to accumulate responsibilities, authority and power. MWDOC will increase its focus on State Water Board proceedings as well as those of the Department of Water Resource.

## **Administration & Finance**

In addition to the normal and essential administration and financial functions, FY2018-19 will include major building renovation projects. Some functional organizational restructuring is also likely as retirements occur. Increased training and process efficiency enhancements are also planned.

### **7. Choice Programs for 2017-18**

The Choice Programs for FY2017-18 include :

- School Program-The current contracts for the school program will continue with program modifications where appropriate. The grade school program will be run in conjunction with the Discovery Science Center with the keypad program for all of the assembly programs in grades 1-6. The High School Program will be conducted in conjunction with the County's Inside the Outdoors program and continues to evolve through the curriculum development and expanded in-class activities
- Water Use Efficiency-Will continue to access MET WUE funding and grants from other sources for implementation programs for OC.



- 2015 Water Loss Control Audits-Follow-up activities will continue from the water audits including leak detection and repair.

## **8. Water Rates and Charges**

Historically, MWDOC's revenue funding for its Core Budget had been derived from charges associated with a retail meter charge (fixed) and a water volume increment charge (variable). However, in FY 2015-16, MWDOC's Core Budget the water volume increment charge had been phased out and Core funding was supported only by the retail meter charge. During that fiscal year, MWDOC completed a water rate study whereby the Board adopted a methodology for a retail meter charge along with a new groundwater customer charge in compliance with Proposition 26.

The total amount of revenue from water sales also includes charges to cover the cost of MET water purchases and MET's associated charges. The proposed Total Water Sales for FY 2018-19 are \$220,515,870.

For FY 2018-19 the proposed Retail Meter Charge is \$12.25.

For FY 2018-19 the proposed Groundwater Customer Charge is \$499,012.

### **Attachments:**

Attached hereto are Resolution, budget schedule, letters from agencies, and the detailed budget for this coming fiscal year.



**RESOLUTION NO. #####**  
**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**

**APPROVING AND ESTABLISHING THE MWDOC BUDGET FOR  
FISCAL YEAR 2018-2019 INCLUDING THE RESERVE FUND, GENERAL FUND,  
WATER FUND, WATER USE EFFICIENCY FUND, WEROC FUND AND AMP FUND**

BE IT RESOLVED by the Board of Directors of Municipal Water District of Orange County that the Budget for financing the District's operations for Fiscal Year 2018-2019, as recommended, be and the same is hereby adopted as follows:

General Fund Budget (Inclusive of Expenses funded by Reserves) .....	\$9,654,208
Water Purchases Budget .....	204,099,094
Water Use Efficiency Budget .....	2,972,135
WEROC Budget.....	489,160
AMP Budget.....	0
 Total Budget Resolution.....	 \$217,214,597

Upon Board approval and the adoption of the Budget and rate resolutions, the General Manager will expend, under District policy, such budgeted amounts as necessary for the purposes identified in the Budget for the Municipal Water District of Orange County.

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

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

I hereby certify the foregoing is a full, true and correct copy of Resolution No. ####, adopted by the Board of Directors of Municipal Water District of Orange County at its meeting held on April 18, 2018.

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Maribeth Goldsby, Secretary  
Municipal Water District of Orange County



# MWDOC BUDGET PROCESS & SCHEDULE

## November 2017

- Notification to Member Agencies of start of budget process and solicitation of input

## December 2017

- MWDOC staff begins preparation of budget hours and costs on program and line-item basis
- Review of four month actuals and fiscal year-end projections
- Review budget adjustments for current fiscal year
- Preparation of internal, draft conceptual budget (review changes for upcoming fiscal year)

## January 2018

- Initial review of budget issues with A&F Committee for feedback **(1-10-18)**
- Initial discussion of budget issues with Member Agencies for feedback
- Request for Member Agencies' PRELIMINARY indication of participation in CHOICE

## February 2018

- Publish and post the FIRST DRAFT Budget in the packet for the A&F Committee **(2-8-18)**
- Review Full Draft Budget with A&F Committee **(2-14-18)**
- Formally request comments from all Member Agencies
- DRAFT information completed on prior year **CHOICE WUE** program benefits to Member Agencies to serve as basis for charging agencies for the upcoming year for **CHOICE WUE** activities
- Member Agencies' INITIAL CONFIRMATION of participation in **CHOICE** Services by **February 15**. The **Updated** Agreement by the end of **March** and after the Elected Officials Meeting
- Discuss FIRST DRAFT Budget at Member Agency Managers' Meeting **(2-22-18)**
- Meet with Member Agencies as requested or scheduled



# MWDOC BUDGET PROCESS & SCHEDULE

## March 2018

- **REVISED** information completed on prior year **CHOICE WUE** benefits to Member Agencies to serve as basis of charging agencies for the upcoming year for WUE activities
- Discuss SECOND DRAFT Budget in A&F Committee **(3-14-18)**
- Review SECOND DRAFT Budget at Member Agency Managers' Meeting **(3-22-18)**
- **Update CHOICE** Participation
- Member Agencies' submit Formal Comments about the Budget **(3-28-18)**

## April 2018

- Conduct meeting with Elected Officials from Member Agencies to discuss budget and other topics **(4-5-18)**
- THIRD DRAFT Budget and Rates presented to A&F Committee **(4-11-18)**
- Member Agencies' Formal Comments presented to A&F Committee
- Board approval of FY2018-19 FINAL Budget and Rates **(4-18-18)**

## June 2018

- Member Agencies confirm **FINAL CHOICE** Participation **(6-15-18)**

## August 2018

- **Reconciliation of FY 2017-18 WUE & CHOICE Programs**

## September 2018

- **REVISED FINAL CHOICE** Budget presented to A&F Committee **(9-12-18)**
- Board approval of FY2018-19 **REVISED FINAL CHOICE** Budget **(9-19-18)**





April 10, 2018

Mr. Robert Hunter  
General Manager  
Municipal Water District of Orange County  
P.O. Box 20895  
18700 Ward Street  
Fountain Valley, CA 92708

Subject: Proposed MWDOC Budget and Rate Resolution for Fiscal Year 2018-19

Rob:

On April 11, 2018, your staff will present to the Municipal Water District of Orange County Administration and Finance Committee a resolution approving a third draft budget for FY 2018-19. Irvine Ranch Water District has reviewed this budget and it appears to represent appropriate costs associated with MWDOC's important goals and objectives for the coming year.

IRWD is requesting that MWDOC review its proposed expenditures for travel to Washington, D.C. and streamline the associated efforts where possible. MWDOC's efforts in Washington, D.C. result in substantive costs to the MWDOC member agencies and should be exercised judiciously. Furthermore, these trips should be coordinated with the ongoing efforts of the member agencies to coordinate messaging and avoid any potential for conflicting information.

Please contact me at (949) 453-5590 if you have any questions or concerns with the comments provided.

Sincerely,

A handwritten signature in blue ink, appearing to read "Paul A. Cook", is written over a light blue horizontal line.

Paul A. Cook, P.E.  
General Manager



**DIRECTORS**

**PHILIP L. ANTHONY**  
**DENIS R. BILODEAU, P.E.**  
**SHAWN DEWANE**  
**CATHY GREEN**  
**DINA NGUYEN**  
**VICENTE SARMIENTO**  
**STEPHEN R. SHELDON**  
**JAMES VANDERBILT**  
**BRUCE WHITAKER**  
**ROGER C. YOH, P.E.**



**ORANGE COUNTY WATER DISTRICT**  
ORANGE COUNTY'S GROUNDWATER AUTHORITY

**OFFICERS**

**President**  
**DENIS R. BILODEAU, P.E.**

**First Vice President**  
**PHILIP L. ANTHONY**

**Second Vice President**  
**SHAWN DEWANE**

**General Manager**  
**MICHAEL R. MARKUS, P.E., D.WRE**

March 29, 2018

Rob Hunter  
General Manager  
Municipal Water District of Orange County  
18700 Ward Street  
Fountain Valley CA 92708

**SUBJECT: Fiscal Year 2018-19 Budget Preparation**

Dear Mr. Hunter:

The Municipal Water District of Orange County (MWDOC) is in the process of preparing its FY2018-19 budget and has been describing this work to its member agencies over the past few months. Orange County Water District (OCWD) appreciates this open, interactive and transparent budget process. OCWD would like to provide three comments for your Board's consideration.

1. The draft March 2018 budget includes funding for 9 trips (3 Association related and 6 advocacy) to Washington DC which seems excessive. We believe that 1 Association and quarterly (4) advocacy trips would be more appropriate, which would result in a reduction to the proposed budget of approximately \$26,800. The District is aware of other MWDOC member agencies with this same concern.
2. We concur with the MWDOC Administration & Finance Committee's recommendation on February 14<sup>th</sup> to remove membership in the Association of Metropolitan Water Agencies from the budget and would further ask consideration for removal of the membership for the California Council for Environmental & Economic Balance, which appears to be more a business-related organization. Removal of these two memberships would result in a reduction to the proposed budget of approximately \$71,300.
3. MWDOC has decided to maintain General Operation reserves at the higher 180 days level versus 90 days. This amounts to approximately an additional \$1.6 million in reserves. OCWD is unaware of the justification to maintain the higher reserve level. MWDOC has also decided to begin making new \$207,000 annual payments towards funding its \$2.2 million CALPERS unfunded liability. OCWD suggests transferring the \$1.6 million in the MWDOC General Operation reserve towards the CALPERS unfunded liability. The net remaining CALPERS unfunded liability would



be about \$0.6 million. MWDOC could then reduce the annual transfers to fund this liability to about \$60,000. The proposed FY2018-19 MWDOC meter charge increase could then be significantly reduced.

If these recommendations are implemented it would result in a very minor increase in rates and still be compliant with the MWDOC reserve policy.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'MR Markus', with a long horizontal flourish extending to the right.

Michael R. Markus, P.E., D.WRE, BCEE, F.ASCE  
General Manager

Cc OCWD Board of Directors



## SOUTH COAST



## WATER DISTRICT

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### Board of Directors

William Green  
*President*

Wayne Rayfield  
*Vice President*

Dennis Erdman  
*Director*

Doug Erdman  
*Director*

Rick Erkeneff  
*Director*

January 24, 2018

Mr. Rob Hunter  
General Manager  
Municipal Water District of Orange County  
18700 Ward Street  
Fountain Valley, CA 92708

Dear Rob:

Thank you for your letter of November 27, 2017 asking for member agency budget suggestions. Recently South Coast Water District completed a district-specific water reliability study as a logical follow-on to the Orange County water reliability study sponsored by the Municipal Water District of Orange County (MWDOC). South Coast Water District has also reviewed the System Reliability Report from the MWDOC Planning & Operations Committee meeting of January 2, 2018. Our District agrees with the analysis demonstrating the cost effectiveness of the Doheny Ocean Desalination Project for the system component of water reliability. South Coast Water District's analysis has indicated significantly lower unit cost for a 15 MGD Doheny Ocean Desalination Plant compared to a 3 to 5 MGD plant. South Coast Water District requests that MWDOC continue to participate in and evaluate efforts to assess and implement Orange County water reliability projects and especially the 15 MGD Doheny Ocean Desalination Project. These actions by MWDOC to increase both the system and supply reliability would be to the benefit of all of Orange County.

Sincerely,

William Green  
President  
Board of Directors

Andrew Brunhart  
General Manager

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JAN 26 2017

MWD OF OC



DIRECTORS

PHILIP L. ANTHONY  
DENIS R. BILODEAU, P.E.  
SHAWN DEWANE  
CATHY GREEN  
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STEPHEN R. SHELDON  
JAMES VANDERBILT  
BRUCE WHITAKER  
ROGER C. YOH, P.E.



**ORANGE COUNTY WATER DISTRICT**  
ORANGE COUNTY'S GROUNDWATER AUTHORITY

OFFICERS

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**First Vice President**  
PHILIP L. ANTHONY  
  
**Second Vice President**  
SHAWN DEWANE  
  
**General Manager**  
MICHAEL R. MARKUS, P.E., D.WRE

December 21, 2017

Mr. Robert Hunter  
General Manager  
Municipal Water District of Orange County  
18700 Ward Street  
Fountain Valley CA 92708

SUBJECT: Water Resources Policy Issues with the Metropolitan Water District

Dear Mr. Hunter:

The Orange County Water District (OCWD) would like to make the Municipal Water District of Orange County (MWDOC) aware of issues that are of importance to OCWD regarding groundwater matters that it would like to be addressed with the Metropolitan Water District of Southern California (MWD) this coming year.

OCWD requests that appropriate consideration be focused on the significant MWD policy issues listed below that affect the management of the OCWD groundwater basin and groundwater basins throughout Southern California. We envision a collaborative process between OCWD, MWDOC and MWD in dealing with each of these issues, as they can be quite complicated.

1. **Establish a permanent regional In-lieu program that encourages the storage of additional water during periods when MWD is at risk of losing excess imported water supplies.** The In-lieu program that was developed for FY2017-18 under the Cyclic Agreement program is a great example of how excess imported water supplies can be brought into Southern California's groundwater basins. Imported water that MWD was at risk of losing is now being recharged into local groundwater basins. MWDOC's work and effort to create this program is greatly appreciated. Unfortunately the current In-lieu program is only available during FY2017-18. OCWD suggests MWDOC encourage the MWD Board to consider the establishment of a permanent In-lieu program that could be exercised during times of abundance so operational flexibility is always available to MWD in the future to ensure that excess imported water supplies are never lost to the region.
2. **Modify the Water Supply Allocation Plan rules to include Groundwater Basin Agencies in a more consistent manner.** The Water Supply Allocation Plan



(WSAP) rules and requirements that currently exist were approved by MWD in December 2014. Under the WSAP rules, groundwater basin agencies can receive imported water during water shortages, however, the rules to do so are restrictive with respect to the management of local groundwater basins.

OCWD typically purchases untreated full service water to recharge the groundwater basin to meet annual consumptive demands. Purchasing this water allows the District to increase the annual natural yield of the groundwater basin. OCWD believes that the purchase of untreated full service water to meet consumptive demands is practically identical to other MWD member agencies that purchase untreated full service water, which is then treated at a treatment plant, to meet their own consumptive demands; the only difference is that OCWD is just using the groundwater basin to treat the water.

In operating a groundwater basin there may be years when the basin is being refilled (such as FY2017-18 with the purchase of approximately 100,000 acre-feet of In-Lieu water) and there will be years when the basin is being overdrafted. But over the long-term, any MWD imported water that is purchased by OCWD will eventually be used to meet consumptive water demands. The use of a long-term average by MWD in determining how much imported water is typically purchased by a groundwater basin manager such as OCWD for use in allocating water under the WSAP should fully account for any large fluctuations in annual purchases.

OCWD is requesting that the WSAP rules that pertain to groundwater agencies be less restrictive and more consistent with other MWD member agencies who take full service treated or untreated MWD supplies to meet consumptive water demands.

3. **Determine the terms necessary to phase-out the MWD Conjunctive Use Program (CUP) storage agreement.** Now that the OCWD, MWDOC and MWD have developed and executed a Cyclic Agreement, the value and utility of the existing CUP program has diminished. The Cyclic Agreement is much easier to operate and allows MWD to pre-deliver excess water supplies to the OCWD groundwater basin at MWD's convenience. Operating two separate storage agreements with MWD can be confusing.

The CUP program agreement phases out in 2028. As part of the program MWD initially provided \$23 million to the District to support the construction of new water facilities of which \$15 million was obtained from a Proposition 13 grant. OCWD would like to work with MWDOC and MWD to determine what the appropriate terms would be to phase out the CUP program sooner.

4. **Obtain MWD's approval to pump potable water supplies into MWD pipeline facilities**

An extensive imported water pipeline network has been constructed in Orange County to distribute MWD supplies to various agencies. As has been demonstrated



over the past few years, flows in these facilities have significantly declined. Substantial unused capacity exists in these pipelines which have been partially funded by Orange County rate payers.

OCWD and MWDOC have conceptually developed projects over the years that could have taken advantage of this unused capacity to transport potable groundwater and/or ocean desalination water to different retail water agencies in the region. Unfortunately, along the way, we have been unable to develop final terms and conditions from MWD for these potential projects to use these facilities.

Some progress has been made in that MWD seems agreeable to a dividing line of responsibility for water quality between MWD and the agencies downstream of where water would be introduced by the local agencies. OCWD would like to work with both MWDOC and MWD in developing appropriate terms and conditions for these types of projects.

OCWD would also like to note that this list of issues was reviewed with the OCWD Groundwater Producers at their meeting of November 8, 2017. The Producers concurred with the importance of this effort.

Thank you for consideration of these important requests.

Sincerely,



Michael R. Markus, P.E., D.WRE, BCEE, F.ASCE  
General Manager

Cc: MWDOC Board of Directors  
MWDOC MWD Directors: Larry McKenney & Linda Ackerman  
MWD Directors: Peter Beard, Stephen Faessel & Michele Martinez  
OCWD Board of Directors  
OCWD Groundwater Producers





## **Annual Budget for Fiscal Year 2018-19**

**Third Draft**

**MWDOC's mission is:**

***To provide reliable, high-quality supplies from MWD and other sources to meet present and future needs, at an equitable and economical cost, and to promote water use efficiency for all of Orange County***



**Exhibit A2**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**CORE FUND**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>OPERATING EXPENSES:</b>						
Salaries & Wages	\$ 3,143,264	\$ 2,974,005	\$ (169,259)	\$ 3,104,292	\$ 130,287	\$ (38,972)
Employee Benefits	929,655	909,766	(19,889)	979,729	69,962	50,073
Director Compensation	243,197	213,069	(30,128)	255,360	42,291	12,163
Director Benefits	81,728	83,323	1,594	94,767	11,444	13,038
MWD Representation	138,969	123,774	(15,195)	145,920	22,146	6,951
CALPERS Unfunded Liability Contribution	-	-	-	207,000	207,000	207,000
Overhead Reimbursement	(151,910)	(144,098)	7,812	(161,317)	(17,220)	(9,408)
Health Insurance Coverage for Retirees	59,554	54,354	(5,200)	70,519	16,165	10,965
Audit Expense	40,000	19,000	(21,000)	29,000	10,000	(11,000)
Automotive & Toll Road Expenses	17,400	19,040	1,640	18,262	(778)	862
Conference Expense - Staff	38,945	31,564	(7,381)	42,880	11,316	3,935
Conference Expense - Directors	23,700	22,500	(1,200)	24,930	2,430	1,230
Engineering Expense	360,000	263,000	(97,000)	330,000	67,000	(30,000)
Insurance Expense	110,250	110,000	(250)	138,500	28,500	28,250
Legal Expense - General	250,000	228,526	(21,474)	255,000	26,474	5,000
Maintenance Expense	123,500	115,446	(8,054)	132,796	17,350	9,296
Membership / Sponsorship	142,102	138,641	(3,461)	141,662	3,021	(440)
CDR Participation	48,803	43,803	(5,000)	47,044	3,241	(1,759)
Miscellaneous Expense	124,650	105,499	(19,151)	134,430	28,931	9,780
Postage / Mail Delivery	9,700	8,622	(1,078)	8,600	(22)	(1,100)
Professional Fees	983,678	830,683	(152,995)	862,921	32,238	(120,757)
Rents & Leases	8,400	3,342	(5,058)	3,460	118	(4,940)
Outside Printing, Subscription & Books	28,775	28,355	(420)	34,573	6,218	5,798
Office Supplies	35,580	35,500	(80)	36,000	500	420
Building Repair & Maintenance	11,000	20,000	9,000	20,000	-	9,000
Computer Maintenance	10,000	7,878	(2,122)	8,000	122	(2,000)
Business Expense	5,200	5,642	442	5,600	(42)	400
Software Support & Expense	93,154	78,263	(14,891)	97,795	19,532	4,641
Computers and Equipment	33,050	29,639	(3,411)	11,850	(17,789)	(21,200)
Telecommunications Expense	21,300	14,800	(6,500)	20,178	5,378	(1,122)
Temporary Help Expense	5,000	4,775	(225)	5,000	225	-
Training Expense	10,000	8,000	(2,000)	25,000	17,000	15,000
Tuition Reimbursement	5,000	-	(5,000)	5,000	5,000	-

(1)

(2)



**Exhibit A2**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**CORE FUND**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>OPERATING EXPENSES: continued</b>						
Travel & Accommodations - Staff	95,600	79,853	(15,747)	99,600	19,747	4,000
Travel & Accommodations - Directors	49,850	46,752	(3,098)	51,750	4,998	1,900
MWDOC's Contribution to WEROC: Operations	179,217	179,217	-	191,380	12,163	12,163
and to WEROC Capital Improvements	281,657	281,657	-	25,488	(256,169)	(256,169)
Capital Acquisition (excluding building)	249,500	170,507	(78,993)	255,500	84,993	6,000
<b>NORMAL OPERATING EXPENSES</b>	<b>\$ 7,839,469</b>	<b>\$ 7,144,698</b>	<b>\$ (694,772)</b>	<b>\$ 7,758,468</b>	<b>\$ 613,770</b>	<b>\$ (81,001)</b>
MWDOC's Building Expense	\$ 356,400	\$ 371,923	\$ 15,523	\$ 531,827	\$ 159,904	\$ 175,427
Contribution to Election Reserve	-	304,000	304,000	304,000	-	304,000
<b>TOTAL EXPENSES</b>	<b>\$ 8,195,869</b>	<b>\$ 7,820,621</b>	<b>\$ (375,248)</b>	<b>\$ 8,594,295</b>	<b>\$ 773,674</b>	<b>\$ 398,426</b>

<b>REVENUES:</b>						
Retail Meter Charge	\$ 7,435,834	\$ 7,435,834	\$ -	\$ 7,697,006	\$ 261,172	\$ 261,172
Ground Water Customer Charge	468,565	468,565	-	499,012	30,447	30,447
Interest Revenue	150,000	287,155	137,155	390,000	102,845	240,000
Miscellaneous Income	3,000	3,000	-	3,000	-	-
<b>TOTAL REVENUES</b>	<b>\$ 8,057,399</b>	<b>\$ 8,194,554</b>	<b>\$ 137,155</b>	<b>\$ 8,589,018</b>	<b>\$ 394,464</b>	<b>\$ 531,619</b>

<b>EFFECT ON RESERVES:</b>						
<b>TOTAL CONTRIBUTION (DRAW) FROM RESERVES</b>	<b>\$ (138,470)</b>	<b>\$ 373,933</b>	<b>\$ 512,403</b>	<b>\$ (5,277)</b>	<b>\$ (379,210)</b>	<b>\$ 133,193</b>

(1) Total FY18-19 Salaries & Wages includes \$35,358 for intern support

(2) Total FY18-19 Benefits includes \$3,655 for intern support. Total Benefits also includes a Calpers contribution for full time employees of 9.409% for classic employees and 6.842% for PEPRA Calpers employees. A further assumption is that medical, dental and vision insurance rates will increase by 8% for calendar year 2018.



**Exhibit A3**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**CHOICE FUNDS**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>OPERATING EXPENSES:</b>						
Salaries & Wages	\$ 427,946	\$ 394,459	\$ (33,487)	\$ 418,691	\$ 24,232	\$ (9,255)
less for Recovery from Grants	(23,279)	(21,400)	1,879	(6,300)	15,100	16,979
Employee Benefits	127,111	113,090	(14,021)	128,836	15,746	1,725
Director Compensation	-	-	-	-	-	-
Director Benefits	-	-	-	-	-	-
MWD Representation	-	-	-	-	-	-
Overhead Reimbursement	151,910	144,098	(7,812)	161,317	17,220	9,407
Health Insurance Coverage for Retirees	-	-	-	-	-	-
Audit Expense	-	-	-	-	-	-
Automotive & Toll Road Expenses	-	-	-	-	-	-
Conference Expense - Staff	-	-	-	-	-	-
Conference Expense - Directors	-	-	-	-	-	-
Engineering Expense	-	-	-	-	-	-
Insurance Expense	-	-	-	-	-	-
Legal Expense - General	-	-	-	-	-	-
Maintenance Expense	-	-	-	-	-	-
Membership / Sponsorship	-	-	-	-	-	-
Miscellaneous Expense	6,000	10,000	4,000	6,000	(4,000)	-
Postage / Mail Delivery	800	400	(400)	400	-	(400)
Professional Fees	556,132	508,472	(47,660)	567,837	59,365	11,705
Rents & Leases	-	-	-	-	-	-
Outside Printing, Subscription & Books	-	-	-	-	-	-
Office Supplies	-	-	-	-	-	-
Computer Maintenance	-	-	-	-	-	-
Software Support & Expense	-	-	-	-	-	-
Telecommunications Expense	-	-	-	-	-	-
Computers and Equipment	-	-	-	-	-	-
Temporary Help Expense	-	-	-	-	-	-
Training Expense	-	-	-	-	-	-
Tuition Reimbursement	-	-	-	-	-	-

(1)

(2)



**Exhibit A3**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**CHOICE FUNDS**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>OPERATING EXPENSES: continued</b>						
Travel & Accommodations - Staff	-	-	-	-	-	-
Travel & Accommodations - Directors	-	-	-	-	-	-
Subtotal Expenses	\$ 1,615,957	\$ 1,149,119	\$ (97,501)	\$ 1,276,781	\$ 127,662	11.11%
<b>TOTAL EXPENSES</b>	<b>\$ 1,246,619</b>	<b>\$ 1,149,119</b>	<b>\$ (97,500)</b>	<b>\$ 1,276,781</b>	<b>\$ 127,662</b>	<b>\$ 30,162</b>

<b>REVENUES:</b>						
Choice Revenue	\$ 1,246,619	\$ 1,149,119	\$ (97,500)	\$ 1,276,781	\$ 127,662	\$ 30,162
<b>TOTAL REVENUES</b>	<b>\$ 1,246,619</b>	<b>\$ 1,149,119</b>	<b>\$ (97,500)</b>	<b>\$ 1,276,781</b>	<b>\$ 127,662</b>	<b>\$ 30,162</b>

(1) Total FY18-19 Salaries & Wages includes \$43,694 for intern support

(2) Total FY18-19 Benefits includes \$4,661 for intern support. Total Benefits also includes a Calpers contribution for full time employees of 9.409% for classic employees and 6.842% for PEPRA Calpers employees. A further assumption is that medical, dental and vision insurance rates will increase by 8% for calendar year 2018.



**Exhibit A4**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**CONSOLIDATED**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET	
<b>OPERATING EXPENSES:</b>							
Salaries & Wages	\$ 3,571,210	\$ 3,368,465	\$ (202,745)	\$ 3,522,983	\$ 154,519	\$ (48,226)	(1)
less for Recovery from Grants	(23,279)	(21,400)	1,879	(6,300)	15,100	16,979	(2)
Employee Benefits	1,056,766	1,022,856	(33,910)	1,108,564	85,708	51,798	
Director Compensation	243,197	213,069	(30,128)	255,360	42,291	12,163	
Director Benefits	81,728	83,323	1,594	94,767	11,444	13,038	
MWD Representation	138,969	123,774	(15,195)	145,920	22,146	6,951	
CALPERS Unfunded Liability Contribution	-	-	-	207,000	207,000	207,000	
Overhead Reimbursement	-	-	-	-	-	-	
Health Insurance Coverage for Retirees	59,554	54,354	(5,200)	70,519	16,165	10,965	
Audit Expense	40,000	19,000	(21,000)	29,000	10,000	(11,000)	
Automotive & Toll Road Expenses	17,400	19,040	1,640	18,262	(778)	862	
Conference Expense - Staff	38,945	31,564	(7,381)	42,880	11,316	3,935	
Conference Expense - Directors	23,700	22,500	(1,200)	24,930	2,430	1,230	
Engineering Expense	360,000	263,000	(97,000)	330,000	67,000	(30,000)	
Insurance Expense	110,250	110,000	(250)	138,500	28,500	28,250	
Legal Expense - General	250,000	228,526	(21,474)	255,000	26,474	5,000	
Maintenance Expense	123,500	115,446	(8,054)	132,796	17,350	9,296	
Membership / Sponsorship	142,102	138,641	(3,461)	141,662	3,021	(440)	
CDR Participation	48,803	43,803	(5,000)	47,044	3,241	(1,759)	
Miscellaneous Expense	130,650	115,499	(15,151)	140,430	24,931	9,780	
Postage / Mail Delivery	10,500	9,022	(1,478)	9,000	(22)	(1,500)	
Professional Fees	1,539,810	1,339,155	(200,655)	1,430,758	91,603	(109,052)	
Rents & Leases	8,400	3,342	(5,058)	3,460	118	(4,940)	
Outside Printing, Subscription & Books	28,775	28,355	(420)	34,573	6,218	5,798	
Office Supplies	35,580	35,500	(80)	36,000	500	420	
Building Repair & Maintenance	11,000	20,000	9,000	20,000	-	9,000	
Computer Maintenance	10,000	7,878	(2,122)	8,000	122	(2,000)	
Business Expense	5,200	5,642	442	5,600	(42)	400	
Software Support & Expense	93,154	78,263	(14,891)	97,795	19,532	4,641	
Computers and Equipment	33,050	29,639	(3,411)	11,850	(17,789)	(21,200)	
Telecommunications Expense	21,300	14,800	(6,500)	20,178	5,378	(1,122)	
Temporary Help Expense	5,000	4,775	(225)	5,000	225	-	
Training Expense	10,000	8,000	(2,000)	25,000	17,000	15,000	
Tuition Reimbursement	5,000	-	(5,000)	5,000	5,000	-	



**Exhibit A4**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**CONSOLIDATED**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>OPERATING EXPENSES: continued</b>						
Travel & Accommodations - Staff	95,600	79,853	(15,747)	99,600	19,747	4,000
Travel & Accommodations - Directors	49,850	46,752	(3,098)	51,750	4,998	1,900
MWDOC's Contribution to WEROC: Operations	179,217	179,217	-	191,380	12,163	12,163
and to WEROC Capital Improvements	281,657	281,657	-	25,488	(256,169)	(256,169)
Capital Acquisition (excluding building)	249,500	170,507	(78,993)	255,500	84,993	6,000
<b>NORMAL OPERATING EXPENSES</b>	<b>\$ 9,086,088</b>	<b>\$ 8,293,817</b>	<b>\$ (792,272)</b>	<b>\$ 9,035,249</b>	<b>\$ 741,432</b>	<b>\$ (50,839)</b>
MWDOC's Building Expense	\$ 356,400	\$ 371,923	\$ 15,523	\$ 531,827	\$ 159,904	\$ 175,427
Contribution to Election Reserve	-	304,000	304,000	304,000	-	304,000
<b>TOTAL EXPENSES</b>	<b>\$ 9,442,488</b>	<b>\$ 8,969,740</b>	<b>\$ (472,749)</b>	<b>\$ 9,871,076</b>	<b>\$ 901,336</b>	<b>\$ 428,588</b>

<b>REVENUES:</b>						
Retail Meter Charge	\$ 7,435,834	\$ 7,435,834	\$ -	\$ 7,697,006	\$ 261,172	\$ 261,172
Ground Water Customer Charge	468,565	468,565	-	499,012	30,447	30,447
Interest Revenue	150,000	287,155	137,155	390,000	102,845	240,000
Miscellaneous Income	3,000	3,000	-	3,000	-	-
Choice Revenue	1,246,619	1,149,119	(97,500)	1,276,781	127,662	30,162
<b>TOTAL REVENUES</b>	<b>\$ 9,304,018</b>	<b>\$ 9,343,673</b>	<b>\$ 39,655</b>	<b>\$ 9,865,799</b>	<b>\$ 522,126</b>	<b>\$ 561,781</b>

<b>EFFECT ON RESERVES:</b>						
<b>TOTAL CONTRIBUTION (DRAW) FROM RESERVES</b>	<b>\$ (138,470)</b>	<b>\$ 373,933</b>	<b>\$ 512,403</b>	<b>\$ (5,277)</b>	<b>\$ (379,210)</b>	<b>\$ 133,193</b>

(1) Total FY18-19 Salaries & Wages includes \$79,052 for intern support

(2) Total Benefits includes \$8,316 for intern support. Total Benefits also includes a Calpers contribution for full time employees of 9.409% for classic employees and 6.842% for PEPRAs Calpers employees. A further assumption is that medical, dental and vision insurance rates will increase by 8% for calendar year 2018.



**Exhibit A5**  
**SUMMARY OF REVENUES AND EXPENSES BY LINE ITEMS**  
**WATER FUND**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>Water Revenues</b>						
Water Sales	\$ 171,308,629	\$ 229,271,993	\$ 57,963,364	\$ 205,393,716	\$ (23,878,277)	\$ 34,085,087
Local Resource Program Incentives	(16,574,748)	(16,413,806)	160,942	(16,416,776)	(2,970)	157,972
Readiness-To-Serve Charge	10,397,278	10,347,493	(49,785)	10,902,178	554,685	504,900
Capacity Charge	3,544,800	3,699,888	155,088	3,854,976	155,088	310,176
Interest Revenue - Tier 2 Cont.	9,400	10,375	975	13,000	2,625	3,600
SCP/SAC Pipeline Surcharge	423,000	356,000	(67,000)	365,000	9,000	(58,000)
<b>TOTAL WATER REVENUES</b>	<b>\$ 169,108,359</b>	<b>\$ 227,271,943</b>	<b>\$ 58,163,584</b>	<b>\$ 204,112,094</b>	<b>\$ (23,159,849)</b>	<b>\$ 35,003,735</b>
<b>Water Expenses</b>						
Water Purchases	\$ 171,308,629	\$ 229,271,993	\$ 57,963,364	\$ 205,393,716	\$ (23,878,277)	\$ 34,085,087
Local Resource Program Incentives	(16,574,748)	(16,413,806)	160,942	(16,416,776)	(2,970)	157,972
Readiness-To-Serve Charge	10,397,278	10,347,493	(49,785)	10,902,178	554,685	504,900
Capacity Charge	3,544,800	3,699,888	155,088	3,854,976	155,088	310,176
SCP/SAC Pipeline Surcharge	423,000	356,000	(67,000)	365,000	9,000	(58,000)
<b>TOTAL WATER EXPENSES</b>	<b>\$ 169,098,959</b>	<b>\$ 227,261,568</b>	<b>\$ 58,162,609</b>	<b>\$ 204,099,094</b>	<b>\$ (23,162,474)</b>	<b>\$ 35,000,135</b>
<b>Changes to Fund Balance:</b>						
Tier 2 Contingency	\$ 9,400	\$ 10,375	\$ 975	\$ 13,000	\$ 2,625	\$ 3,600



**Exhibit A6**  
**SUMMARY OF FUNDING AND EXPENSES**  
**For All Water Use Efficiency Programs**

	FY 2017-2018 ADOPTED BUDGET	FY 2017-2018 PROJECTED ACTUALS	VARIANCE ACTUALS TO BUDGET	FY 2018-2019 PROPOSED BUDGET	VARIANCE TO PROJECTED ACTUALS	VARIANCE TO FY 2017-2018 BUDGET
<b>Funding</b>						
Metropolitan Water District	\$ 1,001,682	\$ 562,259	\$ (439,423)	\$ 680,000	\$ 117,741	\$ (321,682)
USBR	258,749	443,369	184,620	127,380	(315,989)	(131,369)
DWR	708,833	563,740	(145,093)	714,755	151,015	5,922
Member Agencies	2,210,331	1,255,917	(954,414)	1,356,000	100,083	(854,331)
MWDOC	-	44,000	44,000	94,000	50,000	94,000
<b>TOTAL OUTSIDE FUNDING</b>	<b>\$ 4,179,594</b>	<b>\$ 2,869,285</b>	<b>\$ (1,310,309)</b>	<b>\$ 2,972,135</b>	<b>\$ 102,850</b>	<b>\$ (1,207,459)</b>
<b>Program Expenses Funded from Outside Sources</b>						
Project Administration - Staff Time	\$ 23,279	\$ 14,278	\$ (9,001)	\$ 6,300	\$ (7,978)	\$ (16,979)
Monitoring and Evaluation	-	6,803	6,803	-	(6,803)	-
Installation Verification	65,000	151,511	86,511	199,000	47,489	134,000
Rebate Incentives	4,091,316	2,513,912	(1,577,404)	2,766,835	252,923	(1,324,481)
Databasing	-	1,350	1,350	-	(1,350)	-
<b>TOTAL PROGRAMS EXPENSES</b>	<b>\$ 4,179,595</b>	<b>\$ 2,687,854</b>	<b>\$ (1,491,741)</b>	<b>\$ 2,972,135</b>	<b>\$ 284,281</b>	<b>\$ (1,207,460)</b>



**Exhibit B**  
**Expenditures by Program**

Cost Center	PROGRAM	FY 2017-2018 BUDGET FTE	FY 2018-2019 BUDGET FTE	FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
11	Administrative - Board	1.89	1.85	\$ 1,148,384	\$ 1,084,273	\$ 1,188,992
12	Administrative - General	3.86	3.45	645,146	575,554	616,618
13	Personnel / Staff Development	1.40	1.40	335,590	296,226	315,728
19	Overhead	3.92	3.79	1,105,965	975,686	1,283,116
21	Planning & Resource Development	3.58	3.85	738,946	723,935	785,812
22	Research Participation	0.00	0.00	48,803	43,803	47,044
23	Met Issues and Special Projects	4.48	4.14	900,499	772,435	843,133
31	Governmental Affairs	1.03	0.96	483,719	438,754	480,284
35	Water Use Efficiency (Core)	0.58	0.62	417,986	419,375	386,212
32	Public Affairs	3.74	3.68	722,010	652,677	756,078
41	Finance	3.13	3.18	552,106	441,969	508,581
45	Information Technology	0.99	1.00	279,442	259,137	330,002
25	MWDOC's Contribution to WEROC	2.00	2.55	460,874	460,874	216,868
<b>CORE TOTAL</b>		<b>30.61</b>	<b>30.48</b>	<b>\$ 7,839,469</b>	<b>\$ 7,144,698</b>	<b>\$ 7,758,468</b>
62	Water Use Efficiency Program	5.77	5.13	835,106	734,623	839,155
63	School Programs	0.10	0.21	411,513	414,496	437,626
<b>CHOICE TOTAL</b>		<b>5.88</b>	<b>5.33</b>	<b>\$ 1,246,619</b>	<b>\$ 1,149,119</b>	<b>\$ 1,276,781</b>
<b>CORE &amp; CHOICE TOTAL</b>		<b>36.49</b>	<b>35.81</b>	<b>\$ 9,086,088</b>	<b>\$ 8,293,817</b>	<b>\$ 9,035,249</b>
Includes:						
	Full-time employees	30.00	30.00			
	Part-time employees	1.99	0.72			
	Interns	2.50	2.50			
	WEROC Full-time employees	2.00	2.00			
	WEROC Part-time employees	0.00	0.59			

(1)

(1) Total Operational Costs of WEROC is allocated among MWDOC, OCWD, OCSD, Anaheim, Santa Ana, Fullerton and South Orange County Wastewater Authority. Capital Expenditures are provided by MWDOC. Dollars shown are MWDOC's share only.



**Municipal Water District of Orange County**  
**2018-2019 FISCAL MASTER PLAN PROJECTIONS**  
(in thousands)

	Projected ACTUALS FY17-18	BUDGET FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	FY23-24
Beginning Designated Reserve Balance - MWDOC	\$6,004	\$ 6,378	\$ 6,373	\$ 6,465	\$ 6,794	\$ 7,117	\$ 7,410
Net OPEB Asset	484	484	484	484	484	484	484
OPEB Reserve	209	209	209	209	209	209	209
Adjusted Reserve Balance	5,311	5,685	5,680	5,772	6,101	6,424	6,717
<b>Revenues</b>							
Water Rate Revenues:							
Retail Meter Agency Charge	7,436	7,697	7,766	7,844	7,950	8,033	8,125
Ground Water Customer Charge	469	499	509	519	530	540	551
Subtotal	7,904	8,196	8,275	8,363	8,480	8,573	8,676
Other Revenues:							
Choice Revenues	1,149	1,277	1,302	1,328	1,355	1,382	1,410
Interest Earnings	287	390	142	143	177	213	249
Misc./Reimbursements	3	3	3	3	3	3	3
Subtotal	1,439	1,670	1,447	1,474	1,535	1,598	1,662
<b>Total Revenues</b>	9,344	9,866	9,722	9,837	10,015	10,171	10,338
<b>Expenses</b>							
Core Expenses	6,974	7,503	7,653	7,806	7,962	8,121	8,284
Choice Expenses	1,149	1,277	1,302	1,328	1,355	1,382	1,410
Capital Acquisitions (not including building)	171	256	20	20	20	20	20
<b>Total Expenses w/o Building &amp; Election</b>	8,294	9,035	8,975	9,154	9,337	9,523	9,714
<b>Revenue Over Expenses w/o Building &amp; Election</b>	1,050	831	747	683	678	647	625
<b>ELECTION Reserve Beginning Balance</b>	304	608	390	690	298	602	384
<b>Annual Election Reserve Contribution</b>	304	304	300	304	304	304	304
<b>Annual Election Expense</b>	-	522	-	696	-	522	-
<b>Election Reserve Ending Balance</b>	608	390	690	298	602	384	688
<b>BUILDING Reserve Beginning Balance</b>	350	350	350	350	350	350	350
<b>Annual Building Reserve Contribution</b>	372	532	355	50	50	50	50
<b>Annual Building Expense</b>	372	532	355	50	50	50	50
<b>Building Reserve Ending Balance</b>	350	350	350	350	350	350	350
<b>CASH FLOW Reserve Beginning Balance</b>	1,500	-	-	-	-	-	-
<b>Annual Cash Flow Reserve Contribution</b>	-	-	-	-	-	-	-
<b>Cash Flow Reserve Ending Balance</b>	1,500	1,500	1,500	1,500	1,500	1,500	1,500
<b>Adjustments to the General Fund Reserve</b>							
MWDOC's Contribution to OPEB Trust Fund							
<b>Ending General Fund &amp; Cash Flow Reserves</b>	\$ 4,727	\$ 4,940	\$ 4,732	\$ 5,453	\$ 5,472	\$ 5,983	\$ 5,950
Document does not reflect MWDOC's irrevocable trust towards OPEB liability							
<b>MWDOC Water Rates</b>							
Water Sales in Acre Feet	259,619	216,233	220,121	230,154	238,554	240,123	245,123
Total Retail Customer Meters	624,860	628,327	631,421	635,111	641,151	645,211	650,010
OCWD BPP %	75%	75%	75%	75%	75%	75%	75%
<b>Increment Rate</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Connection Charge</b>	\$ 11.90	\$ 12.25	\$ 12.30	\$ 12.35	\$ 12.40	\$ 12.45	\$ 12.50
Fixed Charge %		100%	100%	100%	100%	100%	100%
<b>Rate Increase Proposal:</b>							
Increment Rate	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Connection Charge	\$ 0.35	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05	\$ 0.05

1 Assumptions for FMP:

Inflation factor: 2.00% per year

Rate of return on Investment of portfolio: 1.25% per year

**Working Capital and Interest Revenue Projections**

	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23
<b>Working Capital:</b>					
Designated Reserve Fund	5,679.93	5,772	6,101	6,424	6,717
General Fund Float	1,000	1,000	1,000	1,000	1,000
WUE use of fund	(200)	(200)	(200)	(200)	(200)
Water Payment Float	4,850	4,875	4,900	4,925	4,950
Average Working Capital	11,330	11,447	11,801	12,149	12,467
Interest rate	1.25%	1.25%	1.50%	1.75%	2.00%
<b>Interest Revenue Projections:</b>					
Interest income - General	142	143	177	213	249
<b>Total Interest Revenue Projections</b>	142	143	177	213	249



## Total Core Expenses

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	3,143,264	2,974,005	3,104,292
6090	Directors Compensation - MWDOC	243,197	213,069	255,360
6095	Directors Compensation - MWD	138,969	123,774	145,920
6105	Benefits - Admin	929,655	909,766	979,729
	CALPERS Unfunded Liability Contribution	-	-	207,000
	Overhead Reimbursement	(151,910)	(144,098)	(161,317)
6115	Benefits - Directors	81,728	83,323	94,767
6120	Health Insurance Coverage for Retirees	59,554	54,354	70,519
6205	Training	10,000	8,000	25,000
6210	Tuition Reimbursement	5,000	-	5,000
6220	Temporary Help	5,000	4,775	5,000
7010	Engineering - Outside Services	360,000	263,000	330,000
7020	Legal - General	250,000	228,526	255,000
7030	Audit	40,000	19,000	29,000
7040	Other Professional Fees	983,678	830,683	862,921
7110	Conference - Employee	38,945	31,564	42,880
7115	Conference - Directors	23,700	22,500	24,930
7150	Travel & Accommodations - Employee	95,600	79,853	99,600
7155	Travel & Accommodations - Director	49,850	46,752	51,750
7210	Membership / Sponsorship	142,102	138,641	141,662
7250	CDR Participation	48,803	43,803	47,044
7305	Business Expense	5,200	5,642	5,600
7310	Office Maintenance	123,500	115,446	132,796
7315	Building Repair & Maintenance	11,000	20,000	20,000
7320	Rents & Leases	8,400	3,342	3,460
7330	Office Supplies	35,580	35,500	36,000
7340	Postal / Mail Delivery	9,700	8,622	8,600
7350	Subscriptions / Books	1,500	1,500	1,500
7360	Reproduction Expense	27,275	26,855	33,073
7410	Computer & Peripherals Maint	10,000	7,878	8,000
7430	Software Purchase	44,260	36,635	45,861
7440	Software Support	48,894	41,628	51,934
7540	Computers and Equipment	33,050	29,639	11,850
7580	Maintenance Expense	-	-	-
7610	Automotive / Mileage	16,400	18,240	17,262
7615	Toll Road Charges	1,000	800	1,000
7620	Insurance Expense	110,250	110,000	138,500
7640	Utilities - Telephone	21,300	14,800	20,178
7650	Bank Fees	11,000	14,000	21,225
7670	Miscellaneous Expenses	113,650	91,499	113,205
8810	Capital Acquisition	249,500	170,507	255,500
	<b>Total Expenditure</b>	<b>7,378,595</b>	<b>6,683,824</b>	<b>7,541,599</b>

MWDOC's Contribution:

to WEROC Capital improvements	281,657	281,657	25,488
to WEROC Operations	179,217	179,217	191,380
MWDOC's Contribution to Election Rsrv	-	304,000	304,000
MWDOC's Building Expense	356,400	371,923	531,827
	<u>8,195,869</u>	<u>7,820,621</u>	<u>8,594,295</u>



## Total Choice Revenue and Expense

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
	Choice Revenue	954,566	1,094,256	1,276,781
4205	School Contracts	70,000	70,000	-
4705	Prior Year Carry Over	222,053	-	-
		-	-	-
	Choice billing over/under	-	(15,137)	-
		-	-	-
		-	-	-
		-	-	-
		-	-	-
	<b>Total Revenue</b>	1,246,619	1,149,119	1,276,781

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	427,946	394,459	418,691
	S & B Reimb. DSC or Recov from Grants	(23,279)	(21,400)	(6,300)
6090	Directors Compensation - MWDOC	-	-	-
6095	Directors Compensation - MWD	-	-	-
6105	Benefits - Admin	127,111	113,090	128,836
	Overhead Reimbursement	151,910	144,098	161,317
6115	Benefits - Directors	-	-	-
6120	Health Insurance Coverage for Retirees	-	-	-
6205	Training	-	-	-
6210	Tuition Reimbursement	-	-	-
6220	Temporary Help	-	-	-
7010	Engineering - Outside Services	-	-	-
7020	Legal - General	-	-	-
7030	Audit	-	-	-
7040	Other Professional Fees	165,972	113,472	165,972
	Other Professional Fees - School Programs	390,160	395,000	401,865
7110	Conference - Employee	-	-	-
7115	Conference - Directors	-	-	-
7150	Travel & Accommodations - Employee	-	-	-
7155	Travel & Accommodations - Director	-	-	-
7210	Membership / Sponsorship	-	-	-
7250	CDR Participation	-	-	-
7310	Office Maintenance	-	-	-
7320	Rents & Leases	-	-	-
7330	Office Supplies	-	-	-
7340	Postal / Mail Delivery	800	400	400
7350	Subscriptions / Books	-	-	-
7360	Reproduction Expense	-	-	-
7410	Computer & Peripherals Maint	-	-	-
7430	Software Purchase	-	-	-
7440	Software Support	-	-	-
7540	Computers and Equipment	-	-	-
7580	Maintenance Expense	-	-	-
7610	Automotive / Mileage	-	-	-
7615	Toll Road Charges	-	-	-
7620	Insurance Expense	-	-	-
7640	Utilities - Telephone	-	-	-
7650	Bank Fees	-	-	-
7670	Miscellaneous Expenses	6,000	10,000	6,000
8410	Overhead Reimbursement	-	-	-
8610	Depreciation Expense	-	-	-
8710	Election Expenses	-	-	-
8810	Capital Acquisition	-	-	-
	<b>Total Expenditure</b>	1,246,619	1,149,119	1,276,781



## Total Core and Choice Expenses

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	3,571,210	3,368,465	3,522,983
	S & B Reimb. DSC or Recov from Grants	(23,279)	(21,400)	(6,300)
6090	Directors Compensation - MWDOC	243,197	213,069	255,360
6095	Directors Compensation - MWD	138,969	123,774	145,920
6105	Benefits - Admin	1,056,766	1,022,856	1,108,564
	CALPERS Unfunded Liability Contribution	-	-	207,000
	Overhead Reimbursement	-	-	-
6115	Benefits - Directors	81,728	83,323	94,767
6120	Health Insurance Coverage for Retirees	59,554	54,354	70,519
6205	Training	10,000	8,000	25,000
6210	Tuition Reimbursement	5,000	-	5,000
6220	Temporary Help	5,000	4,775	5,000
7010	Engineering - Outside Services	360,000	263,000	330,000
7020	Legal - General	250,000	228,526	255,000
7030	Audit	40,000	19,000	29,000
7040	Other Professional Fees	1,149,650	944,155	1,028,893
	Other Professional Fees - School Programs	390,160	395,000	401,865
7110	Conference - Employee	38,945	31,564	42,880
7115	Conference - Directors	23,700	22,500	24,930
7150	Travel & Accommodations - Employee	95,600	79,853	99,600
7155	Travel & Accommodations - Director	49,850	46,752	51,750
7210	Membership / Sponsorship	142,102	138,641	141,662
7250	CDR Participation	48,803	43,803	47,044
7305	Business Expense	5,200	5,642	5,600
7310	Office Maintenance	123,500	115,446	132,796
7315	Building Repair & Maintenance	11,000	20,000	20,000
7320	Rents & Leases	8,400	3,342	3,460
7330	Office Supplies	35,580	35,500	36,000
7340	Postal / Mail Delivery	10,500	9,022	9,000
7350	Subscriptions / Books	1,500	1,500	1,500
7360	Reproduction Expense	27,275	26,855	33,073
7410	Computer & Peripherals Maint	10,000	7,878	8,000
7430	Software Purchase	44,260	36,635	45,861
7440	Software Support	48,894	41,628	51,934
7540	Computers and Equipment	33,050	29,639	11,850
7580	Maintenance Expense	-	-	-
7610	Automotive / Mileage	16,400	18,240	17,262
7615	Toll Road Charges	1,000	800	1,000
7620	Insurance Expense	110,250	110,000	138,500
7640	Utilities - Telephone	21,300	14,800	20,178
7650	Bank Fees	11,000	14,000	21,225
7670	Miscellaneous Expenses	119,650	101,499	119,205
8810	Capital Acquisition	249,500	170,507	255,500
	<b>Total Expenditure</b>	<b>8,625,214</b>	<b>7,832,943</b>	<b>8,818,381</b>

MWDOC's Contribution:

to WEROC Capital improvements	281,657	281,657	25,488
to WEROC Operations	179,217	179,217	191,380
MWDOC's Contribution to Election Rsrv	-	304,000	304,000
MWDOC's Building Expense	356,400	371,923	531,827
	<u>9,442,488</u>	<u>8,969,740</u>	<u>9,871,076</u>



**Administrative - Board**  
**11**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin	265,231	249,935	258,131	
6090	Directors Compensation - MWDOC	243,197	213,069	255,360	1
6095	Directors Compensation - MWD	138,969	123,774	145,920	2
6105	Benefits - Admin	72,968	71,533	77,533	
6115	Benefits - Directors	81,728	83,323	94,767	
6120	Health Insurance Coverage for Retirees				
6205	Training				
6210	Tuition Reimbursement				
6220	Temporary Help				
7010	Engineering - Outside Services				
7020	Legal - General	220,000	218,526	225,000	4
7030	Audit				
7040	Other Professional Fees				
7110	Conference - Employee				
7115	Conference - Directors	23,700	22,500	24,930	5
7150	Travel & Accommodations - Employee				
7155	Travel & Accommodations - Director	49,850	46,752	51,750	5
7210	Membership / Sponsorship	25,141	26,449	27,040	6
7250	CDR Participation				
7310	Office Maintenance				
7320	Rents & Leases				
7330	Office Supplies				
7340	Postal / Mail Delivery	3,900	4,322	4,100	
7350	Subscriptions / Books				
7360	Reproduction Expense				
7410	Computer & Peripherals Maint				
7430	Software Purchase				
7440	Software Support				
7540	Computers and Equipment				
7580	Maintenance Expense				
7610	Automotive / Mileage	9,800	11,840	10,662	
7615	Toll Road Charges	600	450	600	
7620	Insurance Expense				
7640	Utilities - Telephone	1,300	800	1,200	
7650	Bank Fees				
7670	Miscellaneous Expenses	12,000	11,000	12,000	7
8410	Overhead Reimbursement				
8810	Capital Acquisition				
	<b>Total Expenditure</b>	1,148,384	1,084,273	1,188,992	

1&2 Based on 5% increase from Jan to June 2019.

3 Best, Best & Krieger \$ 200,000  
Aleshire & Wynder \$ 18,526  
\$ 218,526

4 Best, Best & Krieger \$ 200,000  
Aleshire & Wynder \$ 25,000  
\$ 225,000

5 See Exhibit F.

6 LAFCO Annual Assessment  
See Exhibit D.

7 Misc board expenses (supplies)

MWDOC's Contribution to Election Rsrv	304,000	304,000
	1,148,384	1,388,273
		1,492,992



**Administrative - General**  
**12**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	291,603	260,091	260,272
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	98,842	87,263	94,306
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help	5,000	4,775	5,000
7010	Engineering - Outside Services			
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees	5,000	5,000	6,000
7110	Conference - Employee	38,945	31,564	42,880
7115	Conference - Directors			
7150	Travel & Accommodations - Employee	95,600	79,853	99,600
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship	94,356	90,353	91,660
7250	CDR Participation			
7305	Business Expense	5,200	5,642	5,600
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books	1,500	1,500	1,500
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage	6,600	6,400	6,600
7615	Toll Road Charges	400	350	400
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses	2,100	2,763	2,800
8810	Capital Acquisition			
	<b>Total Expenditure</b>	645,146	575,554	616,618

1 See Exhibit J.

2 See Exhibit E.

3 See Exhibit D.



**Personnel / Staff Development**  
**13**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin	173,664	166,108	179,875	
6090	Directors Compensation - MWDOC				
6095	Directors Compensation - MWD				
6105	Benefits - Admin	51,625	48,818	54,453	
6115	Benefits - Directors				
6120	Health Insurance Coverage for Retirees				
6205	Training	10,000	8,000	25,000	1
6210	Tuition Reimbursement	5,000		5,000	
6220	Temporary Help				
7010	Engineering - Outside Services				
7020	Legal - General	30,000	10,000	30,000	2
7030	Audit				
7040	Other Professional Fees	49,000	48,800		
7110	Conference - Employee				
7115	Conference - Directors				
7150	Travel & Accommodations - Employee				
7155	Travel & Accommodations - Director				
7210	Membership / Sponsorship				
7250	CDR Participation				
7310	Office Maintenance				
7320	Rents & Leases				
7330	Office Supplies				
7340	Postal / Mail Delivery				
7350	Subscriptions / Books				
7360	Reproduction Expense				
7410	Computer & Peripherals Maint				
7430	Software Purchase				
7440	Software Support				
7540	Computers and Equipment				
7580	Maintenance Expense				
7610	Automotive / Mileage				
7615	Toll Road Charges				
7620	Insurance Expense				
7640	Utilities - Telephone				
7650	Bank Fees				
7670	Miscellaneous Expenses	16,300	14,500	21,400	3
8810	Capital Acquisition				
	<b>Total Expenditure</b>	335,590	296,226	315,728	

1 • Staff Technical Training & Leadership  
Development Training

2 • Best, Best & Krieger

3 • Employee Recognition \$ 5,000  
• Applicant Background Checks & Physical \$ 2,500  
• Team Building, Lunch meetings \$ 2,500  
• Holiday Lunch \$ 2,500  
• OCWD Health Fair \$ 200  
• Employee Flu Shots \$ 200  
• Job Ads Recruiting \$ 4,000  
• TAD Executive Assessments \$ 4,500  
\$ 21,400



**Overhead**  
**19**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin	470,533	435,980	444,512	
6090	Directors Compensation - MWDOC				
6095	Directors Compensation - MWD				
6105	Benefits - Admin	134,457	128,455	138,248	
6109	CALPERS Unfunded Liability Contribution			207,000	
6111	Overhead Reimbursement from Choice	(151,910)	(144,098)	(161,317)	
6115	Benefits - Directors				1 Retirees:
6120	Health Insurance Coverage for Retirees	59,554	54,354	70,519	• 12 Retirees
6205	Training				
6210	Tuition Reimbursement				
6220	Temporary Help				2 • Pension Plan administration by
7010	Engineering - Outside Services				Dissinger Associates \$ 4,500
7020	Legal - General				• Cafeteria Plan Wameworks \$ 2,223
7030	Audit				\$ 6,723
7040	Other Professional Fees	6,500	6,200	6,723	2
7110	Conference - Employee				
7115	Conference - Directors				
7150	Travel & Accommodations - Employee				
7155	Travel & Accommodations - Director				
7210	Membership / Sponsorship				
7250	CDR Participation				3 • Window Cleaning \$ 1,200
7310	Office Maintenance	123,500	115,446	132,796	• Sewer Flush & Extra Office Cleaning \$ 1,300
7315	Building Repair & Maintenance	11,000	20,000	20,000	from OCWD \$ 121,780
7320	Rents & Leases	8,400	3,342	3,460	• Plant Maintenance \$ 2,696
7330	Office Supplies	35,580	35,500	36,000	• Landscape/Maintenance Atrium \$ 3,720
7340	Postal / Mail Delivery	5,800	4,300	4,500	• Binding Machine Renewal \$ 700
7350	Subscriptions / Books				• Carpet Cleaning \$ 1,400
7360	Reproduction Expense	3,800	3,700	4,473	\$ 132,796
7410	Computer & Peripherals Maint				
7430	Software Purchase				
7440	Software Support				
7540	Computers and Equipment				4 • Iron Mountain \$ 2,460
7580	Maintenance Expense				• El Toro Water District
7610	Automotive / Mileage				(South EOC site) 1,000
7615	Toll Road Charges				\$ 3,460
7620	Insurance Expense	110,250	110,000	138,500	
7640	Utilities - Telephone	20,000	14,000	18,978	
7650	Bank Fees	11,000	14,000	21,225	5 • Misc equipment repairs, fees etc.
7670	Miscellaneous Expenses	8,000	4,000	4,500	5
8810	Capital Acquisition	249,500	170,507	193,000	6 • Office Furniture/Generator
	<b>Total Expenditure</b>	1,105,965	975,686	1,283,116	See Exhibit H
					7 • Bldg Improvements - Eval / Design / Roof / HVAC
	MWDOC's Building Expense (8811)	356,400	371,923	531,827	7
		1,462,365	1,347,609	1,814,943	



**Planning and  
Resource Development  
21**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	460,941	443,396	490,675
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	116,005	118,539	133,136
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services	155,000	155,000	155,000
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees			
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses	7,000	7,000	7,000
8810	Capital Acquisition			
	<b>Total Expenditure</b>	738,946	723,935	785,812

1 Includes general consulting, reliability of MET, conjunctive use, climate change and value of being reliable. \$5,000 to cover Hazard Mitigation Plan.



**Research Participation**  
**22**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin				
6090	Directors Compensation - MWDOC				
6095	Directors Compensation - MWD				
6105	Benefits - Admin				
6115	Benefits - Directors				
6120	Health Insurance Coverage for Retirees				
6205	Training				
6210	Tuition Reimbursement				
6220	Temporary Help				
7010	Engineering - Outside Services				
7020	Legal - General				
7030	Audit				
7040	Other Professional Fees				
7110	Conference - Employee				
7115	Conference - Directors				
7150	Travel & Accommodations - Employee				
7155	Travel & Accommodations - Director				
7210	Membership / Sponsorship				
7250	CDR & UCI Water Research Center	48,803	43,803	47,044	1
7310	Office Maintenance				
7320	Rents & Leases				
7330	Office Supplies				
7340	Postal / Mail Delivery				
7350	Subscriptions / Books				
7360	Reproduction Expense				
7410	Computer & Peripherals Maint				
7430	Software Purchase				
7440	Software Support				
7540	Computers and Equipment				
7580	Maintenance Expense				
7610	Automotive / Mileage				
7615	Toll Road Charges				
7620	Insurance Expense				
7640	Utilities - Telephone				
7650	Bank Fees				
7670	Miscellaneous Expenses				
8810	Capital Acquisition				
	<b>Total Expenditure</b>	48,803	43,803	47,044	

1 Center for Demographic Research at  
Cal State University Fullerton \$ 47,044



# Met Issues and Special Projects

23

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	536,677	508,337	507,087
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	158,822	156,098	161,046
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services	205,000	108,000	175,000
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees			
7045	Other Professional Fees - MET			
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses			
8810	Capital Acquisition			
	<b>Total Expenditure</b>	900,499	772,435	843,133

See Exhibit J.



**Government Affairs**  
**31**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	124,565	111,218	117,400
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	42,734	39,930	42,784
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services			
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees	294,000	279,505	308,000
	Other Professional Fees - DSC			
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense	420	100	100
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses	22,000	8,000	12,000
8410	Overhead Reimbursement			
8610	Depreciation Expense			
8710	Election Expenses			
8810	Capital Acquisition			
	<b>Total Expenditure</b>	<b>483,719</b>	<b>438,754</b>	<b>480,284</b>

1 • BB&K \$ 90,000  
 • Barker \$ 96,000  
 • Travel/Miscellaneous \$ 7,505  
 • Lewis Consulting \$ 36,000  
 • Ackerman \$ 30,000  
 • Grant Research & Acquisition \$ 20,000  
**\$ 279,505**

2 • BB&K \$ 90,000  
 • Barker \$ 96,000  
 • Travel/Miscellaneous \$ 8,000  
 • Lewis Consulting \$ 42,000  
 • Ackerman \$ 36,000  
 • Grant Research & Acquisition \$ 36,000  
**\$ 308,000**

3 • Legislative Outreach & Briefings \$ 7,000  
 • WACO \$ 5,000  
**\$ 12,000**



**Public Affairs**  
**32**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin	320,239	280,248	305,539	
6090	Directors Compensation - MWDOC				
6095	Directors Compensation - MWD				
6105	Benefits - Admin	97,288	88,623	105,336	
6115	Benefits - Directors				
6120	Health Insurance Coverage for Retirees				
6205	Training				
6210	Tuition Reimbursement				
6220	Temporary Help				
7010	Engineering - Outside Services				
7020	Legal - General				
7030	Audit				
7040	Other Professional Fees	239,178	219,178	269,198	1
7047	Prof Service-Grant Recovery				
7110	Conference - Employee				
7115	Conference - Directors				
7150	Travel & Accommodations - Employee				
7155	Travel & Accommodations - Director				
7210	Membership / Sponsorship				
7250	CDR Participation				
7310	Office Maintenance				
7320	Rents & Leases				
7330	Office Supplies				
7340	Postal / Mail Delivery				
7350	Subscriptions / Books				
7360	Reproduction Expense	23,055	23,055	28,500	2
7410	Computer & Peripherals Maint				
7430	Software Purchase				
7440	Software Support				
7450	Software Development				
7510	Site Maintenance				
7540	Computers and Equipment				
7580	Maintenance Expense				
7610	Automotive / Mileage				
7615	Toll Road Charges				
7620	Insurance Expense				
7640	Utilities - Telephone				
7650	Bank Fees				
7670	Miscellaneous Expenses	42,250	41,573	47,505	3
8810	Capital Acquisition				
	<b>Total Expenditure</b>	<b>722,010</b>	<b>652,677</b>	<b>756,078</b>	

<b>1 Public Affairs Activities:</b>	
• Strategic Outreach Program Support	\$ 40,000
• Resolutions/Proclamations	\$ 3,000
• Member Agency Workshops PAW	\$ 4,000
• Consumer Confidence Reports	\$ 38,698
• Event Registration Fees	\$ 3,000
• PAW meeting materials	\$ 1,500
• So Cal Water Coalition Outreach	\$ 30,000
• High School Program	\$ 64,000
<b>Subtotal</b>	<b>\$ 184,198</b>

<b>Communications Plan Activities:</b>	
• Advertising	\$ 20,000
• CA Water Fix / OC Reliability	\$ 60,000
• Other Activities	\$ 5,000
<b>Subtotal</b>	<b>\$ 85,000</b>
	<b>\$ 269,198</b>

<b>2 • Promotional Attire</b>		\$ 3,000
• Promotional Items / Printing		\$ 20,000
• Poster Slogan Award & Ceremony		5,500
		<b>\$ 28,500</b>

<b>3 • Ricki Maint and Repair</b>		\$ 2,750
• Children's Water Festival		
Sponsorship		\$ 3,500
• Spring Smartscape Expo		\$ 3,755
• Event Display Materials		\$ 4,000
• Speaker Recognition		\$ 500
• Wyland Mayor's Challenge		\$ 10,000
• Boy Scout Program		\$ 8,000
• Girl Scout Program		\$ 5,000
• Legislative Staff Trip Travel Costs		\$ 5,000
• Sponsorship Contingency Fund		\$ 5,000
		<b>\$ 47,505</b>



**Water Use Efficiency  
(Core)  
35**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	93,037	107,350	103,988
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	27,344	38,186	31,262
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services			
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees	275,000	252,000	225,000
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship	22,605	21,839	22,962
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses			3,000
8810	Capital Acquisition			
	<b>Total Expenditure</b>	417,986	419,375	386,212

1 • General Research	\$ 75,000
• Landscape Education and Outreach Program	\$ 50,000
• Water Loss Control Work Grp	\$ 50,000
• Leak Detection Equipment	\$ 50,000
	<u>\$225,000</u>
2 • CalWEP Dues	\$ 12,241
• South O.C. Watershed Mngmt Area Dues	\$ 9,096
• OC CLCA	\$ 1,625
	<u>\$ 22,962</u>



# General Finance

41

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	304,554	308,550	328,933
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	91,553	93,919	101,648
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services			
7020	Legal - General			
7030	Audit	40,000	19,000	29,000
7040	Other Professional Fees	115,000	20,000	48,000
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses	1,000	500	1,000
8810	Capital Acquisition			
	<b>Total Expenditure</b>	552,106	441,969	508,581

1 • Annual Audit	\$ 19,380
• Single Audit	\$ 4,620
• WUE Grant Review	\$ 5,000
	<u>\$ 29,000</u>

2 • Custodial Bank fees	\$ 3,000
• Financial Consulting	\$ 40,000
• Demsey Filliger - OPEB	\$ 5,000
	<u>\$ 48,000</u>



**Information Technology**  
**45**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin	102,221	102,791	107,880	
6090	Directors Compensation - MWDOC				
6095	Directors Compensation - MWD				
6105	Benefits - Admin	38,017	38,402	39,977	
6115	Benefits - Directors				
6120	Health Insurance Coverage for Retirees				
6205	Training				
6210	Tuition Reimbursement				
6220	Temporary Help				
7010	Engineering - Outside Services				
7020	Legal - General				
7030	Audit				
7040	Other Professional Fees				1 • Misc repairs, maint & components
7110	Conference - Employee				
7115	Conference - Directors				2 • Misc software upgrades and license
7150	Travel & Accommodations - Employee				
7155	Travel & Accommodations - Director				
7210	Membership / Sponsorship				
7250	CDR Participation				3 • MWDOC Website Support & Enhancements \$ 15,000
7310	Office Maintenance				• Investment software usage cost \$ 2,340
7320	Rents & Leases				• Financial Management System \$ 23,773
7330	Office Supplies				• Cisco Smartnet support \$ 3,300
7340	Postal / Mail Delivery				• Misc NAV development \$ 2,000
7350	Subscriptions / Books				• Jet Reports support \$ 1,521
7360	Reproduction Expense				• ECS Laserfiche Annual Support \$ 4,000
7410	Computer & Peripherals Maint	10,000	7,878	8,000	\$ 51,934
7430	Software Purchase	44,260	36,635	45,861	
7440	Software Support	48,894	41,628	51,934	
7540	Computers and Equipment	33,050	29,639	11,850	4 • 3 Laptops \$ 4,500
7580	Maintenance Expense				• 5 desktop computers w/ 9 monitors \$ 7,000
7610	Automotive / Mileage				• RICOH color printer support \$ 350
7615	Toll Road Charges				\$ 11,850
7620	Insurance Expense				
7640	Utilities - Telephone				
7650	Bank Fees				
7670	Miscellaneous Expenses	3,000	2,163	2,000	
8810	Capital Acquisition			62,500	5 • Physical Server for Virtual Host \$ 15,500
	<b>Total Expenditure</b>	279,442	259,137	330,002	• Upgrade Conference Room Screen and Interactive Board \$ 20,000 • Phone Server Upgrade 27,000 \$ 62,500



**Water Use Efficiency  
(choice)  
62**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
4215	Choice Revenue	615,480	835,106	839,155
4705	Prior Year Carry over	219,626		
	Choice billing over/under		(100,483)	
	<b>Total Revenue</b>	835,106	734,623	839,155

Choice billing over/under reflects revenue overage or shortfall to be reconciled with participating member agencies. Final charges will be revised by August 2018 to reflect the new budget year charges plus/minus prior year over/under.

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	415,020	382,658	397,568
6012	Salaries & Benefits - Recovery from Grants	(23,279)	(21,400)	(6,300)
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	123,678	109,236	122,007
	Overhead Reimbursement	146,916	140,257	153,508
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services			
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees	165,972	113,472	165,972
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accomodations - Employee			
7155	Travel & Accomodations - Director			
7210	Membership / Sponsorship			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery	800	400	400
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses	6,000	10,000	6,000
8810	Capital Acquisition			
	<b>Total Expenditure</b>	835,106	734,623	839,155

1 Recovery from WUE Grants for some Salaries and Benefits:

\$ 6,300

2 • Marketing of WUE programs \$ 40,000  
• Residential Installation Verification Inspec \$ 35,000  
• CSANS & Base Schedule Calculator Web \$ 29,400  
• Turf Rebate Processing Platform - Droplet \$ 39,072  
• Drip Rebate Processing Platform - Droplet \$ 6,000  
• E-Signature \$ 16,500  
\$ 165,972



**School Program  
(choice)  
63**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
4215	Choice Revenue	339,086	259,150	437,626
4205	School Contracts	70,000	70,000	
4705	Prior Year Carry over	2,427		
	Choice billing over/under		85,346	
	<b>Total Revenue</b>	411,513	414,496	437,626

Choice billing over/under reflects revenue overage or shortfall to be reconciled with participating member agencies. Final charges will be revised by August 2018 to reflect the new budget year charges plus/minus prior year over/under.

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	12,925	11,801	21,123
6105	Benefits - Admin	3,433	3,854	6,828
	Overhead Reimbursement	4,994	3,841	7,810
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services			
7020	Legal - General			
7030	Audit			
7040	Other Professional Fees			
7040	Other Professional Fees - School Programs	390,160	395,000	401,865
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7450	Software Development			
7510	Site Maintenance			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses			
8810	Capital Acquisition			
	<b>Total Expenditure</b>	411,513	414,496	437,626

- 1 • Assemblies: FY18-19  
Goal is 70,000 students
- Digital Program \$ 43,710
  - High Schools \$ 100,540
  - Elementary Schools \$ 257,615
  - \$ 401,865**



**WEROC  
25**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
4320	MWDOC Contribution to Operations	179,217	179,217	191,380	
4210	WEROC Contracts	179,216	179,216	191,380	1
4205					
4230	Reimbursements		5,246		2
4240					
4410					
4805					
	<b>Total Revenue</b>	358,433	363,679	382,760	
	Operational Reserves to Capital	844	844	80,912	3
	MWDOC Contribution to Capital Improvements	281,657	281,657	25,488	
		640,934	646,180	489,160	

1 • OCSD \$ 37,510  
 • SOCWA \$ 14,545  
 • OCWD \$ 95,690  
 • 3 Cities -- \$14,545 ea \$ 43,635  
 \$ 191,380

2 • Grants and sale of generator

3 • WEROC Reserves

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET	
6010	Salaries & Wages - Admin	197,354	197,964	236,268	
	Salaries & Benefits - Recovery from Grants				
6090	Directors Compensation - MWDOC				
6095	Directors Compensation - MWD				
6105	Benefits - Admin	64,892	57,360	65,137	
6115	Benefits - Directors				
6120	Health Insurance Coverage for Retirees				
6205	Training			1,150	4
6210	Tuition Reimbursement				
6220	Temporary Help				
7010	Engineering - Outside Services				
7020	Legal - General				
7030	Audit				
7040	Other Professional Fees	30,000	11,320	30,000	5
7110	Conference - Employee	3,835	3,220	2,800	4
7115	Conference - Directors				
7150	Travel & Accomodations - Employee	3,900	1,356	6,430	4
7155	Travel & Accomodations - Director				
7210	Membership / Sponsorship	620	605	605	
7250	CDR Participation				
7310	Office Maintenance				
7320	Rents & Leases	21,049	21,049		<--
7330	Office & Radio Supplies	1,000	1,000	1,000	Catalina Repeater Lease No Longer Needed
7340	Postal / Mail Delivery				
7350	Subscriptions / Books				
7360	Reproduction Expense	1,000	8,186	1,000	
7410	Computer & Peripherals Maint	5,805	6,991	5,060	
7430	Software Purchase				
7440	Software Support	6,750	6,750	6,750	
7510	Site Maintenance	710	810	900	
7540	Computers and Equipment				
7580	Maintenance - Generators	2,000	900	2,000	
7581	Maintenance - Radios	2,000	1,901	1,838	
7582	Maintenance - EOC's	3,000	1,270	3,000	
7610	Automotive / Mileage	1,700	1,501	1,700	
7615	Toll Road Charges	100	111	115	
7620	Insurance Expense	1,500			
7640	Utilities - Telephone	7,218	11,756	13,008	
7650	Bank Fees				
7670	Miscellaneous Expenses	1,000	1,000	1,000	
7671	Miscellaneous Training	3,000	3,000	3,000	
8810	Capital Acquisition				
	<b>Total Expenditure</b>	358,434	338,051	382,760	
	Capital Improvements	282,500	276,819	106,400	6
		640,934	614,870	489,160	

• 2017 Updated WEROC Map  
Printing.

• 2017 Phone Plans Increased

6 • Exhibit H



**AMP Proceeds Agreement Administration**  
**61**

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
4020	Interest Revenue			
4050	O & M Maintenance Deposit			
4230	Reimbursement	19,505		
4680	Miscellaneous Income			
	Prior Year Carryover			28,397
	<b>Total Revenue</b>	19,505	-	28,397

Participating member agencies prior year carryover will potentially be used per the AMP sales admin agreement to cover legal and audit expenses

		FY 2017-2018 BUDGET	FY 2017-2018 PROJECTED ACTUALS	FY 2018-2019 PROPOSED BUDGET
6010	Salaries & Wages - Admin	6,403	-	-
6090	Directors Compensation - MWDOC			
6095	Directors Compensation - MWD			
6105	Benefits - Admin	1,548	-	-
6115	Benefits - Directors			
6120	Health Insurance Coverage for Retirees			
6205	Training			
6210	Tuition Reimbursement			
6220	Temporary Help			
7010	Engineering - Outside Services			
7020	Legal - General	11,553		
7030	Audit			
7040	Other Professional Fees			
7110	Conference - Employee			
7115	Conference - Directors			
7150	Travel & Accommodations - Employee			
7155	Travel & Accommodations - Director			
7210	Membership / Sponsorship			
7220	CUWA Participation			
7240	AAWARF Participation			
7250	CDR Participation			
7310	Office Maintenance			
7320	Rents & Leases			
7330	Office Supplies			
7340	Postal / Mail Delivery			
7350	Subscriptions / Books			
7360	Reproduction Expense			
7410	Computer & Peripherals Maint			
7430	Software Purchase			
7440	Software Support			
7540	Computers and Equipment			
7580	Maintenance Expense			
7610	Automotive / Mileage			
7615	Toll Road Charges			
7620	Insurance Expense			
7640	Utilities - Telephone			
7650	Bank Fees			
7670	Miscellaneous Expenses			
8810	Capital Acquisition			
	<b>Total Expenditure</b>	19,505	-	-



# Exhibit D

## MUNICIPAL WATER DISTRICT OF ORANGE COUNTY Proposed District Participation Costs Fiscal Year 2018-2019

	Budget FY 2017-2018	Projected FY 2017-2018 Actuals	Budget FY 2018-2019	Approval included in Budget Approval
<b>Required Participation or Service</b>				
LAFCO	\$ 25,101	\$ 26,419	\$ 27,000	√
<b>Subtotal Cost Center 11</b>	\$ 25,101	\$ 26,419	\$ 27,000	
Association of Calif. Water Agencies (ACWA)	\$ 18,000	\$ 17,765	\$ 18,000	√
<b>Subtotal Cost Center 12</b>	\$ 18,000	\$ 17,765	\$ 18,000	
South OC Watershed Management Area Dues	\$ 9,096	\$ 8,973	\$ 9,096	√
<b>Subtotal Cost Center 35</b>	\$ 9,096	\$ 8,973	\$ 9,096	
<b>Subtotal - Required Participation or Service</b>	<b>\$ 52,197</b>	<b>\$ 53,156</b>	<b>\$ 54,096</b>	
<b>Elective Participation</b>				
Colorado River Water Users Assn. (CRWUA 2-Director's)	\$ 40	\$ 30	\$ 40	√
<b>Subtotal Cost Center 11</b>	\$ 40	\$ 30	\$ 40	
Association of California Cities- Orange County (ACCOC)	\$ 5,000	\$ 5,000	\$ 5,100	√
American Water Works Association (AWWA)	1,589	1,629	1,675	√
Association of Metropolitan Water Agencies (AMWA)	17,645	18,527	18,900	√
CA Chamber of Commerce (HR California)	499	469	480	√
CALDESAL	5,000	5,000	5,100	√
California Association of Public Information Officers (CAPIO)	250	250	255	√
California Municipal Treasurers Association (CMTA)	155	155	160	√
California Society of Municipal Finance Officers (CSMFO)	125	125	130	√
CA Special Districts Assn. (CSDA)	6,485	6,842	6,980	√
Colorado River Water Users Assn. (CRWUA 3-staff)	60	60	65	√
Government Finance Officers Association (GFOA)	165	165	170	√
Indep. Special Districts of Or. Co. (ISDOC)	200	200	50	√
International Personnel Management Association	105	109	50	√
Municipal Information Systems Association of California (MISAC)	200	200	-	√
National Water Resources Assn., Mun. Caucus	500	500	510	√
Orange County Business Council (OC Chamber)	5,000	5,000	5,100	√
Orange County Public Affairs Association	200	200	205	√
California Council for Environmental & Economic Balance	29,500	24,500	24,990	√
Orange County Water Association (OCWA)	100	100	105	√
Public Agency Risk Managers Association (PARMA)	100	100	105	√
Public Relations Society of America/O.C.	300	300	305	√
Society of Human Resources Management (SHRM)	200	179	185	√
Southern California Personnel Management Assoc. (SCPMA)	50	50	55	√
South Orange County Economic Coalition	1,500	1,500	1,530	√
Southern California Water Committee	850	850	865	√
Water Education Foundation	578	578	590	√
<b>Subtotal Cost Center 12</b>	\$ 76,356	\$ 72,588	\$ 73,660	
OC Chapter-Calif. Landscape Contractors Assoc.	\$ 1,500	\$ 1,500	\$ 1,625	√
CA Water Efficiency Partnership (formerly CA Urban Water Cnvr Cncl)	12,009	11,366	12,241	√
<b>Subtotal Cost Center 35</b>	\$ 13,509	\$ 12,866	\$ 13,866	
<b>Subtotal - Elective Participation</b>	<b>\$ 89,905</b>	<b>\$ 85,484</b>	<b>\$ 87,566</b>	
International Association of Emergency Managers	\$ 380	\$ 380	\$ 380	√
California Emergency Services Association	240	225	225	√
<b>WEROC Program Total</b>	620	605	605	
<b>GRAND TOTAL</b>	<b>\$ 142,722</b>	<b>\$ 139,245</b>	<b>\$ 142,267</b>	



# Exhibit E

## MUNICIPAL WATER DISTRICT OF ORANGE COUNTY Summary of Proposed Staff Registration & Travel Budget <sup>(1)</sup> Fiscal Year 2018-2019

Conference / Meeting	Registration	Travel <sup>(1)</sup>	Approval included in	
			Budget	Approval
ACWA - DC Conference (3 staff)	\$ 3,000	\$ 6,600		✓
- Fall Conference, San Diego (6 staff)	4,200	3,600		✓
- Spring Conference, Sacramento, California (6 staff)	3,500	6,000		✓
- Legislative Symposium (2 staff)	600	1,800		✓
ACCOC Advocacy Trip - Sacramento (2 staff)	2,000	2,800		✓
ACCOC Advocacy Trip - Washington DC (1 staff)	1,200	3,200		✓
ACWA Region 10 (2 Staff)	130	200		✓
Assoc. of Metrop. Water Agencies Misc. Conference (AMWA), TBD (1 staff)	1,600	2,200		✓
Assoc. of Metrop. Wtr Agencies Exec. (AMWA) Conf., San Francisco (1 staff)	900	1,800		✓
Assoc. of Metrop. Water Agencies Water Policy Conference, TBD (AMWA) (1 staff)	900	2,200		✓
AWWA Cal Nevada & National Conf, Fall Conference, Rancho Mirage (3 Staff)	1,500	3,000		✓
AWWA Cal Nevada & National Conf, Spring, TBD (3 Staff)	1,500	3,300		✓
AWWA ACE Annual Conference, TBD (4 staff)	1,500	3,300		✓
Bond Buyers Conference (1 Staff)	200			✓
California Assoc. of Public Inform. Officials Conference (2 Staff) Santa Rosa	600	3,200		✓
California Council for Environmental & Economic Balance (5 Trips)		5,000		✓
California Council for Environmental & Economic Balance, TBD (2 staff)	2,200	3,000		✓
Calif. Soc. of Mun. Finance Officers (1 staff)	400	100		✓
Cal Desal Conference (1 staff)	250	600		✓
CRWUA, Las Vegas - Fall (4 staff)	2,000	3,500		✓
CSDA Annual Conference (2 staff)	1,200	2,000		✓
CSDA Legislative Days (2 staff)	400	1,200		✓
CALWEP California Water Efficiency Partnership (formerly CUWCC) 6 trips		1,800		✓
CALWEP Peer to Peer - So. Cal - (5 staff)	625	2,750		✓
DWR Stakeholder Meetings (4 trips)		1,200		✓
Gov. Finance Officers Assoc. Seminar (1 staff)	600	100		✓
Information Technology Seminar (2 staff)	500	1,000		✓
Orange Co. Business Council (OCBC) Advocacy Trip-Sacramento (1 Staff)	1,200	1,000		✓
Orange Co. Business Council (OCBC) Advocacy Trip-DC (1 Staff)	1,800	1,400		✓
Sacramento Legislative Advocacy (18 trips)		9,500		✓
Urban Water Institute Annual Conference, San Diego (4 Staff)	1,900	3,200		✓
Urban Water Institute Spring Conference, Palm Springs (4 Staff)	1,425	2,400		✓
Washington Legislative Advocacy (6 trips)		10,800		✓
Water Smart Innovations, Las Vegas Nevada (2 Staff)	800	900		✓
Women in Water, 11/1-2, 2018, Santa Barbara (2 Staff)	1,000	1,200		✓
Miscellaneous*	3,250	3,750		✓
<b>General Fund Total **</b>	<b>\$ 42,880</b>	<b>\$ 99,600</b>		
International Assoc. of Emergency Managers (Michigan) (1 Staff)	\$ 700	\$ 1,850		✓
California State Training Institute (1 staff)	700	1,140		✓
American Red Cross Disaster Academy- (3 staff)	450			✓
AWWA National Emergency Management Conference (Texas) -(1 Staff)	700	1,440		✓
California Emergency Services Association (2 staff)	1,400	2,000		✓
<b>WEROC Program Total</b>	<b>\$ 3,950</b>	<b>\$ 6,430</b>		
<b>PROPOSED GENERAL FUND BUDGET</b>	<b>\$ 42,880</b>	<b>\$ 99,600</b>		

\* Includes OCWA lunch meetings, ISDOC, OCBC, SCWC, League of Cities, Misc. Assoc./Committee meetings and related business meeting expenses.

\*\* Excludes automotive mileage.

(1) Includes all modes of travel (except automotive mileage), room accommodations, meals, and related misc. expenses.



## Exhibit F

### MUNICIPAL WATER DISTRICT OF ORANGE COUNTY Summary of Proposed Board Registration & Travel Budget Fiscal Year 2018-2019

Conference	Registration	Travel <sup>(1)</sup>	Approval included in
			Budget Approval
ACCOC Advocacy Trip - Sacramento (2 Directors)	\$ 2,000	\$ 2,800	√
ACCOC Advocacy Trip - Washington DC (2 Directors)	2,400	3,200	√
ACWA DC Conference (2 Directors)	2,000	4,400	√
ACWA Fall Conference, San Diego (3 Directors)	2,100	1,800	√
ACWA Spring Conference, Monterey (3 Directors)	2,100	3,600	√
ACWA Region 10 (2 Directors)	130	200	√
Bond Buyers Conference (2 Directors)	400		√
CRWUA Fall Conf, Las Vegas (2 Directors)	1,000	1,750	√
CSDA Annual Conference (1 Director)	600	1,000	√
CSDA Legislative Day (1 Director)	200	600	√
California Council for Environmental & Economic Balance (5 Trips)		5,000	√
Calif. Council for Environ. & Econ. Balance Conf. TBD(1 Dir.)	1,100	1,500	√
Orange County Business Council (OCBC) Advocacy Trip-Sacramento (2 Directors)	2,400	2,000	√
Orange County Business Council (OCBC) Advocacy Trip-DC (2 Directors)	3,600	2,800	√
Sacramento Legislative Advocacy (8 Trips)		4,000	√
Washington DC Legislative Advocacy ( 6 trips)		10,800	√
Urban Water Institute Annual Conference, San Diego (2 Directors)	950	1,600	√
Urban Water Institute Spring Conference, Palm Desert (2 Directors)	950	1,600	√
Women in Water Conference, 11/1-2, 2018, Santa Barbara (1Director)	500	600	√
Miscellaneous*	2,500	2,500	√
<b>TOTAL **</b>	<b>\$ 24,930</b>	<b>\$ 51,750</b>	
<b>PROPOSED GENERAL FUND BUDGET</b>	<b>\$ 24,930</b>	<b>\$ 51,750</b>	

\* Includes OCWA lunch meetings, ISDOC, OCBC, SCWC, League of Cities, Misc. Assoc/Committee meetings and related business meeting expenses.

\*\* Excludes automotive mileage.

(1) Includes all modes of travel (except automotive mileage), room accommodations, meals, and related misc. expenses.



## Exhibit H

### MUNICIPAL WATER DISTRICT OF ORANGE COUNTY Schedule of Capital Expenditures Fiscal Year 2018-2019

	<u>Proposed Budget</u>	Approval included in <u>Budget Approval</u>
<b>Finance - 45-8810:</b>		
Physical Server for Virtual Host	\$ 15,500	√
Upgrade Conference Room Screen and Interactive Board	20,000	√
Phone Server Upgrade	27,000	√
<b>Subtotal Cost Center 45</b>	<b>\$ 62,500</b>	
<b>Furniture and Fixtures- 19-8810:</b>		
Workstations	\$ 36,000	√
Generator	122,000	√
Office furniture for former 102 area & cabinetry for hallway areas	35,000	√
<b>Subtotal Cost Center 19</b>	<b>\$ 193,000</b>	
<b>WEROC - 25-8811:</b>		
SEOC Electrical	\$ 9,000	√
SEOC Furniture & Layout	95,000	√
<b>Subtotal Cost Center 25</b>	<b>\$ 104,000</b>	
<b>Total Capital Expenditures - General Fund</b>	<b>\$ 255,500</b>	



**Exhibit J**  
**Professional / Special Services Authorized**  
**Core Fund**

Department	Consultant	Service	Budget FY 17-18	Budget FY 18-19	* Approval included in Budget Approval
<b>Engineering Expenses</b>					
<b>Planning &amp; Operation (21)</b>	(To be determined)	Various Engineering/Technical Services	155,000	155,000	
<b>Met Issues &amp; Special Projects (23)</b>	Ed Means Consulting	Consulting on MET issues	50,000	25,000	✓
	(To be determined)	MET and Reliability Planning	155,000	150,000	
<b>Total Engineering Expenses</b>			<b>360,000</b>	<b>330,000</b>	
<b>Legal Expenses</b>					
<b>Administration (11 &amp; 13)</b>	Best, Best & Krieger	General Legal Counsel Services	195,000	200,000	✓
	Aleshire & Wynder	Legal Counsel Services Regarding San Diego CWA	25,000	25,000	✓
	Best, Best & Krieger	Labor Counsel Services	30,000	30,000	✓
<b>Total Legal Expenses</b>			<b>250,000</b>	<b>255,000</b>	
<b>Audit Expenses</b>					
<b>Finance (41)</b>	Vasquez & Company LLP	Annual Financial Audit and Federal Single Audit	40,000	29,000	✓
<b>Training</b>					
<b>Administration (13)</b>	TBD/Cal State University Fullerton Leadership	Staff Development/Technical Training/Leadership Training	10,000	25,000	✓
<b>Building Expenses</b>					
<b>Overhead (19)</b>	(To be determined)	Bldg Improvements - Eval /design/Interior Design/Construction Mgmt. Costs/bid package docs.	100,000	71,775	
<b>Professional Fees</b>					
<b>Administration (12 &amp; 13 &amp; 19)</b>	Dissinger Associates	Pension Plan Administration	4,500	4,500	✓
	Wage Works	Cafeteria Plan Administration	2,000	2,223	✓
	(To Be determined)	Evaluate fund Portfolios for 401 and 457 Plans	9,000		
	Gladwell Services	Records Management Consulting	5,000	6,000	✓
	(To Be determined)	Benchmark Study	40,000		
<b>Governmental Affairs (31)</b>	BBK Legislation	State Legislative Advocate	90,000	90,000	✓
	James C. Barker	Federal Legislative Advocate	96,000	96,000	✓
	Lewis Consulting	County Issues Consulting	42,000	42,000	✓
	(To be determined)	Grant Research and Acquisition Assistance	20,000	36,000	
	Ackerman	Legal and Regulatory	36,000	36,000	✓
	(To be determined)	Miscellaneous	10,000	8,000	
<b>Public Affairs (32)</b>	Stetson Engineers	Consumer Confidence Report (CCR) Technical Water Quality Advisor	34,178	38,698	✓
	So Cal Water Coalition	So Cal Water Coalition Outreach		30,000	✓
	(To be determined)	Collateral materials update and resolutions/proclamations	2,000	3,000	
	(To be determined)	Event Registration Fees	2,500	3,000	
	(To be determined)	Strategic Outreach Program Support	40,000	40,000	
	(To be determined)	PAW Meeting Materials	1,500	1,500	
	(To be determined)	Client Agency Workshops for PAW	7,000	4,000	
	(To be determined)	CA Water Fix PSA Campaign	60,000	60,000	
	(To be determined)	Other Activities		5,000	
	(To be determined)	Advertising	20,000	20,000	
	(To be determined)	Core High School Program	64,000	64,000	
	(To be determined)	Website updates and Maintenance	8,000		
<b>WUE - Core (35)</b>	(To be determined)	General WUE Research	75,000	75,000	
	Blue Watchdog Conservation, Inc	Landscape Education and Outreach Program	50,000	50,000	✓
	Water Systems Optimization	Water Loss Control Work Grp	50,000	50,000	✓
	(To be determined)	Leak Detection Equipment	100,000	50,000	
<b>Finance &amp; IT (41 &amp; 45)</b>	Union Bank	Custodial Bank fees	3,000	3,000	✓
	Davis Farr	Financial Consulting	112,000	40,000	✓
	Demsey Filliger	Demsey Filliger - OPEB		5,000	✓
<b>Total Professional Fees</b>			<b>983,678</b>	<b>862,921</b>	

**WEROC**

Department	Consultant	Service	Budget FY 17-18	Budget FY 18-19	* Approval included in Budget Approval
<b>Professional Fees</b>					
<b>WEROC (25)</b>	IDS Group	SEOC Space Planning (Seismic)	15,000		✓
	(To be determined)	SEOC Seismic Retrofit	30,000		
	Motorola / OC Sheriff	New Radio System OC Sheriff's Dept	227,210		✓
	(To be determined)	Exercise Consultant	30,000	30,000	
<b>Total Professional Fees</b>			<b>302,210</b>	<b>30,000</b>	

**Trustee Activities**

Department	Consultant	Service	Budget FY 17-18	Budget FY 18-19	* Approval included in Budget Approval
<b>Legal Expenses</b>					
<b>AMP Administration (61)</b>	Best, Best & Krieger	AMP Administration, 1996 COPS	15,000		✓

\* Approval of the budget constitutes authorization for spending within the policy guidelines set out in Chapter 8, Contracts section of the Administrative code including authorization limitations. A check mark indicates final board approval of the expenditure.



**Exhibit J1**  
**Professional / Special Services Authorized**  
**Choice Funds**

Department	Consultant	Service	Budget FY 17-18	Budget FY 18-19	* Approval included in Budget Approval
<b>Professional Fees</b>					
<b>Water Use Efficiency (62)</b>	Various Printers	Printing of marketing materials for all WUE programs	40,000	40,000	√
	Enterprise Information Systems	CSANS & Base Schedule Calculator Web	14,400	29,400	√
	Droplet	Web Based Rebate Processing Platform (Turf & Drip)	45,072	45,072	√
	Droplet	E-Signature	16,500	16,500	√
	Mission Resource Cnsvr District	Residential Installation Verification Inspections	50,000	35,000	√
<b>School Program (63)</b>	Discovery Science Center	Assemblies (Grades 1-6)	250,112	257,615	√
	ITO	Assemblies (Grades 9-12)	97,612	100,540	√
	ITO	Digital Program	42,436	43,710	√
<b>Total Professional Fees</b>			<b>556,132</b>	<b>567,837</b>	

\* Approval of the budget constitutes authorization for spending within the policy guidelines set out in Chapter 8, Contracts section of the Administrative code including authorization limitations. A check mark indicates final board approval of the expenditure.



**Municipal Water District of Orange County**  
**Fiscal Year 2017-2018 Consolidated Budget Summary**

	Core & Choice	Water Fund	WUE Grants and Outside Funding	WEROC	AMP Proceeds Agreement Administration	Total with Inter-Fund Transfers	Less Inter-Fund Transfers <sup>(1)</sup>	Consolidated Budget Total
<b>Revenues:</b>								
Water Sales		\$ 185,673,707				\$ 185,673,707		\$ 185,673,707
Local Resource Program Incentives		(16,574,748)				(16,574,748)		(16,574,748)
Retail Meter Charge	7,435,834					7,435,834		7,435,834
Ground Water Customer Charge	468,565					468,565		468,565
Water Increment Charge								
Interest Revenue	150,000	9,400				159,400		159,400
MWDOC's Contribution				460,874		460,874	(460,874)	-
Outside Fundings			4,179,595	179,216	19,505	4,378,316		4,378,316
Carryover Funds				843		843		843
Choice Revenue	1,246,619					1,246,619		1,246,619
Miscellaneous Income	3,000					3,000		3,000
<b>Total Revenues</b>	<b>9,304,018</b>	<b>169,108,359</b>	<b>4,179,595</b>	<b>640,934</b>	<b>19,505</b>	<b>183,252,411</b>	<b>(460,874)</b>	<b>182,791,537</b>
<b>Expenses:</b>								
Water Purchases		169,098,959				169,098,959		169,098,959
Salaries & Wages	3,571,210			197,354	6,403	3,774,967		3,774,967
less S & W Reimb. DSC or Recov from Grants	(23,279)					(23,279)		(23,279)
Employee Benefits	1,056,766			64,892	1,548	1,123,207		1,123,207
Engineering Expense	360,000					360,000		360,000
Professional Fees	1,539,810		4,179,595	30,000		5,749,405		5,749,405
Election Expense (annualized)								
Legal Expense - General	250,000				11,553	261,553		261,553
Maintenance Expense	134,500			4,710		139,210		139,210
Insurance Expense	110,250			1,500		111,750		111,750
Membership / Sponsorship	142,102			620		142,722		142,722
Director Compensation	243,197					243,197		243,197
MWDOC Contribution to WEROC Operations	179,217					179,217	(179,217)	-
MWDOC Contribution to WEROC Capital Improv	281,657					281,657	(281,657)	-
RPO Distribution to Member Agencies								
<b>Others:</b>								
MWD Representation	138,969					138,969		138,969
Director Benefits	81,728					81,728		81,728
Health Insurance Coverage for Retirees	59,554					59,554		59,554
Audit Expense	40,000					40,000		40,000
Automotive & Toll Road Expenses	17,400			1,800		19,200		19,200
Conference Expense - Staff	38,945			3,835		42,780		42,780
Conference Expense - Directors	23,700					23,700		23,700
CDR Participation	48,803					48,803		48,803
Business Expense	5,200					5,200		5,200
Miscellaneous Expense	130,650			7,000		137,650		137,650
Postage / Mail Delivery	10,500					10,500		10,500
Rents & Leases	8,400			21,049		29,449		29,449
Outside Printing, Subscription & Books	28,775			1,000		29,775		29,775
Office Supplies	35,580			1,000		36,580		36,580
Computer Maintenance	10,000			5,805		15,805		15,805
Software Support & Expense	93,154			6,750		99,904		99,904
Computers and Equipment	33,050					33,050		33,050
Telecommunications Expense	21,300					21,300		21,300
Temporary Help Expense	5,000			7,218		12,218		12,218
Training Expense	10,000					10,000		10,000
Tuition Reimbursement	5,000					5,000		5,000
Travel & Accommodations - Staff	95,600			3,900		99,500		99,500
Travel & Accommodations - Directors	49,850					49,850		49,850
Depreciation Expense (annualized)					-	-		-
Overhead Expenses billed to AMP and WFC								
MWDOC Building Reimbursement								
MWDOC Building Expense	356,400					356,400		356,400
WEROC Sinking Fund Expense (generator & radios)								
Capital Acquisition	249,500			282,500		532,000		532,000
All Other Expenses	1,597,058			341,857		1,938,915		1,938,915
<b>Total Expenses</b>	<b>9,442,488</b>	<b>169,098,959</b>	<b>4,179,595</b>	<b>640,934</b>	<b>19,505</b>	<b>183,381,480</b>	<b>(460,874)</b>	<b>182,920,606</b>
<b>EFFECT ON RESERVES / FUND BALANCE</b>	<b>\$ (138,470)</b>	<b>\$ 9,400</b>	<b>(2)</b>			<b>\$ (129,069)</b>		<b>\$ (129,069)</b>

1. Adjustment for MWDOC's contributions to other funds.  
2. Net change to restricted reserves for Interest revenue.



**Municipal Water District of Orange County**  
**Fiscal Year 2018-2019 Consolidated Budget Summary**

	Core & Choice	Water Fund	WUE Grants and Outside Funding	WEROC	AMP Proceeds Agreement Administration	Total with Inter-Fund Transfers	Less Inter-Fund Transfers <sup>(1)</sup>	Consolidated Budget Total
<b>Revenues:</b>								
Water Sales		\$ 220,515,870				\$ 220,515,870		\$ 220,515,870
Local Resource Program Incentives		(16,416,776)				(16,416,776)		(16,416,776)
Retail Meter Charge	7,697,006					7,697,006		7,697,006
Ground Water Customer Charge	499,012					499,012		499,012
Water Increment Charge	-					-		-
Interest Revenue	390,000	13,000						
MWDOC's Contribution	-		2,972,135	216,868	28,397	403,000	(216,868)	403,000
Outside Fundings	-			191,380		3,191,912		3,191,912
Carryover Funds	1,276,781			-		1,276,781		1,276,781
Choice Revenue	3,000					3,000		3,000
Miscellaneous Income								
<b>Total Revenues</b>	<b>9,865,799</b>	<b>204,112,094</b>	<b>2,972,135</b>	<b>408,248</b>	<b>28,397</b>	<b>217,386,673</b>	<b>(216,868)</b>	<b>217,169,805</b>
<b>Expenses:</b>								
Water Purchases		204,099,094				204,099,094		204,099,094
Salaries & Wages	3,522,963			236,268	-	3,759,231		3,759,231
less S & W Reimb. DSC or Recov from Grants	(6,300)					(6,300)		(6,300)
Employee Benefits	1,315,564			65,137	-	1,380,701		1,380,701
Engineering Expense	330,000					330,000		330,000
Professional Fees	1,430,758			30,000		4,432,893		4,432,893
Contribution to Election Reserve	304,000		2,972,135			304,000		304,000
Legal Expense - General	255,000			-		255,000		255,000
Maintenance Expense	152,796			4,738		157,534		157,534
Insurance Expense	138,500			-		138,500		138,500
Membership / Sponsorship	141,662			605		142,267		142,267
Director Compensation	255,360					255,360		255,360
MWDOC Contribution to WEROC Operations	191,380					191,380	(191,380)	-
MWDOC Contribution to WEROC Capital Improv	25,488					25,488	(25,488)	-
<b>Others:</b>								
MWD Representation	145,920					145,920		145,920
Director Benefits	94,767					94,767		94,767
Health Insurance Coverage for Retirees	70,519					70,519		70,519
Audit Expense	29,000					29,000		29,000
Automotive & Toll Road Expenses	18,262					20,077		20,077
Conference Expense - Staff	42,880			1,815		45,680		45,680
Conference Expense - Directors	24,930			2,800		24,930		24,930
CDR Participation	47,044					47,044		47,044
Business Expense	5,600					5,600		5,600
Miscellaneous Expense	140,430			7,000		147,430		147,430
Postage / Mail Delivery	9,000					9,000		9,000
Rents & Leases	3,460			-		3,460		3,460
Outside Printing, Subscription & Books	34,573			1,000		35,573		35,573
Office Supplies	36,000			1,000		37,000		37,000
Computer Maintenance	8,000			5,060		13,060		13,060
Software Support & Expense	97,795			6,750		104,545		104,545
Computers and Equipment	11,850			-		11,850		11,850
Telecommunications Expense	20,178			13,008		33,186		33,186
Temporary Help Expense	5,000					5,000		5,000
Training Expense	25,000			1,150		26,150		26,150
Tuition Reimbursement	5,000					5,000		5,000
Travel & Accommodations - Staff	99,600			6,430		106,030		106,030
Travel & Accommodations - Directors	51,750					51,750		51,750
Depreciation Expense (annualized)	-					-		-
Overhead Expenses billed to AMP and WFC	-					-		-
Overhead Reimbursement	-					-		-
MWDOC Building Expense	531,827					531,827		531,827
MWDOC Sinking Fund Expense (generator & radios)								
Capital Acquisition	255,500			106,400		361,900		361,900
All Other Expenses	1,813,884			152,413		1,966,297		1,966,297
<b>Total Expenses</b>	<b>9,871,076</b>	<b>204,099,094</b>	<b>2,972,135</b>	<b>489,160</b>	<b>-</b>	<b>217,431,465</b>	<b>(216,868)</b>	<b>217,214,597</b>
<b>EFFECT ON RESERVES / FUND BALANCE</b>	<b>\$ (5,277)</b>	<b>\$ 13,000</b>	<b>(2)</b>	<b>\$ (80,912)</b>	<b>\$ 28,397</b>	<b>\$ (44,792)</b>	<b>\$ -</b>	<b>\$ (44,792)</b>

1 Adjustment for MWDOC's contributions to other funds.  
2 Net change to restricted reserves for interest revenue.





**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert J. Hunter, General Manager

**Staff Contacts:** Harvey De La Torre

**SUBJECT:** **Proposed MWD OC Water Rate Resolution for Fiscal Year 2018-19**

**STAFF RECOMMENDATION**

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It is recommended that the Board of Directors:

1. Increase the MWD OC Retail Meter Charge from \$11.90 to \$12.25 per meter, and the Groundwater Customer Charge from \$468,565 to \$499,012, effective July 1, 2018; and
2. Adopt the Water Rate Resolution setting forth rates and charges to be effective July 1, 2018 and January 1, 2019 as identified in the Water Rate Resolution for Fiscal Year 2018-19.

**COMMITTEE RECOMMENDATION**

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Committee concurred with staff recommendation.

**REPORT**

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MWD OC adopts a water rate resolution annually to reflect water rates and charges required to collect revenue to support MWD OC's annual budget and to recover the costs of providing imported water. Attachment A is the proposed MWD OC Water Rate Resolution for Fiscal Year 2018-19. In order to show the proposed changes compared to last year's version, the attached proposed water rate resolution is in a redline form. The most significant changes are within the choice service programs with some programs being modified or removed.

Below is a summary of the proposed Rates and Charges for FY2018-19:

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



<b>Proposed Rates</b>	<b>Proposed Rates July 1, 2018</b>	<b>Proposed Rates January 1, 2019</b>
MWDOC Retail Meter Charge	\$11.90/meter	\$12.25/meter
MWDOC Groundwater Customer Charge*	\$468,565	\$499,012
System Access Rate	\$299.00	\$326.00
System Power Rate	\$132.00	\$127.00
Water Stewardship Rate	\$55.00	\$69.00
MWDOC Melded Supply Rate	\$209.00	\$209.00
Treatment Surcharge	\$320.00	\$319.00
Treated Full Service Rate	\$1,015.00	\$1,050.00
Untreated Full Service Rate	\$695.00	\$731.00

[\*] This is an annual charge to OCWD

**Attachment A – REDLINE VERSION of Proposed MWDOC Water Rate Resolution for Fiscal Year 2018-19**

**Attachment B – CLEAN VERSION of Proposed MWDOC Water Rate Resolution for Fiscal Year 2018-19**



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

WHEREAS, pursuant to Water Code sections 71614 and 71616, the Municipal Water District of Orange County ("MWDOC") is authorized to establish water rates and charges for water which will result in revenues sufficient to meet the operating expenses of the District, provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extensions and enlargements, and cover principal and interest payments and costs associated with bonded debt; and,

WHEREAS, the Metropolitan Water District of Southern California ("Metropolitan"), adopted rates for water service consisting of a two-tiered water supply rate, and separate unbundled rates for system access, water stewardship, system power, water treatment, and fixed charges for the Capacity Charge and Readiness-to-Serve, which are imposed on MWDOC as a condition of receiving water deliveries from Metropolitan; and,

WHEREAS, pursuant to Section 1117 of the MWDOC Administrative Code, the MWDOC Board of Directors adopted Ordinance No. 53 establishing classes of water service, and terms and conditions of such service, and intends to adopt this Resolution fixing the rates and charges for said classes of water service (including Choice services in Section 6); and,

WHEREAS, the Board of Directors has reviewed the cost of water and other charges imposed on MWDOC by Metropolitan, and with respect to the projected MWDOC operating expenses and financial needs, and has determined that it is necessary and appropriate to establish new rates and charges for water service and programs provided by MWDOC; and,

WHEREAS, the Board of Directors has reviewed the water supply, water demand and replenishment conditions in the Orange County Water District (OCWD) Basin and the impact these conditions will have on MWDOC's imported water purchases from Metropolitan; and,



WHEREAS, MWDOC's Administration and Finance Committee and Board reviewed the issue of tiered or melded water rates for Tier-1 and Tier-2 purchases from Metropolitan in November 2004, and retained the establishment of a melded rate, with a provision for further review should the OCWD's basin pumping percentage fall below 60% in the future; and.

WHEREAS, Metropolitan continues to levy its Standby Charge within the MWDOC service area, which will be credited against Metropolitan's Readiness-to-Serve Charge and will provide an equivalent offset on the Metropolitan charges imposed on MWDOC; and.

WHEREAS, Metropolitan assesses ~~the~~ a Capacity Charge to MWDOC based on MWDOC's highest cumulative peak day delivery rate in cubic feet per second (CFS) between May 1 and September 30 in the three preceding calendar years, ending on the year prior to the year of the charge being imposed; and.

WHEREAS, MWDOC engaged Raftelis Financial Consultants, Inc. to prepare a cost of service and rate study (Rate Study) for MWDOC's rates and charges; and.

WHEREAS, the Rate Study was completed in 2016 and affirmed MWDOC's Retail Meter Charge, and added a new Groundwater Customer Charge effective with the fiscal year 2016-17 rates and charges; and.

WHEREAS, beginning with the budget year commencing July 1, 2011 through June 30, 2012, the MWDOC Board approved changing the format of the budget and how certain "Choice" services are to be funded by those MWDOC member agencies and the cities of Anaheim, Fullerton and Santa Ana (3 Cities) electing to receive such services; and.

WHEREAS, the MWDOC Board has approved the "Choice" services, the associated budgets, and the methods for allocating such costs to the member agencies and 3 Cities, and has directed staff to bill for those costs pursuant to Section 10 of this Resolution as part of MWDOC's water rates and charges; and.

WHEREAS, there is a need to charge for costs associated with the transfer or



wheeling of water into the MWDOC service area by any member agency as is provided for in this Resolution.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Municipal Water District of Orange County that, subject to the terms and conditions set forth herein, the rates and charges for the classes of water service provided by MWDOC to MWDOC's member agencies shall be as follows:

**SECTION 1.**        **RATES FOR CLASSES OF WATER SERVICE.**

The rates per acre-foot of Metropolitan water sold or delivered by MWDOC to its member agencies shall be as follows:

(a) For Full Service, including water delivered for seawater barrier and groundwater replenishment purposes and for agricultural purposes.



Rate Component	July 1 through December 31, <del>2018</del> 2017	Beginning January 1, <del>2019</del> 2018
Untreated Full Service	<del>\$695</del> 666.00	<del>\$731</del> 695.00
Treated Full Service	<del>\$1,015</del> 979.00	<del>\$1,050</del> 45.00
<b>Unbundled Rate By Component:</b>		
System Access Rate	\$2 <del>99</del> 89.00	\$ <del>326</del> 299.00
System Power Rate	\$1 <del>32</del> 24.00	\$ <del>127</del> 432.00
Water Stewardship Rate	\$5 <del>52</del> .00	\$ <del>69</del> 55.00
MWDOC Melded Supply Rate*	<del>\$209</del> 204.00	\$209.00
Tiered Supply Rate (Tier 1/Tier 2)*	N/A	N/A
<b>Subtotal Untreated Full Service:</b>	<del>\$695</del> 666.00	<del>\$731</del> 695.00
Treatment Surcharge	\$3 <del>20</del> 13.00	\$3 <del>19</del> 20.00
<b>Total Treated Full Service:</b>	<del>\$1,015</del> 979.00	<del>\$1,050</del> 45.00

\* Any unused revenue will be applied to the Tier 2 Contingency Fund as described in MWDOC's Administrative Code. As a result of MWDOC not applying the Tier 2 Contingency Fund rate, the MWDOC Melded Supply Rate is equal to MET's Tier-1 Supply Rate at this time.

(b) **Drought Allocation Surcharge**

Rates for a Drought Allocation Surcharge are established by Board action in accordance with the Water Supply Allocation Plan (WSAP), as required.

**SECTION 2. MWDOC READINESS-TO-SERVE CHARGE.**

(a) Amount Due to Metropolitan from MWDOC

Metropolitan has notified MWDOC that for fiscal year 201~~87~~-1~~98~~ Metropolitan



estimates that the amount of Metropolitan's Readiness-~~to-Serve~~ ("RTS") Charge applicable to MWDOC, which exceeds the standby charges collected in MWDOC's service area ("Net RTS") is ~~\$10,455,204 10,631,604~~. The Net RTS Charge will be allocated among the MWDOC member agencies, as provided herein and invoiced as a fixed charge to each MWDOC member agency. Metropolitan will bill MWDOC for the Net RTS Charge on a monthly installment basis. The MWDOC Net RTS Charge will be invoiced to ~~each~~the MWDOC member agencies on a monthly basis.

(b) Apportionment of Net Metropolitan RTS Charge to MWDOC's Member Agencies

The MWDOC method of apportioning the Net ~~Metropolitan~~ RTS Charge to the MWDOC member agencies uses the most recently completed four-year rolling average of fiscal year full service purchases of water ending one year prior to the year of the charge being imposed (i.e., for fiscal year 201~~87-198~~ charges, the four-year average shall be based on fiscal years 201~~32-143~~ through 201~~65-176~~). The Net Metropolitan RTS Charges to MWDOC shall be apportioned to the MWDOC member agencies based on the four-year average of full service sales, which would include wheeled and transferred water.

(c) Fiscal Year 201~~87-198~~ MWDOC ~~Readiness to Serve~~ RTS Charge ~~Rate~~

For fiscal year 201~~87-198~~, MWDOC will charge the MWDOC member agencies total Net RTS Charges of ~~\$10,455,204 10,631,604~~. The amount of the Net RTS Charge to be apportioned to each of the MWDOC member agencies is set forth in **Exhibit A**, attached hereto and by this reference incorporated herein made an operative part hereof.

(d) Adjustment of RTS Charge

Metropolitan determines its Net RTS Charge to each agency based on the estimated revenue derived from the Metropolitan Standby Charge within each member agency (less delinquencies and administrative costs). The projected Net Standby Charge revenue for MWDOC in fiscal year 201~~87-198~~ is set forth in **Exhibit A**. Once the actual Net Standby



Charge revenue is known, Metropolitan may adjust the amount of the Net RTS Charge for the prior year through an additional charge or credit. Any adjustment necessary to reconcile the estimated Net RTS Charge with the actual Net RTS Charge will be charged or credited to each MWDOC member agency in the next regularly scheduled water billing following the preparation of the reconciliation report by Metropolitan.

### **SECTION 3. MWDOC CAPACITY CHARGE**

#### **(a) Amount due to Metropolitan from MWDOC**

Metropolitan has notified MWDOC that for calendar year 201~~98~~, the amount of the Metropolitan Capacity Charge to be imposed on MWDOC will be \$~~3,753,900~~~~3,854,970~~. The Metropolitan Capacity Charge will be allocated among the MWDOC member agencies as provided herein and invoiced as a fixed charge to each member agency. Metropolitan will bill MWDOC for the Capacity Charge on a monthly installment basis. The MWDOC Capacity Charge will be invoiced to the MWDOC member agencies on a monthly basis.

#### **(b) Apportionment of Metropolitan's Capacity Charge to MWDOC's Member Agencies**

The MWDOC method of apportioning the Capacity Charge to the MWDOC member agencies uses each member agency's highest peak day flow for delivery of full service water, which includes wheeled and transferred water, during the period of May 1 through September 30 of each year for the three-year period ending one year prior to the year of the charge being imposed (i.e., for calendar year 201~~98~~ charges, the highest peak day flow shall be based on May 1 through September 30, 201~~54~~, 201~~65~~ and 201~~76~~). The peak day flow for each MWDOC member agency is used to apportion the Capacity Charge based upon the ratio of each agency's highest peak day flow to the sum of all member agencies' highest peak day flows. The amount of the 201~~98~~ Capacity Charge apportioned to each member agency is set forth in **Exhibit B**, attached hereto and by this reference incorporated herein and made an



operative part hereof.

#### **SECTION 4. MWDOC'S RETAIL METER CHARGE.**

The annual charge to be imposed by MWDOC on each member agency for each retail water meter served by a MWDOC member agency which is in service as of January 1 of each year ("MWDOC's Retail Meter Charge") shall be \$~~12.25~~~~41.90~~. MWDOC's Retail Meter Charge shall be collected in accordance with Section 10 of this Resolution. Annually, or at such time as determined to be necessary, MWDOC will request supporting documentation from each member agency to verify the number of retail meters within their service area, and such documentation shall be signed by a representative of the member agency. MWDOC is also authorized to conduct random on-site visits with the member agencies to verify the data on the number of retail meters.

#### **SECTION 5. MWDOC GROUNDWATER CUSTOMER CHARGE**

The annual charge to be imposed on Orange County Water District (OCWD) for Core services provided by MWDOC for fiscal year 201~~87~~-1~~98~~ shall be \$~~498,189~~~~499,012~~~~468,565~~. MWDOC's Groundwater Customer Charge to be imposed on OCWD shall be collected in accordance with Section 10 of this Resolution.

The Groundwater Customer Charge is calculated based on OCWD's portion of MWDOC's Cost Centers #21 (Planning and Resource Development) and #23 (MET Issues and Special Projects), plus one-twenty-sixth of the remaining MWDOC cost centers of MWDOC's fiscal year 201~~87~~-1~~98~~ general fund core budget, but not including the WEROC cost item. OCWD's portion of Cost Centers #21 and #23 is based on ~~the~~ OCWD's most recent 10-year historical water purchases as a percentage of the sum of the MWDOC member agencies' 10-year historical water purchases.



**SECTION 6. CHOICE SERVICES TO THE MWDOC MEMBER AGENCIES 201~~87~~-1~~98~~**

The Choice services to the member agencies shall be provided and charged for as follows for 201~~87~~-1~~98~~:

- (a) Water Use Efficiency Program – The cost of MWDOC’s Water Use Efficiency Program shall be allocated to those agencies electing to participate in the program. The costs shall be apportioned to the participants in proportion to the benefits received from Metropolitan and/or any other outside sources of funding in calendar year 201~~7~~6. There may be other costs allocated over and above these costs for participation in certain water use efficiency program efforts in various parts of Orange County that are separate from this basic program. Anything beyond the basic program will be implemented separately by agreement or memorandum of understanding with each participating member agency. The costs to be charged shall reflect any carry-over or deficit funds from the preceding fiscal year.
- (b) The Elementary School Education Program will provide grade-specific water education programs for students in Grade 1 through Grade 6 in private and public schools located in Orange County. Each participating member agency may set a target number of students for which the School Education program (“basic program”) be made available in their service area. The basic program will be charged based on the actual number of students to which the program is provided, at a cost of \$4.~~11~~03 per student. The School Education Program in fiscal year 201~~87~~-1~~98~~ offers other additional services to the member agencies that may be provided pursuant to a contract entered into with MWDOC and



under a separate fee structure.

~~(e) —~~ The High School Education Program will provide for a grade-specific water education program for students in Grade 9 through Grade 12 in private and public schools within Orange County ~~in conjunction with a digital program and teachers' training program~~. The High School program is charged based ~~on~~ on the level of participation and the program structure number of High Schools participating in the program. For Fiscal Year 20187-198, the participation rate is \$4,371,244 per ~~participating~~ High School, ~~and the total cost for the digital program and teachers' education is \$42,436. These costs are apportioned over all agencies participating based on the percentage of each agency's high school students compared to the total number of high school students in the program (all cities and water agencies participating). The costs to be charged shall reflect any carry-over or deficit funds from the preceding fiscal year.~~

(c) —

~~(e) Poseidon Huntington Beach Ocean Desalination Program — The Poseidon Ocean Desalination project Choice activities for fiscal year 2016-17 are uncertain at the time the Board is adopting the budgets and setting the rates and charges. During fiscal year 2014-15, 17 member agencies participated in the Poseidon Choice program. MWDOC will not charge the participating member agencies during fiscal year 2017-18, but will refund the existing accumulation of funds to each agency who deposited funds towards the Poseidon Workgroup. Blank~~

(f) Blank

~~(f) —.~~



- (d) The Water Loss Control Program provides professional services with Water Systems Optimization, Inc. for water loss control technical assistance to retail agencies in Orange County, as well as technical services with McCall's Meters, Inc. and with Westerly Meter Service Company to provide meter accuracy testing services. The costs for the program varies per agency according to the level of professional and technical service selected by each participating agency. The costs to be charged shall reflect any carry-over or deficit funds from the preceding fiscal year.

The details on these Choice options and charges to the member agencies are included in Section 10 and are set forth in **Exhibit C**, attached hereto and by this reference incorporated herein and made an operative part hereof .



## **SECTION 7. RATES AND CHARGES FOR WHEELED, EXCHANGED OR TRANSFERRED WATER**

Unless otherwise specified by written agreement with MWDOC, MWDOC shall charge the member agencies for water wheeled, exchanged or transferred through exchanges with Metropolitan into the MWDOC service area in accordance with the provisions below.

Wheeled, exchanged or transferred water will also be assessed, unless otherwise specified by written agreement, at the then-applicable rates for wheeling services set by Metropolitan's Board of Directors from time to time pursuant to its Administrative Code for the use of Metropolitan's facilities to transport water not owned or controlled by Metropolitan to Metropolitan's member agencies. Metropolitan's rates for ~~the~~ "wheeling service" are defined in the Metropolitan Administrative Code. Metropolitan's rate for wheeling service does not include power utilized for delivery, which the wheeling party must provide or pay directly at its own cost (if power can be scheduled by Metropolitan) or pay to Metropolitan at Metropolitan's actual (not system average) cost.

In addition to these charges, MWDOC shall assess the following charges related to costs, pursuant to applicable law:

- (a) A one-time administrative charge, based on actual time spent to account for the staff time and legal counsel time required for preparation of an agreement or agreements to establish the legal and administrative framework for water to be wheeled or transferred through exchanges with Metropolitan.
- (b) Unless otherwise specified by written agreement with MWDOC, an annual charge will be assessed, based on actual time spent in any year



in which water is wheeled or transferred through exchanges with Metropolitan, to cover staff time to account for and bill for the water.

- (c) Other charges established by written agreement between MWDOC and a Member Agency.

## **SECTION 8. MWDOC WATER SUPPLY ALLOCATION PLAN (WSAP)**

In the event that a regional water shortage is declared, the MWDOC Board can implement, adjust, or adopt an updated Water Supply Allocation Plan ("Plan"). This Plan, as adopted in 2009, updated in 2014 and 2016, and as amended from time to time, established procedures allowing MWDOC to assess an allocation surcharge to its member agencies in the event MWDOC is assessed an allocation surcharge under Metropolitan's own "Water Supply Allocation Plan." Under MWDOC's Plan, surcharges may be assessed according to a particular member agency's prorated share of its over usage relative to the MWDOC surcharge amount assessed by Metropolitan. However, the rates set forth in this Resolution do not include or otherwise account for potential surcharges that may be assessed by MWDOC under its Water Supply Allocation Plan.

## **SECTION 9. EFFECTIVE DATE.**

The rates set forth in this Resolution shall become effective as of July 1, 201~~8~~<sup>7</sup> or thereafter as specified and shall remain in effect until changed by subsequent Resolution of the Board of Directors.

## **SECTION 10. BILLING AND PAYMENT.**

Billing Schedule. MWDOC member agencies shall be billed for water delivered and



for other charges as follows:

- (a) MWDOC's cost of acquisition of the water shall be billed in the month following delivery of the water;
- (b) MWDOC's Retail Meter Charge shall be billed once annually on or after July 1st of each year, for each retail water service meter within each member agency's service area;
- (c) the MWDOC Readiness-to-Serve Charge shall be billed in monthly installments on the water billing in accordance with **Exhibit A**, the MWDOC Capacity Charge shall be billed in monthly installments on the water billing in accordance with **Exhibit B**; and
- (d) the MWDOC Choice services shall be billed once annually on or after July 1<sup>st</sup> of each year or as otherwise during the fiscal year in accordance with **Exhibit C** and/or as may be adjusted during the fiscal year in discussions with and as agreed to by the Choice Program participants.
- (e) The fixed annual Groundwater Customer Charge to OCWD, as set forth in MWDOC's Water Rate Ordinance No. 53 and referred to in Section 5 hereof, shall be billed to OCWD annually at the beginning of the fiscal year on July 1. All such billings shall be due on receipt by the member agency and shall be delinquent if payment is not received by MWDOC by the 15th day of the month following the mailing of the billing or within 30 days of mailing of such billing, whichever date is later.

**SECTION 11. EXEMPTION FROM CEQA.**

The Board of Directors finds that the adoption of the rates and charges as set forth in this Resolution are exempt from the California Environmental Quality Act under Section



21080(b)(8) of the Public Resources Code in that the water rates established herein are for the purpose of meeting operating expenses of MWDOC, including employee wages and fringe benefits, purchasing or leasing of supplies, equipment and materials, meeting financial reserve needs and requirements and obtaining funds for capital projects necessary to maintain service within existing service areas.

**SECTION 12.**        **REASONABLE COST.**

The Board of Directors finds that the water rates established herein are in accordance with the adopted fiscal year 201~~87~~-1~~98~~ budget, and that said rates do not exceed the reasonable cost of providing water service and other services and regulatory functions for which they are charged.

**SECTION 13.**        **SUPERSEDES PRIOR RESOLUTIONS.**

All resolutions, ordinance or administrative actions by the Board or parts thereof that are inconsistent with any provision of this Resolution are hereby superseded only to the extent of such inconsistency.

**SECTION 14.**        **RATES SUBJECT TO ORDINANCE.**

The rates for water service established herein are subject to Ordinance No. 53 as it may be amended from time to time.

**SECTION 15.**        **IMPLEMENTATION.**

The General Manager is directed to establish procedures to implement this Resolution.

BE IT FURTHER RESOLVED that a copy of this Resolution be sent to each of MWDOC's member agencies.



Said Resolution No. was adopted by the following roll call vote:

AYES: Directors

NOES:

ABSENT:

ABSTAIN:

---

MARIBETH GOLDSBY, District Secretary  
Municipal Water District of Orange County



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

WHEREAS, pursuant to Water Code sections 71614 and 71616, the Municipal Water District of Orange County ("MWDOC") is authorized to establish water rates and charges for water which will result in revenues sufficient to meet the operating expenses of the District, provide for repairs and depreciation of works, provide a reasonable surplus for improvements, extensions and enlargements, and cover principal and interest payments and costs associated with bonded debt; and,

WHEREAS, the Metropolitan Water District of Southern California ("Metropolitan"), adopted rates for water service consisting of a two-tiered water supply rate, and separate unbundled rates for system access, water stewardship, system power, water treatment, and fixed charges for the Capacity Charge and Readiness-to-Serve, which are imposed on MWDOC as a condition of receiving water deliveries from Metropolitan; and,

WHEREAS, pursuant to Section 1117 of the MWDOC Administrative Code, the MWDOC Board of Directors adopted Ordinance No. 53 establishing classes of water service, and terms and conditions of such service, and intends to adopt this Resolution fixing the rates and charges for said classes of water service (including Choice services in Section 6); and,

WHEREAS, the Board of Directors has reviewed the cost of water and other charges imposed on MWDOC by Metropolitan, and with respect to the projected MWDOC operating expenses and financial needs, and has determined that it is necessary and appropriate to establish new rates and charges for water service and programs provided by MWDOC; and,

WHEREAS, the Board of Directors has reviewed the water supply, water demand and replenishment conditions in the Orange County Water District (OCWD) Basin and the impact these conditions will have on MWDOC's imported water purchases from Metropolitan; and,



WHEREAS, MWDOC's Administration and Finance Committee and Board reviewed the issue of tiered or melded water rates for Tier-1 and Tier-2 purchases from Metropolitan in November 2004, and retained the establishment of a melded rate, with a provision for further review should the OCWD's basin pumping percentage fall below 60% in the future; and,

WHEREAS, Metropolitan continues to levy its Standby Charge within the MWDOC service area, which will be credited against Metropolitan's Readiness-to-Serve Charge and will provide an equivalent offset on the Metropolitan charges imposed on MWDOC; and,

WHEREAS, Metropolitan assesses a Capacity Charge to MWDOC based on MWDOC's highest cumulative peak day delivery rate in cubic feet per second (CFS) between May 1 and September 30 in the three preceding calendar years, ending on the year prior to the year of the charge being imposed; and,

WHEREAS, MWDOC engaged Raftelis Financial Consultants, Inc. to prepare a cost of service and rate study (Rate Study) for MWDOC's rates and charges; and,

WHEREAS, the Rate Study was completed in 2016 and affirmed MWDOC's Retail Meter Charge, and added a new Groundwater Customer Charge effective with the fiscal year 2016-17 rates and charges; and,

WHEREAS, beginning with the budget year commencing July 1, 2011 through June 30, 2012, the MWDOC Board approved changing the format of the budget and how certain "Choice" services are to be funded by those MWDOC member agencies and the cities of Anaheim, Fullerton and Santa Ana (3 Cities) electing to receive such services; and,

WHEREAS, the MWDOC Board has approved the "Choice" services, the associated budgets, and the methods for allocating such costs to the member agencies and 3 Cities, and has directed staff to bill for those costs pursuant to Section 10 of this Resolution as part of MWDOC's water rates and charges; and,

WHEREAS, there is a need to charge for costs associated with the transfer or



wheeling of water into the MWDOC service area by any member agency as is provided for in this Resolution.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Municipal Water District of Orange County that, subject to the terms and conditions set forth herein, the rates and charges for the classes of water service provided by MWDOC to MWDOC's member agencies shall be as follows:

**SECTION 1.**        **RATES FOR CLASSES OF WATER SERVICE.**

The rates per acre-foot of Metropolitan water sold or delivered by MWDOC to its member agencies shall be as follows:

(a) For Full Service, including water delivered for seawater barrier and groundwater replenishment purposes and for agricultural purposes.



Rate Component	July 1 through December 31, 2018	Beginning January 1, 2019
<b>Untreated Full Service</b>	<b>\$695.00</b>	<b>\$731.00</b>
<b>Treated Full Service</b>	<b>\$1,015.00</b>	<b>\$1,050.00</b>
<b>Unbundled Rate By Component:</b>		
System Access Rate	\$299.00	\$326.00
System Power Rate	\$132.00	\$127.00
Water Stewardship Rate	\$55.00	\$69.00
MWDOC Melded Supply Rate*	\$209.00	\$209.00
Tiered Supply Rate (Tier 1/Tier 2)*	N/A	N/A
<b>Subtotal Untreated Full Service:</b>	<b>\$695.00</b>	<b>\$731.00</b>
Treatment Surcharge	\$320.00	\$319.00
<b>Total Treated Full Service:</b>	<b>\$1,015.00</b>	<b>\$1,050.00</b>

\* Any unused revenue will be applied to the Tier 2 Contingency Fund as described in MWDOC's Administrative Code. As a result of MWDOC not applying the Tier 2 Contingency Fund rate, the MWDOC Melded Supply Rate is equal to MET's Tier-1 Supply Rate at this time.

(b) **Drought Allocation Surcharge**

Rates for a Drought Allocation Surcharge are established by Board action in accordance with the Water Supply Allocation Plan (WSAP), as required.

**SECTION 2. MWDOC READINESS-TO-SERVE CHARGE.**

(a) **Amount Due to Metropolitan from MWDOC**

Metropolitan has notified MWDOC that for fiscal year 2018-19 Metropolitan estimates that the amount of Metropolitan's Readiness-to-Serve ("RTS") Charge applicable to MWDOC,



which exceeds the standby charges collected in MWDOC's service area ("Net RTS") is \$10,455,204 . The Net RTS Charge will be allocated among the MWDOC member agencies, as provided herein and invoiced as a fixed charge to each MWDOC member agency. Metropolitan will bill MWDOC for the Net RTS Charge on a monthly installment basis. The MWDOC Net RTS Charge will be invoiced to each MWDOC member agencies on a monthly basis.

(b) Apportionment of Net Metropolitan RTS Charge to MWDOC's Member Agencies

The MWDOC method of apportioning the Net Metropolitan RTS Charge to the MWDOC member agencies uses the most recently completed four-year rolling average of fiscal year full service purchases of water ending one year prior to the year of the charge being imposed (i.e., for fiscal year 2018-19 charges, the four-year average shall be based on fiscal years 2013-14 through 2016-17). The Net Metropolitan RTS Charge to MWDOC shall be apportioned to the MWDOC member agencies based on the four-year average of full service sales, which would include wheeled and transferred water.

(c) Fiscal Year 2018-19 MWDOC RTS Charge

For fiscal year 2018-19, MWDOC will charge the MWDOC member agencies total Net RTS Charges of \$10,455,204. The amount of the Net RTS Charge to be apportioned to each of the MWDOC member agencies is set forth in **Exhibit A**, attached hereto and by this reference incorporated herein made an operative part hereof.

(d) Adjustment of RTS Charge

Metropolitan determines its Net RTS Charge to each agency based on the estimated revenue derived from the Metropolitan Standby Charge within each member agency (less delinquencies and administrative costs). The projected Net Standby Charge revenue for MWDOC in fiscal year 2018-19 is set forth in **Exhibit A**. Once the actual Net Standby Charge revenue is known, Metropolitan may adjust the amount of the Net RTS Charge for the



prior year through an additional charge or credit. Any adjustment necessary to reconcile the estimated Net RTS Charge with the actual Net RTS Charge will be charged or credited to each MWDOC member agency in the next regularly scheduled water billing following the preparation of the reconciliation report by Metropolitan.

### **SECTION 3. MWDOC CAPACITY CHARGE**

#### **(a) Amount due to Metropolitan from MWDOC**

Metropolitan has notified MWDOC that for calendar year 2019, the amount of the Metropolitan Capacity Charge to be imposed on MWDOC will be \$3,753,900. The Metropolitan Capacity Charge will be allocated among the MWDOC member agencies as provided herein and invoiced as a fixed charge to each member agency. Metropolitan will bill MWDOC for the Capacity Charge on a monthly installment basis. The MWDOC Capacity Charge will be invoiced to the MWDOC member agencies on a monthly basis.

#### **(b) Apportionment of Metropolitan's Capacity Charge to MWDOC's Member Agencies**

The MWDOC method of apportioning the Capacity Charge to the MWDOC member agencies uses each member agency's highest peak day flow for delivery of full service water, which includes wheeled and transferred water, during the period of May 1 through September 30 of each year for the three-year period ending one year prior to the year of the charge being imposed (i.e., for calendar year 2019 charges, the highest peak day flow shall be based on May 1 through September 30, 2015, 2016 and 2017). The peak day flow for each MWDOC member agency is used to apportion the Capacity Charge based upon the ratio of each agency's highest peak day flow to the sum of all member agencies' highest peak day flows. The amount of the 2019 Capacity Charge apportioned to each member agency is set forth in **Exhibit B**, attached hereto and by this reference incorporated herein and made an operative part hereof.



**SECTION 4.**            **MWDOC'S RETAIL METER CHARGE.**

The annual charge to be imposed by MWDOC on each member agency for each retail water meter served by a MWDOC member agency which is in service as of January 1 of each year ("MWDOC's Retail Meter Charge") shall be \$12.25. MWDOC's Retail Meter Charge shall be collected in accordance with Section 10 of this Resolution. Annually, or at such time as determined to be necessary, MWDOC will request supporting documentation from each member agency to verify the number of retail meters within their service area, and such documentation shall be signed by a representative of the member agency. MWDOC is also authorized to conduct random on-site visits with the member agencies to verify the data on the number of retail meters.

**SECTION 5.**            **MWDOC GROUNDWATER CUSTOMER CHARGE**

The annual charge to be imposed on Orange County Water District (OCWD) for Core services provided by MWDOC for fiscal year 2018-19 shall be \$499,012. MWDOC's Groundwater Customer Charge to be imposed on OCWD shall be collected in accordance with Section 10 of this Resolution.

The Groundwater Customer Charge is calculated based on OCWD's portion of MWDOC's Cost Centers #21 (Planning and Resource Development) and #23 (MET Issues and Special Projects), plus one-twenty-sixth of the remaining MWDOC cost centers of MWDOC's fiscal year 2018-19 general fund core budget, but not including the WEROC cost item. OCWD's portion of Cost Centers #21 and #23 is based on OCWD's most recent 10-year historical water purchases as a percentage of the sum of the MWDOC member agencies' 10-year historical water purchases.



## **SECTION 6. CHOICE SERVICES TO THE MWDOC MEMBER AGENCIES 2018-19**

The Choice services to the member agencies shall be provided and charged for as follows for 2018-19:

- (a) Water Use Efficiency Program – The cost of MWDOC’s Water Use Efficiency Program shall be allocated to those agencies electing to participate in the program. The costs shall be apportioned to the participants in proportion to the benefits received from Metropolitan and/or any other outside sources of funding in calendar year 2017. There may be other costs allocated over and above these costs for participation in certain water use efficiency program efforts in various parts of Orange County that are separate from this basic program. Anything beyond the basic program will be implemented separately by agreement or memorandum of understanding with each participating member agency. The costs to be charged shall reflect any carry-over or deficit funds from the preceding fiscal year.
- (b) The Elementary School Education Program will provide grade-specific water education programs for students in Grade 1 through Grade 6 in private and public schools located in Orange County. Each participating member agency may set a target number of students for which the School Education program (“basic program”) be made available in their service area. The basic program will be charged based on the actual number of students to which the program is provided, at a cost of \$4.11 per student. The School Education Program in fiscal year 2018-19 offers other additional services to the member agencies that may be provided pursuant to a contract entered into with MWDOC and under a separate fee structure.



- (c) The High School Education Program will provide for a grade-specific water education program for students in Grade 9 through Grade 12 in private and public schools within Orange County. The High School program is charged based on the number of High Schools participating in the program. For Fiscal Year 2018-19, the participation rate is \$4,371 per High School.
- (e) Blank
- (f) Blank
- (d) The Water Loss Control Program provides professional services with Water Systems Optimization, Inc. for water loss control technical assistance to retail agencies in Orange County, as well as technical services with McCall's Meters, Inc. and with Westerly Meter Service Company to provide meter accuracy testing services. The costs for the program varies per agency according to the level of professional and technical service selected by each participating agency. The costs to be charged shall reflect any carry-over or deficit funds from the preceding fiscal year.

The details on these Choice options and charges to the member agencies are included in Section 10 and are set forth in **Exhibit C**, attached hereto and by this reference incorporated herein and made an operative part hereof .



## **SECTION 7. RATES AND CHARGES FOR WHEELED, EXCHANGED OR TRANSFERRED WATER**

Unless otherwise specified by written agreement with MWDOC, MWDOC shall charge the member agencies for water wheeled, exchanged or transferred through exchanges with Metropolitan into the MWDOC service area in accordance with the provisions below.

Wheeled, exchanged or transferred water will also be assessed, unless otherwise specified by written agreement, at the then-applicable rates for wheeling services set by Metropolitan's Board of Directors from time to time pursuant to its Administrative Code for the use of Metropolitan's facilities to transport water not owned or controlled by Metropolitan to Metropolitan's member agencies. Metropolitan's rates for "wheeling service" are defined in the Metropolitan Administrative Code. Metropolitan's rate for wheeling service does not include power utilized for delivery, which the wheeling party must provide or pay directly at its own cost (if power can be scheduled by Metropolitan) or pay to Metropolitan at Metropolitan's actual (not system average) cost.

In addition to these charges, MWDOC shall assess the following charges related to costs, pursuant to applicable law:

- (a) A one-time administrative charge, based on actual time spent to account for the staff time and legal counsel time required for preparation of an agreement or agreements to establish the legal and administrative framework for water to be wheeled or transferred through exchanges with Metropolitan.
- (b) Unless otherwise specified by written agreement with MWDOC, an annual charge will be assessed, based on actual time spent in any year



in which water is wheeled or transferred through exchanges with Metropolitan, to cover staff time to account for and bill for the water.

- (c) Other charges established by written agreement between MWDOC and a Member Agency.

## **SECTION 8. MWDOC WATER SUPPLY ALLOCATION PLAN (WSAP)**

In the event that a regional water shortage is declared, the MWDOC Board can implement, adjust, or adopt an updated Water Supply Allocation Plan ("Plan"). This Plan, as adopted in 2009, updated in 2014 and 2016, and as amended from time to time, established procedures allowing MWDOC to assess an allocation surcharge to its member agencies in the event MWDOC is assessed an allocation surcharge under Metropolitan's own "Water Supply Allocation Plan." Under MWDOC's Plan, surcharges may be assessed according to a particular member agency's prorated share of its over usage relative to the MWDOC surcharge amount assessed by Metropolitan. However, the rates set forth in this Resolution do not include or otherwise account for potential surcharges that may be assessed by MWDOC under its Water Supply Allocation Plan.

## **SECTION 9. EFFECTIVE DATE.**

The rates set forth in this Resolution shall become effective as of July 1, 2018 or thereafter as specified and shall remain in effect until changed by subsequent Resolution of the Board of Directors.

## **SECTION 10. BILLING AND PAYMENT.**

Billing Schedule. MWDOC member agencies shall be billed for water delivered and



for other charges as follows:

- (a) MWDOC's cost of acquisition of the water shall be billed in the month following delivery of the water;
- (b) MWDOC's Retail Meter Charge shall be billed once annually on or after July 1st of each year, for each retail water service meter within each member agency's service area;
- (c) the MWDOC Readiness-to-Serve Charge shall be billed in monthly installments on the water billing in accordance with **Exhibit A**, the MWDOC Capacity Charge shall be billed in monthly installments on the water billing in accordance with **Exhibit B**; and
- (d) the MWDOC Choice services shall be billed once annually on or after July 1<sup>st</sup> of each year or as otherwise during the fiscal year in accordance with **Exhibit C** and/or as may be adjusted during the fiscal year in discussions with and as agreed to by the Choice Program participants.
- (e) The fixed annual Groundwater Customer Charge to OCWD, as set forth in MWDOC's Water Rate Ordinance No. 53 and referred to in Section 5 hereof, shall be billed to OCWD annually at the beginning of the fiscal year on July 1. All such billings shall be due on receipt by the member agency and shall be delinquent if payment is not received by MWDOC by the 15th day of the month following the mailing of the billing or within 30 days of mailing of such billing, whichever date is later.

**SECTION 11. EXEMPTION FROM CEQA.**

The Board of Directors finds that the adoption of the rates and charges as set forth in this Resolution are exempt from the California Environmental Quality Act under Section



21080(b)(8) of the Public Resources Code in that the water rates established herein are for the purpose of meeting operating expenses of MWDOC, including employee wages and fringe benefits, purchasing or leasing of supplies, equipment and materials, meeting financial reserve needs and requirements and obtaining funds for capital projects necessary to maintain service within existing service areas.

**SECTION 12.**        **REASONABLE COST.**

The Board of Directors finds that the water rates established herein are in accordance with the adopted fiscal year 2018-19 budget, and that said rates do not exceed the reasonable cost of providing water service and other services and regulatory functions for which they are charged.

**SECTION 13.**        **SUPERSEDES PRIOR RESOLUTIONS.**

All resolutions, ordinance or administrative actions by the Board or parts thereof that are inconsistent with any provision of this Resolution are hereby superseded only to the extent of such inconsistency.

**SECTION 14.**        **RATES SUBJECT TO ORDINANCE.**

The rates for water service established herein are subject to Ordinance No. 53 as it may be amended from time to time.

**SECTION 15.**        **IMPLEMENTATION.**

The General Manager is directed to establish procedures to implement this Resolution.

BE IT FURTHER RESOLVED that a copy of this Resolution be sent to each of MWDOC's member agencies.



Said Resolution No. was adopted by the following roll call vote:

AYES: Directors

NOES:

ABSENT:

ABSTAIN:

---

MARIBETH GOLDSBY, District Secretary  
Municipal Water District of Orange County



**EXHIBIT A**

**Readiness-to-serve Charge for MWDOC Client Agencies for FY 2018-19**

<b>Metropolitan Readiness-to-Serve (RTS) Charge to MWDOC for FY 2018/19 = \$ 17,600,888</b>				
<b>Expected Standby Revenue Less Metropolitan Administrative Charge Plus Delinquencies &amp; Uncollectables FY 2018/19 = \$ (7,145,684)</b>				
<b>Net MWD RTS Charge = \$ 10,455,204</b>				

**DRAFT**

as of 4/4/18

Agency						AF Share (%)	Net RTS	2018	2019
								Monthly Charge July - December	Monthly Charge January - June
	2013-14	2014-15	2015-16	2016-17	4-Yr Ave				
Brea	3,459	3,285	1,553	1,159.7	2,364	1.15%	\$ 119,891	\$ 10,358	\$ 9,624
Buena Park	4,571	2,782	716	3,229.0	2,824	1.37%	\$ 143,229	\$ 12,374	\$ 11,497
East Orange County Water District	4,765	3,164	1,726	1,372.0	2,757	1.34%	\$ 139,787	\$ 12,077	\$ 11,221
El Toro Water District	10,165	8,631	6,967	6,638.7	8,100	3.93%	\$ 410,764	\$ 35,487	\$ 32,973
Fountain Valley	2,644	2,618	1,985	2,112.1	2,340	1.13%	\$ 118,646	\$ 10,250	\$ 9,524
Garden Grove	5,183	5,928	3,301	6,134.7	5,137	2.49%	\$ 260,477	\$ 22,503	\$ 20,909
Golden State Water Company	8,209	5,863	3,395	5,664.0	5,783	2.80%	\$ 293,245	\$ 25,334	\$ 23,540
Huntington Beach	9,342	7,692	6,060	6,083.7	7,295	3.54%	\$ 369,902	\$ 31,957	\$ 29,693
Irvine Ranch Water District	21,127	16,680	11,732	18,594.7	17,034	8.26%	\$ 863,768	\$ 74,624	\$ 69,338
La Habra	42	232	10	75.7	90	0.04%	\$ 4,564	\$ 394	\$ 366
La Palma	663	539	491	651.2	586	0.28%	\$ 29,711	\$ 2,567	\$ 2,385
Laguna Beach County Water District	3,926	3,641	3,310	1,663.1	3,135	1.52%	\$ 158,964	\$ 13,733	\$ 12,761
Mesa Water District	0	0	202	0.0	51	0.02%	\$ 2,563	\$ 221	\$ 206
Moulton Niguel Water District	28,869	26,792	23,429	22,866.0	25,489	12.36%	\$ 1,292,542	\$ 111,667	\$ 103,757
Newport Beach	6,045	4,338	3,167	3,316.9	4,217	2.05%	\$ 213,821	\$ 18,473	\$ 17,164
Orange	7,796	6,516	4,103	5,786.3	6,050	2.93%	\$ 306,813	\$ 26,507	\$ 24,629
Orange County Water District	55,215	65,759	54,661	42,878.5	54,628	26.50%	\$ 2,770,170	\$ 239,324	\$ 222,371
San Clemente	9,654	8,917	6,512	6,542.5	7,906	3.83%	\$ 400,933	\$ 34,638	\$ 32,184
San Juan Capistrano	5,189	5,166	4,998	5,555.5	5,227	2.54%	\$ 265,077	\$ 22,901	\$ 21,279
Santa Margarita Water District	28,779	26,725	21,892	21,846.5	24,810	12.03%	\$ 1,258,129	\$ 108,694	\$ 100,994
Seal Beach	1,164	787	1,033	1,000.4	996	0.48%	\$ 50,500	\$ 4,363	\$ 4,054
Serrano Water District	4,034	4,682	216	2,198.6	2,782	1.35%	\$ 141,097	\$ 12,190	\$ 11,326
South Coast Water District	6,030	5,714	4,910	4,907.0	5,390	2.61%	\$ 273,335	\$ 23,614	\$ 21,941
Trabuco Canyon Water District	3,183	2,968	2,198	2,000.2	2,587	1.25%	\$ 131,204	\$ 11,335	\$ 10,532
Westminster	3,760	2,356	459	2,602.0	2,294	1.11%	\$ 116,331	\$ 10,050	\$ 9,338
Yorba Linda Water District	10,881	5,595	3,375	5,369.7	6,305	3.06%	\$ 319,739	\$ 27,623	\$ 25,667
Sum of MWDOC Agencies	244,694	227,369	172,400	180,248.7	206,178	100%	\$ 10,455,204	\$ 903,260	\$ 839,274



**EXHIBIT B**

**Capacity Charge for MWDOC Member Agencies for CY 2019**

DRAFT 4/3/18

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Peak</b>
MWDOC's Peak to MWD (cfs)	293.0	406.0	436.5	<b>436.5</b>
Date	7/3/15	7/12/16	7/24/17	<b>7/24/17</b>

Metropolitan Capacity Charge to MWDOC for CY 2019 \$ 3,753,900 \*

Agency	Capacity Charge Eligible Flows (CFS)			CFS Share (%)	Annual Capacity Charge	Monthly Capacity Charge
	2015	2016	2017			
City of Brea	8.5	6.8	11.4	2.02%	\$ 75,936	\$ 6,328
	7.6	4.0	7.7	1.37%	\$ 51,612	4,301
East Orange County Water District	11.4	12.8	9.0	2.28%	\$ 85,722	7,144
El Toro Water District	15.9	16.3	16.8	2.99%	\$ 112,413	9,368
City of Fountain Valley	3.6	3.3	3.7	0.66%	\$ 24,719	2,060
City of Garden Grove	9.0	13.0	13.6	2.42%	\$ 91,025	7,585
Golden State Water Company	7.9	12.9	11.3	2.30%	\$ 86,318	7,193
City of Huntington Beach	25.0	28.4	17.5	5.05%	\$ 189,699	15,808
Irvine Ranch Water District	41.2	43.5	36.2	7.75%	\$ 290,769	24,231
City of La Habra	2.3	1.7	7.3	1.30%	\$ 48,614	4,051
City of La Palma	1.4	2.9	1.2	0.52%	\$ 19,371	1,614
Laguna Beach County Water District	7.0	7.6	5.4	1.35%	\$ 50,855	4,238
Mesa Water District	0.0	0.0	0.0	0.00%	\$ -	-
Moulton Niguel Water District	45.1	48.0	58.7	10.46%	\$ 392,559	32,713
City of Newport Beach	10.3	8.9	11.6	2.07%	\$ 77,655	6,471
Orange County Water District	61.0	135.9	160.1	28.53%	\$ 1,070,861	89,238
City of Orange	15.8	17.8	15.8	3.18%	\$ 119,308	9,942
City of San Clemente	21.6	21.9	19.4	3.91%	\$ 146,597	12,216
City of San Juan Capistrano	14.6	14.3	14.1	2.61%	\$ 97,942	8,162
Santa Margarita Water District	53.9	62.3	58.4	11.09%	\$ 416,471	34,706
City of Seal Beach	5.5	5.5	5.9	1.05%	\$ 39,517	3,293
Serrano Water District	0.0	2.0	0.0	0.36%	\$ 13,379	1,115
South Coast Water District	7.3	8.1	7.5	1.44%	\$ 54,057	4,505
Trabuco Canyon Water District	6.0	6.1	8.1	1.45%	\$ 54,308	4,526
City of Westminster	5.3	4.7	4.6	0.94%	\$ 35,275	2,940
Yorba Linda Water District	12.6	12.7	16.3	2.90%	\$ 108,918	9,076
Total				100%	\$ 3,753,900	\$ 312,825
MWDOC Capacity Charge Per CFS:					\$ 6.689	

\* Based on MWDOC's aggregate peak flow of 466.7 cfs on 7/24/2017 charge at MET's 2019 rate of \$8,600 per cfs



**Exhibit C**

**MWDOC Member Agency Choice Services Program Summary**

Cost Allocations by Agencies for FY 2018-19

**DRAFT**

As of 4/09/2018

Retail Agency	Water Use Efficiency [1]	School Education (Elementary)[2]	School Education (High School)[2]	Water Loss Control Program [3]	Total Choice Allocation
Brea	\$ 26,135	\$ 6,576	\$ 4,371		\$ 37,082
Buena Park	\$ 7,694	\$ 8,631	\$ 4,371	Pending	\$ 20,696
East Orange County WD	\$ 1,379	\$ -	\$ 4,371		\$ 5,750
El Toro WD	\$ 16,693	\$ 5,910	\$ 8,742	Pending	\$ 31,345
Fountain Valley	\$ 13,028	\$ 5,154	\$ 4,371		\$ 22,553
Garden Grove	\$ 9,067	\$ 14,385	\$ -	Pending	\$ 23,452
Golden State Water Company	\$ 10,310	\$ -	\$ -		\$ 10,310
Huntington Beach	\$ 83,858	\$ 22,605	\$ 4,371	Pending	\$ 110,834
Irvine Ranch WD	\$ 235,153	\$ -	\$ -		\$ 235,153
La Habra	\$ 2,934	\$ 8,220	\$ -	Pending	\$ 11,154
La Palma	\$ 2,617	\$ 2,844	\$ -		\$ 5,461
Laguna Beach County WD	\$ 2,575	\$ 1,110	\$ -	Pending	\$ 3,684
Mesa Water	\$ 43,362	\$ 3,494	\$ -		\$ 46,855
Moulton Niguel WD	\$ 92,835	\$ 16,440	\$ 15,299	Pending	\$ 124,574
Newport Beach	\$ 41,041	\$ -	\$ -		\$ 41,041
Orange	\$ 30,601	\$ 9,453	\$ -	Pending	\$ 40,054
Orange County WD	\$ -	\$ -	\$ -		\$ -
San Clemente	\$ 17,798	\$ 3,699	\$ 4,371	Pending	\$ 25,868
San Juan Capistrano	\$ 7,071	\$ 4,110	\$ 4,371		\$ 15,552
Santa Margarita WD	\$ 91,657	\$ 14,385	\$ 6,557	Pending	\$ 112,598
Seal Beach	\$ 1,309	\$ 2,511	\$ -		\$ 3,820
Serrano WD	\$ 1,225	\$ 1,722	\$ -	Pending	\$ 2,947
South Coast WD	\$ 29,009	\$ 4,850	\$ 4,371		\$ 38,230
Trabuco Canyon WD	\$ 6,408	\$ 1,993	\$ -	Pending	\$ 8,402
Tustin	\$ 22,026	\$ 13,563	\$ 4,371		\$ 39,960
Westminster	\$ 11,001	\$ 10,082	\$ 8,742	Pending	\$ 29,825
Yorba Linda WD	\$ 28,948	\$ 4,250	\$ -		\$ 33,198
Anaheim	\$ 1,518	\$ 30,546	\$ 4,371	Pending	\$ 36,434
Fullerton	\$ 1,140	\$ 10,193	\$ -		\$ 11,333
Santa Ana	\$ 765	\$ 52,550	\$ 4,371	Pending	\$ 57,686
<b>Orange County Total</b>	<b>\$ 839,155</b>	<b>\$ 259,275</b>	<b>\$ 87,420</b>	<b>\$ -</b>	<b>\$ 1,185,850</b>

**\*\* These numbers are draft and subject to change**

[1] Preliminary Cost Allocation for the Choice Water Use Efficiency Program for FY 2018-19

[2] Preliminary cost, to be confirmed on an agency by agency basis

[3] For FY 2018-19 the Water Loss Control Program includes Phases III & IV. Agency costs will vary based on the selection of technical & professional services. The final cost by agency are not expected to be determined until Fall 2018





**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert Hunter, General Manager

**SUBJECT: WATER UCI INDUSTRY-UNIVERSITY COOPERATIVE RESEARCH CENTER**

**COMMITTEE RECOMMENDATION**

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It is recommended the Board of Directors: consider financial participation in the Water UCI Industry-University Cooperative Research Center.

**SUMMARY**

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During the budget review process, financial participation in the Water UCI Industry-University Cooperative Research Center was removed by the Committee, however at the April A&F Committee meeting, the Committee recommended this issue be again discussed by the full Board.

The request is for a \$30,000 annual commitment for five years; however this would not begin until one or two budget cycles (either fiscal year 2019-20 or 2020-21), depending on research center's success in obtaining grants.

Attached is the program summary.

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



## **Water UCI Industry-University Cooperative Research Center (IUCRC)**

**Water UCI** is an interdisciplinary center in the UC Irvine School of Social Ecology. Water UCI was launched in July 2014 to: 1) foster collaboration among UCI faculty, students, and researchers on boundary-spanning research, education, and outreach; and, 2) employ Southern California as a point of departure to engage regional and global stakeholders (e.g., water agencies, NGOs) in tackling grand challenges facing the world's freshwater such as climate variability, population growth, urbanization, and the energy-water nexus.

The **NSF IUCRC** program enables industrially-relevant, pre-competitive research via a multi-member, sustained partnerships among industry, academe, and government. The partnership is formalized in each Center's **Industrial Advisory Board (IAB)**, which advises the Center's management on all aspects of the Center, from research project selection and evaluation to strategic planning. It is important to note that all IAB members have common ownership of the entire IUCRC research portfolio; however, individual firms can provide additional support for specific "enhancement" projects under separate arrangements with the respective university. The partnership is given even greater strength by the direct involvement of industry representatives in research projects. Each project in the Center has a principal researcher (typically the project's research professor) and in many cases also has one or more mentors from industry (who may be a IAB representatives or engineers or scientists assigned from an IAB member company).

New IUCRCs start at Phase I that lasts five years. As a Center progresses, it is likely to have increased opportunities for funding from additional firms, other federal agencies and laboratories, and state and local governments; thus, increasing the leverage of NSF funds. After five years, Sites within Centers that continue to meet the IUCRC Program requirements may request support for a second five-year (Phase II) period. After ten years, Sites within Centers may apply for a third five-year (Phase III) period. Phase III awards are provided for Centers that demonstrate significant impact on industry research as measured through robust and sustained membership, student impact, annual reports, site visits, and adherence to IUCRC requirements. Centers are expected to be fully supported by private and public partners after fifteen years as an IUCRC.

### **Required Funding From Industry Partners**

Membership fees received by the Center are considered program income. At least 90% of the IUCRC program income must be used to support direct costs of the research, and up to 10% may be used to support indirect costs.

Membership fee requirement levels (per Site) are:

- *Phase I*: a minimum of \$150,000 in-cash (no in-kind cash equivalent) annually and 3 distinct full members.



- *Phase II:* a minimum of \$200,000 in-cash (no in-kind cash equivalent) annually and 4 distinct full members.
- *Phase III:* a minimum of \$250,000 in-cash (no in-kind cash equivalent) annually and 5 distinct full members.

### **Funding from NSF**

- *Phase I - First Five Year Center Award*  
Site meeting minimum membership requirement receives \$150,000 annually from NSF.
- *Phase II - Second Five Year Center Award*  
Site meeting minimum membership requirement receives \$100,000 annually from NSF.
- *Phase III - Third Five Year Center Award*  
Site meeting minimum membership requirement receives \$50,000 annually from NSF.

Phase I and Phase II Sites that exceed minimum membership requirements during their five years of operations are eligible to request additional funding for the subsequent Phase. The additional requested amount is equivalent to half of the total in-cash only membership fees collected in excess of the required minimum during the current operating Phase, not to exceed \$50,000 per Site, per year.

### **Water UCI IUCRC: Water Resilience and Sustainability Center**

**Participating Universities:** University of California, Irvine and University of Nevada, Reno, Sacramento State University (potential)

**Potential Industry Partners:** Moulton Niguel, OCWD, IRWD, MWDOC, Santa Margarita

**Research thrusts (potential research areas- actual thrusts to be determined in partnership with Industry Advisory Board):**

- Reverse osmosis membrane research
- Potable water treatment optimization
- Potable reuse water quality monitoring technology
- Brine concentration and management
- Wetland treatment operations and design
- Natural treatment systems
- Emerging contaminant/pharmaceuticals related research
- Potential for direct potable reuse in Orange County
- Storm water capture and use
- Water use efficiency
- Water supply reliability planning including climate variability implications
- Unintended consequences water use efficiency programs have on recycled water quality and supply development, wastewater systems, and treatment processes





**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert Hunter, General Manager

Staff Contact: Heather Baez

**SUBJECT: AB 2241 (Rubio) – The Open and Transparent Water Data Act**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors vote to adopt a support position on AB 2241 (Rubio).

**COMMITTEE RECOMMENDATION**

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Committee will review this item on April 16, 2018 and make a recommendation to the Board.

**BILL SUMMARY**

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AB 2241 would require the Department of Water Resources, the State Water Resources Control Board, and the Department of Fish and Wildlife to work to improve the open and transparent access to data by reducing the fractured or duplicative reporting of the same or similar data to multiple governmental agencies or departments, and by reducing the reporting burden on entities providing data to governmental agencies.

**ARGUMENTS IN SUPPORT**

---

AB 2241 is a simple measure that requires three state agencies to work together to avoid duplicative reporting while streamlining data reported to them. It would save staff time and increase public transparency by having duplicative information reported to one agency.

**ARGUMENTS IN OPPOSITION**

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None on file

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



**STAFF COMMENTS**

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MWDOC's Legislative Policy Principles directly reflect support to legislation that is intended to advance transparency and facilitates technological efficiencies. Specifically, *it is MWDOC's policy to support legislation and regulation that: "Advances good government practices and public transparency measures in a manner that does not take a 'one-size fits all' approach, respects local government control, and facilitates technological efficiencies to meet state reporting and disclosure requirements."*

**DETAILED REPORT**

---

The full text of AB 2241 is attached.



AMENDED IN ASSEMBLY MARCH 15, 2018

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

## ASSEMBLY BILL

**No. 2241**

---

**Introduced by Assembly Member Rubio**

February 13, 2018

---

An act to ~~amend Section 10608 of~~ *add Section 12407 to* the Water Code, relating to water.

### LEGISLATIVE COUNSEL'S DIGEST

AB 2241, as amended, Rubio. ~~Sustainable water use and demand reduction: legislative findings and declarations. The Open and Transparent Water Data Act.~~

*Existing law, the Open and Transparent Water Data Act, requires the Department of Water Resources, the State Water Resources Control Board, and the Department of Fish and Wildlife to coordinate and integrate existing water and ecological data from local, state, and federal agencies.*

*This bill would require the Department of Water Resources, the board, and the Department of Fish and Wildlife to work to improve the open and transparent access to data by reducing the fractured or duplicative reporting of the same or similar data to multiple governmental agencies or departments, and by reducing the reporting burden on entities providing data to governmental agencies.*

~~Existing law requires the State Water Resources Board to implement and administer various water conservation and demand reduction programs in the state. Existing law makes legislative findings and declarations regarding the need to reduce urban water use statewide by 20% and to effectively measure a water supplier's efforts to reduce urban water use in its service area.~~



~~This bill would make nonsubstantive changes in those legislative findings and declarations.~~

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

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

1     ~~SECTION 1. Section 12407 is added to the Water Code, to~~  
2     ~~read:~~

3     ~~12407. The department, the state board, and the Department~~  
4     ~~of Fish and Wildlife shall work to improve the open and~~  
5     ~~transparent access to data by reducing the fractured or duplicative~~  
6     ~~reporting of the same or similar data to multiple governmental~~  
7     ~~agencies or departments, and by reducing the reporting burden~~  
8     ~~on entities providing data to governmental agencies.~~

9     ~~SECTION 1. Section 10608 of the Water Code is amended to~~  
10    ~~read:~~

11    ~~10608. The Legislature finds and declares all of the following:~~

12    ~~(a) Water is a public resource that the California Constitution~~  
13    ~~protects against waste and unreasonable use.~~

14    ~~(b) Growing population, climate change, and the need to protect~~  
15    ~~and grow California's economy while protecting and restoring our~~  
16    ~~fish and wildlife habitats make it essential that the state manage~~  
17    ~~its water resources as efficiently as possible.~~

18    ~~(c) Diverse regional water supply portfolios will increase water~~  
19    ~~supply reliability and reduce dependence on the Delta.~~

20    ~~(d) Reduced water use through conservation provides significant~~  
21    ~~energy and environmental benefits, and can help protect water~~  
22    ~~quality, improve streamflows, and reduce greenhouse gas~~  
23    ~~emissions.~~

24    ~~(e) The success of state and local water conservation programs~~  
25    ~~to increase efficiency of water use is best determined on the basis~~  
26    ~~of measurable outcomes related to water use or efficiency.~~

27    ~~(f) Improvements in technology and management practices offer~~  
28    ~~the potential for increasing water efficiency in California over~~  
29    ~~time, providing an essential water management tool to meet the~~  
30    ~~need for water for urban, agricultural, and environmental uses.~~

31    ~~(g) The Governor has called for a 20 percent per capita reduction~~  
32    ~~in urban water use statewide by 2020.~~



1     (h) ~~The factors used to formulate water use efficiency targets~~  
2     ~~can vary significantly from location to location based on factors~~  
3     ~~including weather, patterns of urban and suburban development,~~  
4     ~~and past efforts to enhance water use efficiency.~~

5     (i) ~~Per capita water use is a valid measure of a water supplier's~~  
6     ~~efforts to reduce urban water use within its service area. However,~~  
7     ~~per capita water use is less useful for measuring relative water use~~  
8     ~~efficiency between different water suppliers. Differences in~~  
9     ~~weather, historical patterns of urban and suburban development,~~  
10    ~~and density of housing in a particular location need to be~~  
11    ~~considered when assessing per capita water use as a measure of~~  
12    ~~efficiency.~~

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**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

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

Robert Hunter, General Manager

Staff Contact: Heather Baez

**SUBJECT: AB 2543 (Eggman) – State Agencies: Infrastructure Project Budget and Schedule**

**STAFF RECOMMENDATION**

---

Staff recommends the Board of Directors vote to adopt an oppose position on AB 2543 (Eggman).

**COMMITTEE RECOMMENDATION**

---

Committee will review this item on April 16, 2018 and make a recommendation to the Board.

**BILL SUMMARY**

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AB 2543 would direct state agencies and departments to post specified information about changes in the cost or schedule of large infrastructure projects on their websites. Specifically:

- 1) Requires each state agency or department authorized to undertake any infrastructure project costing \$100 million or more to publicly post on its Internet Web site any change in the cost or schedule of the project that would result in the project exceeding its established budget by 10% or more or in delaying its completion by 12 months or longer.
- 2) Specifies that the posted information must describe how much the project is expected to exceed its established budget or delay its construction schedule.

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



## ARGUMENTS IN SUPPORT

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According to the author, AB 2543 would provide necessary scrutiny to ensure major state infrastructure projects are undertaken with full transparency and accountability. She uses an October 2017 audit of the California WaterFix project by the California State Auditor as evidence of the need for this bill. The audit found that the unexpected complexity of the California WaterFix, an infrastructure project managed by the Department of Water Resources, had resulted in significant cost increases and delays.

## ARGUMENTS IN OPPOSITION

---

AB 2543 would create a new reporting requirement that would apply to numerous state agencies that could potentially include projects such as roads, universities, prisons, transit, and water infrastructure. It does not clearly define what constitutes an “established budget” or project schedule, and is not clear whether it applies to the operation and maintenance of existing infrastructure or just new projects.

The Legislature currently has considerable authority through oversight and the annual budget process to examine projects that it believes merit such scrutiny. Additionally, the public can obtain budget and schedule public records for any public project.

This measure would not improve state management of important projects and would only add new costs, more paperwork and possibly, more litigation over any perceived non-compliance.

The author has cited the California WaterFix as evidence of the need for this bill. However, AB 2543 will not result in any change in how state dollars are managed for the California WaterFix as no state funds are involved.

## 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

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The full text of AB 2543 is attached.



AMENDED IN ASSEMBLY MARCH 13, 2018

CALIFORNIA LEGISLATURE—2017–18 REGULAR SESSION

**ASSEMBLY BILL**

**No. 2543**

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**Introduced by Assembly Member Eggman**  
**(Coauthor: Assembly Member Frazier)**  
(Coauthor: Senator Dodd)

February 15, 2018

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An act to add Section 11093.7 to the Government Code, relating to state government.

LEGISLATIVE COUNSEL'S DIGEST

AB 2543, as amended, Eggman. State agencies: infrastructure project budget and schedule: ~~report~~. *Internet Web site information.*

Existing law, on order of the Governor, requires the head of each state agency to make a report to the Governor giving an account of all matters pertaining to the agency during the period specified by the Governor.

This bill would require each state agency or department authorized to undertake ~~large and complex~~ *any* infrastructure ~~projects~~ *project* costing \$100,000,000 or more to ~~develop and implement a policy for publicly reporting any significant~~ *post on its Internet Web site any* change in the cost or schedule of ~~a large and complex infrastructure~~ *the* project that would result in the project exceeding its ~~projected~~ *established* budget by 10 percent or more or being delayed by 12 months or longer. The bill would require that the ~~report include documentation and an explanation justifying a decision to proceed with the large and complex infrastructure project. The bill would also require the policy to require that the state agency or department provide a copy of this report to each appropriate policy committee of the Legislature.~~ *posted*



*information describe how much the project is expected to exceed its established budget or delay its construction schedule.*

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 11093.7 is added to the Government  
2 Code, to read:  
3 11093.7. ~~(a) Each state agency or department authorized to~~  
4 ~~undertake large and complex any infrastructure projects project~~  
5 ~~costing one hundred million (\$100,000,000) or more shall develop~~  
6 ~~and implement a policy for publicly reporting post on its Internet~~  
7 ~~Web site any significant change in the cost or schedule of a large~~  
8 ~~and complex infrastructure the project that would result in the~~  
9 ~~project exceeding its projected established budget by 10 percent~~  
10 ~~or more or in delaying its completion by 12 months or longer. The~~  
11 ~~report shall include documentation and an explanation justifying~~  
12 ~~a decision to proceed with the large and complex infrastructure~~  
13 ~~project. posted information shall describe how much the project~~  
14 ~~is expected to exceed its established budget or delay its~~  
15 ~~construction schedule.~~  
16 ~~(b) The policy required by this section shall also require that~~  
17 ~~the state agency or department provide a copy of the report~~  
18 ~~described in subdivision (a) to each appropriate policy committee~~  
19 ~~of the Legislature in accordance with Section 9795.~~

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**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

**FROM:** **Public Affairs & Legislation Committee**  
(Directors Dick, Tamaribuchi, Thomas)

Robert Hunter  
General Manager

Staff Contact: Sarah Wilson

**SUBJECT: Recommendation for MWDOC School Program Grades 1-6 First  
Extension of Agreement for Fiscal Year 2018-19**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to enter into a First Extension of Agreement with Discovery Science Center (DSC) for a one-year renewal term to implement the Water Education School Program Grades 1-6 for fiscal year 2018-19.

**COMMITTEE RECOMMENDATION**

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The Public Affairs & Legislation Committee will review this item on April 16, 2018 and make a recommendation to the Board.

**SUMMARY**

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On July 1, 2015, MWDOC and DSC entered into an Agreement ("Original Agreement") for services to administer MWDOC's Water Education School Program in Orange County elementary schools, grades 1-6. The Original Agreement was for a three year period beginning in fiscal year 2015-16, with the potential for two, one-year renewal terms following fiscal year 2017-18. The Original Agreement terms state that the rate per student will increase by a pre-determined three percent for each subsequent year of the Original Agreement. A minimum target number of 55,138 students, and corresponding annual revenue of \$220,000, are guaranteed to DSC for each year of the agreement.

The Original Agreement and First Extension of Agreement are included as **Attachments A & B**.

<b>Budgeted (Y/N):</b>	Budgeted amount: \$259,275	Core __	Choice <u>  x  </u>
<b>Action item amount:</b>	Line item: 63-7040		
<b>Fiscal Impact (explain if unbudgeted):</b>			



## DETAILED REPORT

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Since 2004, MWDOC has contracted with DSC to implement the Water Education School Program in Orange County elementary schools. This program is intended to educate students on the value of water, the importance of protecting our water resources, drought, water use efficiency, sources of water, and more. The educational content focuses on the grade-specific science content curriculum that aligns with all current education standards outlined by the State of California including the Next Generation Science Standards.

In fiscal year 2015-16, MWDOC and DSC entered into an agreement to provide grade-specific water education programs to public and private elementary schools in Orange County, including Anaheim, Fullerton, and Santa Ana (Three Cities). As part of the agreement, DSC presents keypad assembly programs for Orange County students in grades one through six (1-6). The keypad assemblies for each grade utilize individual student-response keypad systems to actively engage students in the program and measure concept comprehension and retention.

A minimum target number of 55,138 students in grades one through six (1-6), and corresponding annual revenue of \$220,000, are guaranteed to DSC for each year of the agreement. A targeted number of students for each retail water agency shall be specified by MWDOC and provided to DSC by April 15<sup>th</sup> of each successive year of the agreement. The programs are scheduled on a first-come, first-served basis within each retail water agency's service area until the program is fully booked. Upon filling the program for any retail agency, DSC shall initiate a "waiting list" for the next year of the program.

The initial year rate paid to DSC by MWDOC was \$3.65 per student with a pre-determined three percent increase for each subsequent year of the agreement. The rate for the term of the Extension will be \$3.99 per student. The rate schedule is as follows:

- Initial Year (2015-16): \$3.65
- Second Year (2016-17): \$3.76
- Third Year (2017-18): \$3.87
- First Extension Year (2018-19): \$3.99

DSC shall continue to be responsible for marketing and scheduling the Keypad Assembly program for grades one through six (1-6). DSC will continue to monitor and report student counts under the various programs on a monthly basis, and deliver to MWDOC no later than the 8<sup>th</sup> of each month. DSC shall also continue to provide the schedule for all upcoming assembly programs.



**FIRST EXTENSION OF AGREEMENT FOR IMPLEMENTATION  
OF MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
WATER EDUCATION GRADES 1-6 SCHOOL PROGRAM  
BY DISCOVERY SCIENCE CENTER**

This FIRST EXTENSION OF AGREEMENT (“Extension”) is dated as of April 18, 2018, by and between the Municipal Water District of Orange County (MWDOC) and the Discovery Science Center of Orange County (DSC) (collectively, the “Parties”).

**RECITALS**

WHEREAS the Parties entered into an agreement on July 1, 2015, (the “Original Agreement”) for services in connection with administering MWDOC’s Water Education School Program in Orange County elementary schools, grades one through six (1-6).

WHEREAS the Original Agreement, which is attached hereto as a part of this Extension, will end on June 30, 2018, with an option for two, one-year renewal terms.

WHEREAS the Original Agreement terms state that the rate per student will increase by a pre-determined three percent for each subsequent year of the Original Agreement with a starting rate of \$3.65 per student. The rate for the term of this Extension will be \$3.99 per student.

NOW THEREFORE the Parties hereby agree to extend the term of the Original Agreement for a period of 12 months. This Extension will commence immediately upon the expiration of the Original Agreement, and will end on June 30, 2019, in accordance with the terms of the Original Agreement as well as the terms set forth herein.

**TERMS**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree to the new Extension terms as follows:

**1. Water Education School Program:**

**a. Keypad Assembly Program:**

- The educational content will focus on the grade-specific science content that aligns with all current education standards outlined by the State of California including the Next Generation Science Standards.
- A minimum target number of 55,138 students in grades one through six (1-6) will be required between September 1, 2018, and June 30, 2019 (2018-2019 academic year) with corresponding revenue of \$220,000.

**b. Follow-up Activity:** DSC, with input from MWDOC, will update and maintain the online survey with relevant information at the start of each academic year. The online



survey will be referenced in the Ricki the Raindrop booklets provided to students, grades one through six (1-6), upon completion of the Keypad Assembly Program

**5. Water Awareness Poster & Slogan Contest and Photography & Digital Arts Contest.**

Let the new terms reflect that in 2017 the contest was restructured to remove the Slogan and Digital Arts Components. The contest should herein be referred to as the “Water Awareness Poster Contest.”

- 10. Term and Termination.** This Extension will commence as of July 1, 2018, and will terminate as of June 30, 2019, unless both Parties agree to a second, one-year renewal term of this Agreement pursuant to Section 15 of the Original Agreement.

Agreed by the signatories below.

Dated: \_\_\_\_\_

Municipal Water District of Orange County

By: \_\_\_\_\_  
Robert J. Hunter, General Manager

MWDOC Approved as to form:

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Dated: \_\_\_\_\_

Discovery Science Center of Orange County

By: \_\_\_\_\_  
L. Joseph Adams, President





**ACTION ITEM**

April 18, 2018

**TO:** Board of Directors

**FROM:** **Public Affairs & Legislation Committee**  
(Directors Dick, Tamaribuchi, Thomas)

Robert Hunter  
General Manager

Staff Contact: Sarah Wilson

**SUBJECT: Recommendation for MWDOC School Program Grades 9-12 First Extension of Agreement for Fiscal Year 2018-19**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors authorize the General Manager to enter into a First Extension of Agreement with Inside the Outdoors (ITO) for a one-year renewal term to implement the Water Education School Program Grades 9-12 for fiscal year 2018-19.

**COMMITTEE RECOMMENDATION**

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The Public Affairs & Legislation Committee will review this item on April 16, 2018 and make a recommendation to the Board.

**SUMMARY**

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On July 1, 2015, MWDOC and ITO entered into an Agreement ("Original Agreement") for services to administer MWDOC's Water Education School Program in Orange County high schools, grades 9-12. The Original Agreement was for a three year period beginning in fiscal year 2015-16, with the potential for two, one-year renewal terms following fiscal year 2017-18. The Original Agreement terms state that the rate per high school will increase by a pre-determined three percent for each subsequent year of the Original Agreement. A minimum number of 10 high schools is guaranteed with no set maximum.

The Original Agreement, First Amendment, Second Amendment, and First Extension of Agreement are included as **Attachments A, B, C, & D**.

<b>Budgeted (Y/N):</b>	Budgeted amount: \$64,000 /\$87,420	Core <u>  x  </u>	Choice <u>  x  </u>
<b>Action item amount:</b>		Line item: 63-7040	
<b>Fiscal Impact (explain if unbudgeted):</b>			



## DETAILED REPORT

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In 2015, MWDOC contracted with ITO to implement the Water Education School Program in Orange County high schools. This program is intended to educate students on the value of water, the importance of protecting our water resources, drought, water use efficiency, sources of water, and more. The educational content focuses on the science content curriculum that aligns with all current education standards outlined by the State of California including the Next Generation Science Standards.

Participating high schools are offered three visits by ITO's "Traveling Scientists." The first visit provides standards-aligned water education including where California water comes from and how to be more water efficient. "Traveling Scientists" also facilitate a discussion on potential water industry careers and promote community engagement. Pre- and post- visit assessments are conducted with individual student-response keypad systems to actively engage students in the program and measure concept comprehension and retention. The second visit promotes active student engagement on local policy issues including a discussion of a current or proposed policy and its effect on the local or statewide community. "Traveling Scientists" then facilitate a classroom debate on the merits of the policy. The third and final visit includes implementation of a campus-wide expo with ITO staff where students share with other students in their schools the concepts discussed in the previous visits.

A minimum target of 10 high schools throughout Orange County are guaranteed to ITO for each year of the agreement with no set maximum. A targeted number of schools for each retail water agency shall be specified by MWDOC and provided to ITO for each successive year of the agreement. The initial year rate paid to ITO by MWDOC was \$4,000 per high school with a pre-determined three percent increase for each subsequent year of the agreement. The rate for the term of the Extension will be \$4,371 per high school. The rate schedule is as follows:

- Initial Year (2015-16): \$4,000
- Second Year (2016-17): \$4,120
- Third Year (2017-18): \$4,244
- First Extension Year (2018-19): \$4,371

ITO shall continue to be responsible for marketing and scheduling the Water Education School Program for grades 9-12. ITO will continue to monitor and report activities and progress under the various programs on a monthly basis and deliver to MWDOC no later than the first Friday of each month. ITO shall also continue to provide the schedule for all upcoming school visits and expos.



**FIRST EXTENSION OF AGREEMENT FOR IMPLEMENTATION  
OF MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
WATER EDUCATION GRADES 9-12 SCHOOL PROGRAM  
BY INSIDE THE OUTDOORS**

This FIRST EXTENSION OF AGREEMENT (“Extension”) is dated as of April 18, 2018, by and between the Municipal Water District of Orange County (MWDOC) and the Orange County Superintendent of Schools, maintaining Inside the Outdoors (ITO) (collectively, the “Parties”).

**RECITALS**

WHEREAS the Parties entered into an agreement on July 1, 2015, (the “Original Agreement”) for services in connection with administering MWDOC’s Water Education School Program in Orange County high schools, grades nine through twelve (9-12).

WHEREAS the Original Agreement, including the First Amendment and Second Amendment, which is attached hereto as a part of this Extension, will end on June 30, 2018, with an option for two, one-year renewal terms.

WHEREAS the Original Agreement terms state that the rate per high school will increase by a pre-determined three percent for each subsequent year of the Original Agreement with a starting rate of \$4,000 per high school. The rate for the term of this Extension will be \$4,371 per high school. A minimum number of 10 high schools is guaranteed with no set maximum.

NOW THEREFORE the Parties hereby agree to extend the term of the Original Agreement and the associated Amendments for a period of 12 months. This Extension will commence immediately upon the expiration of the Original Agreement, and will end on June 30, 2019, in accordance with the terms of the Original Agreement as well as the terms set forth herein.

**TERMS**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree to the Extension as follows:

Upon ITO sub-contractor, The Ecology Center’s (TEC) termination of its contract, the partnership with Hurley was dissolved accordingly.

**1. Water Education School Program.**

- a. Teacher trainings will be provided for up to 100 teachers participating in the MWDOC Water Education School Program. ITO will provide training to Orange County teachers that will include water sources, water use efficiency, water recycling, watersheds, and ecological solutions for the benefit of their current and future students. Trainings will provide teachers with the support needed to implement water education in the classroom that aligns with all current educational standards outlined by the State of California including the Next Generation Science Standards.



- b. Let the Extension terms reflect that the Online Digital Platform was modified in April 2016 upon ITO sub-contractor, The Ecology Center's (TEC) termination of its contract. The current Digital Platform emphasizes marketing and outreach to students, teachers, and community members in water education activities through digital resources. ITO will continue to be responsible for the marketing and advertising of the MWDOC Water Education School Program including:
- Boosted social media posts related to the Water Education School Program including promotion of community events, student success stories, subject-matter expert videos, and other relevant posts related to the water industry.
  - School District outreach to share social media posts in order to reach families in participating retail agencies service areas.
  - Annual online video contest with targeted messages and specific contest categories for participating retail water agencies such as: water awareness, water use efficiency, or water reuse.
  - ITO, with input from MWDOC, will update and maintain the [www.whataboutwater.us](http://www.whataboutwater.us) landing page to include partner links, videos, and student stories at the start of each academic year.

**c. Campus Student Programs.**

- (ref.) iii. Participating high schools will be offered three visits by ITO's "Traveling Scientists." The first visit will provide standards-aligned water education including where California water comes from and how to be more water efficient. "Traveling Scientists" will facilitate a discussion on potential water industry careers and promote community engagement. The second visit will promote active student engagement on local policy issues including a discussion of a current or proposed policy and its effect on the local or statewide community. "Traveling Scientists" will facilitate a classroom debate on the merits of the policy. The third and final visit will include implementation of a campus-wide expo with ITO staff where students will share with other students in their schools the concepts discussed in the previous visits.
6. **Marketing and Scheduling.** ITO will monitor and report activities and progress under the various programs on a monthly basis, and this report shall be delivered via email to MWDOC no later than the first Friday of each month.
8. **Payment of Services.** ITO will invoice MWDOC quarterly for services provided.
10. **Term and Termination.** This Extension will commence as of July 1, 2018, and will terminate as of June 30, 2019, unless both Parties agree to a second, one-year renewal term pursuant to Section 16 of the Original Agreement.



Agreed by the signatories below.

Dated: \_\_\_\_\_

Municipal Water District of Orange County

By: \_\_\_\_\_  
Robert J. Hunter, General Manager

MWDOC Approved as to form:

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Dated: \_\_\_\_\_

Orange County Superintendent of Schools

By: \_\_\_\_\_  
Patricia McCaughey, Administrator



# GENERAL MANAGER'S REPORT OF STAFF ACTIVITIES APRIL 2018

<b>Managers' Meeting</b>	<p>MWDOC held its Member Agency Managers' meeting at its office in Fountain Valley on March 22, 2018. In attendance were Mike Grisso (Buena Park), Mike Dunbar (Emerald Bay SD), Mark Sprague (Fountain Valley), Cel Pasillas (Garden Grove); Ken Vecchiarelli (GSWC); Brian Ragland (Huntington Beach); Paul Cook and Paul Weghorst (IRWD); Renae Hinchey (LBCWD), Johnathan Cruz and Lindsey Stuvick (MNWD); Steffen Catron and Casey Parks (Newport Beach); Mike Markus and John Kennedy (OCWD); Jose Diaz (Orange); Dave Rebensdorf (San Clemente); Eric Bauman (San Juan Capistrano); Dan Ferons (SMWD); David Spitz (Seal Beach); Rick Shintaku (SCWD); Art Valenzuela (Tustin); Scott Miller (Westminster); Steve Conklin and Bryan Hong (YLWD); Karl Seckel; Harvey De La Torre; Charles Busslinger; Joe Berg; Damon Micalizzi; Heather Baez; Chris Lingad and myself of staff.</p> <p>The agenda included the following:</p> <ol style="list-style-type: none"> <li>1. MWDOC Budget Update</li> <li>2. MET Budget Update</li> <li>3. Update on California WaterFix</li> <li>4. MET Conservation Program Modifications</li> <li>5. LAFCO Ballot and Instructions</li> <li>6. Update on MET Meter Workshop</li> </ol> <p>The next meeting is scheduled for April 19, 2018.</p>
<b>California WaterFix</b>	<p>In a historic action, the Metropolitan Water District of Southern California Board of Directors voted to finance the California WaterFix at the full project (2 tunnel) level. The vote passed with 60.83% in favor, including all four of the MWDOC-MET delegation, as well as delegates from all other agencies and cities aside from Los Angeles, San Diego County Water Authority, Santa Monica, San Fernando.</p> <p>The vote was precluded by more than 2.5 hours and over 70 public comments, followed by comments by nearly all Metropolitan Directors.</p> <p>The full action states:</p> <p><b>Option #2</b> Adopt CEQA determination, and:</p> <ul style="list-style-type: none"> <li>• Adopt Resolutions authorizing the General Manager to participate, <b>support and fund additional financing and funding arrangements of California WaterFix up to a 64.6 percent share of overall California WaterFix capital costs;</b></li> <li>• Amend the General Manager's existing authorization to execute Joint Powers Agreements forming the Construction and Financing JPAs to</li> </ul>



	<p>allow for governance structures commensurate with member participation;</p> <ul style="list-style-type: none"> <li>• Authorize funding of up to \$86 million for further contributions for study, review, planning, engineering, design, and other preconstruction capital costs for the California WaterFix subject to a reimbursement agreement with DWR acceptable to the General Manager and General Counsel that provides for repayment upon DWR's first bond issuance; and</li> <li>• Authorize the General Manager to negotiate draft terms and conditions for one or more multi-year transfers of State Water Project water supplies.</li> </ul> <p>Fiscal Impact: Present value costs (in 2017 dollars) would be Metropolitan's 64.6-percent investment (\$10.8 billion) of total project costs (\$16.7 billion capital cost for construction and mitigation). Half of the anticipated cost increases for California WaterFix have already been incorporated into Metropolitan's ten year Financial Forecast and are included as part of the long-term projected average 3 percent rate increases. An increment of the costs from this option would be in addition to those California WaterFix costs that are included in the ten-year Financial Forecast, and would increase the long-term projected average 3 percent rate increases by approximately 1.1 percent. It is expected that the capacity interest acquired through this option would generate future revenues from the delivery or wheeling of water supplies to CVP water contractors or other parties. Revenues generated would offset some and potentially all of the fiscal impact of this option.</p> <p>Business Analysis: This option promotes the goal in Metropolitan's IRP Update to ensure reliability of SWP supplies, to pursue a successful outcome with California WaterFix, and to establish dependable and stable long-term average State Water Project supplies. This option also meets all of the Delta Conveyance Criteria adopted by the Board in 2007.</p> <p>A presentation on the CA WaterFix action can be found at the following link: <a href="http://mwdh2o.com/PDFWWACurrentBoardAgendas/04102018 BOD 8-7 Presentation.pdf">http://mwdh2o.com/PDFWWACurrentBoardAgendas/04102018 BOD 8-7 Presentation.pdf</a></p> <p>This was a momentous effort successfully accomplished together, 58 years after the original State Water Project vote at Metropolitan.</p>
<b>Elected Officials Forum</b>	<p>On April 5<sup>th</sup>, the Board held its semi-annual Elected Officials Forum. Approximately 15 of MWDOC's member agencies were represented (approximately 50 people in attendance) and topics included the California WaterFix, MET Budget, MWDOC Budget, State Legislative Issues, and MWDOC's School Program.</p>



## MET ITEMS CRITICAL TO ORANGE COUNTY

### MET's Water Supply Conditions

#### 2018 Water Supply Balance

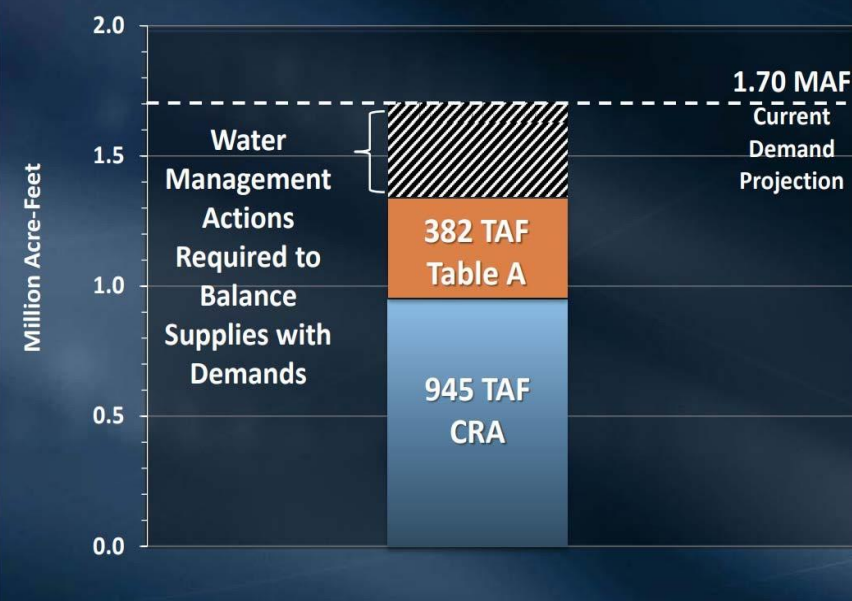
The Department of Water Resources (DWR State Water Project (SWP) "Table A" allocation has remained at 20%, giving Metropolitan approximately 382 thousand acre-feet (TAF) in SWP deliveries this water year. On the Colorado River system, Metropolitan estimates a total delivery of 945 TAF.

With estimated total demands and losses of 1.70 million acre-feet (MAF), at a 20% SWP allocation, Metropolitan is projecting that demands will exceed supply levels in CY 2018 by about 373 TAF. Based on this, estimated total dry-year storage for Metropolitan, at the end of CY 2018, will go down to 2.2 MAF.

The month of March brought much needed snowfall and precipitation to much of the state of California. With the improve hydrology hopefully this will increase the SWP allocation, more information on this will be available later in the month of April.

### 2018 Supply Demand Balances

#### 20% SWP Allocation Current Projections

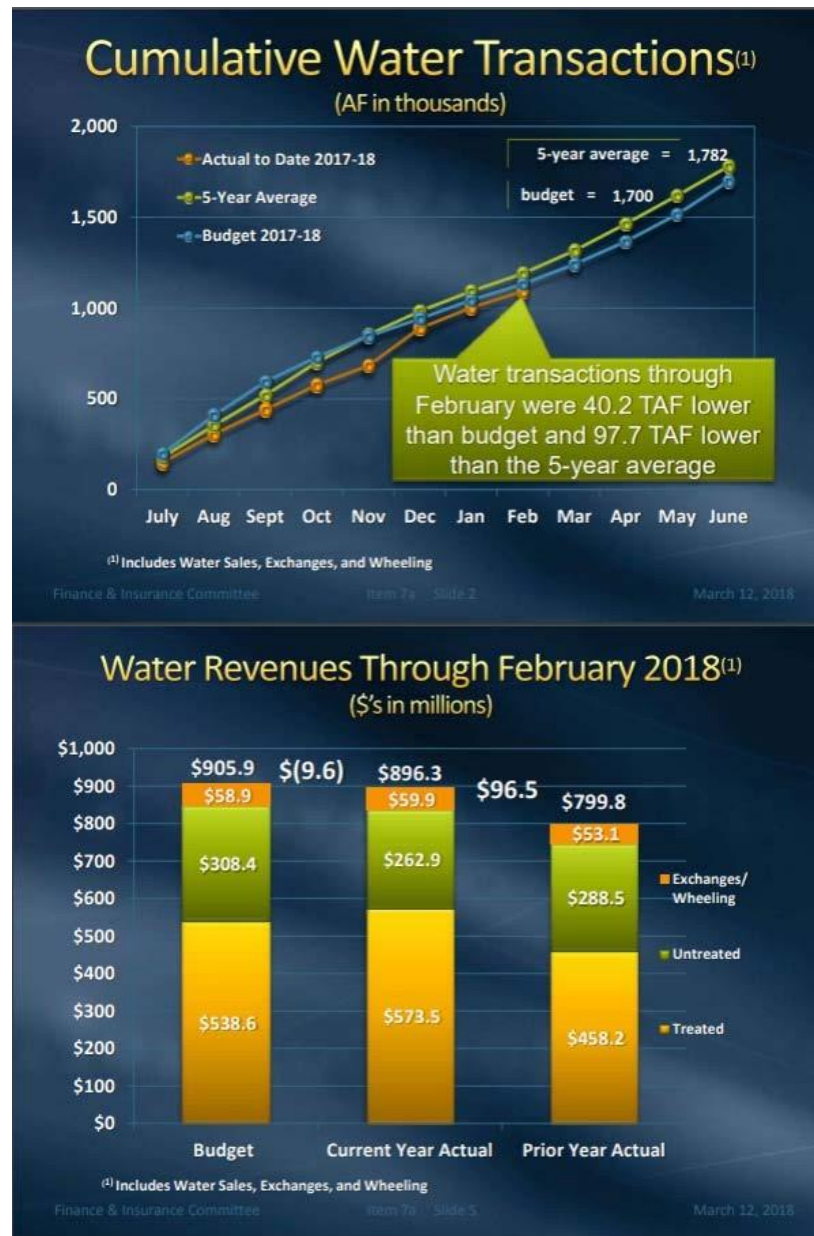




### MET's Finance and Rate Issues

Water transactions (sales) through February were 40.2 thousand acre-feet (TAF) lower than budget and 97.7 TAF lower than the 5-year average. In comparison to both the budget and prior year actual sales, the continued cumulative low water transactions can be attributed to decreased untreated water sales; as illustrated below. Although sales through February 2018 are slightly lower than the budget (\$9.6 million), they are \$96.5 million greater than February 2017.

On April 10, the MET Board approved the proposed Biennial Budget for fiscal years 2018/19 and 2019/20, along with ten-year forecast, and the rates and charges for calendar years 2019 and 2020.





<b>Colorado River Issues</b>	<p><b><u>Minute 323 Implementation</u></b></p> <p>Minute 323 to the United States and Mexico International Water Treaty, signed in September 2017, and included authorization of the formation of several workgroups that include representatives from both the U.S. and Mexico. These workgroups provide input to the International Boundary and Water Commission on specific issue areas. In February, the Projects Workgroup and Salinity Workgroup each met.</p> <p>On February 27, the Projects Workgroup held its first meeting. The scope of this workgroup's effort is to ensure that a total of 229,100 acre-feet (AF) of water is conserved in the Mexicali Valley. Metropolitan has agreed to fund a share of the conservation programs (\$3.7 million) and will receive a total of about 27,000 AF of water when the funding is provided. The conserved water will be stored in Lake Mead as intentionally created surplus water. Minute 323 also includes an option to conserve an additional 195,000 AF, which Metropolitan will have the opportunity to participate in at a future date. Meeting these conservation targets will involve implementation of numerous on-field projects, and these projects will be overseen by the Projects Workgroup. At this meeting the workgroup also received an update on the progress of the Minute 319 conservation projects.</p> <p>A presidential election is being held in Mexico in 2018, and in anticipation of the change of administration, the workgroup will not meet again until after the election in September. At the next meeting the workgroup plans to visit Minute 319 projects in Mexicali that have either been completed or are under construction.</p> <p>The Salinity Workgroup has met three times since the beginning of the year. This workgroup's charge is to begin the effort to develop a desalination project in the Mexican state of northern Sonora that would benefit both countries. Minute 323 authorized development of a desalination facility that would have potential capacity of 50,000-120,000 AF per year. The engineering firm (Black &amp; Veatch) has been involved in drafting a scope of work for a major study to identify a site for the proposed desalination plant. In upcoming meetings, the workgroup will be making decisions regarding the scope of the study and available technologies that will be evaluated. The workgroup will meet two more times to complete the scope of work.</p>
<b>Bay Delta/State Water Project Issues</b>	<p><b><u>Science Activities</u></b></p> <p>Metropolitan staff continued participation in the Collaborative Science and Adaptive Management Program, including participation on the Collaborative Adaptive Management Team (CAMT). February activities focused on review of draft technical work products and development of CAMT projects for 2018. Metropolitan staff also provided input to development of CAMT workplan items for 2018. With funding contributions from the State Water Contractors, CAMT initiated a project to develop a long-term monitoring and science plan to assess the effects of ambient conditions and management actions on Delta smelt habitat</p>



<b>Bay Delta/State Water Project Issues (continued)</b>	<p>quality and vital rates. CAMT is also discussing potential salmon projects addressing the effects of water project operations on salmon survival and identification of Delta rearing habitats for salmon.</p> <p>On February 14, Metropolitan staff participated in the Interagency Ecological Program (IEP) stakeholder meeting to receive updates on IEP science activities and discuss strategies to provide input to the IEP workplan for future years. Metropolitan staff provided input to the Incidental Take Limit for winter-run Chinook salmon developed by the IEP winter-run project work team.</p> <p>Metropolitan staff also provided input to the Bureau of Reclamation Directed Outflow Project for 2018, which is proposed to monitor Delta Smelt habitat factors throughout the spring to fall 2018 period. Metropolitan staff is also participating in the Longfin Smelt Management Analysis and Synthesis Team to help develop the overall conceptual model and report describing the biology and ecology of longfin smelt in the San Francisco estuary.</p> <p>On February 2, Metropolitan staff participated in the Delta Independent Science Board meeting to provide comments on the Draft report titled "Water Quality Science in the Sacramento-San Joaquin Delta, Part 1: Chemical Contaminants and Nutrients". The report included a review of current water quality monitoring programs in the Delta and an evaluation of how the monitoring information is used in management decisions.</p>
<b>Orange County Reliability Projects</b>	<p><b><u>Central Pool Augmentation Project</u></b></p> <p>Nothing New to Report on the status of the CPA Project</p> <p><b><u>Orange County Water Reliability Study</u></b></p> <p>See information under "Engineering &amp; Operations"</p>
<b>South Orange County Projects</b>	<p><b><u>Doheny Desal Project</u></b></p> <p>See information under "Engineering &amp; Operations"</p> <p><b><u>San Juan Watershed Project</u></b></p> <p>Santa Margarita Water District (SMWD) continues working on the San Juan Watershed Project. Phase 1 is being designed to capture wet and dry weather runoff through the installation of rubber dams along the lower portion of the creek, with subsequent phases looking to introduce recycled water into San Juan Creek.</p> <p>The Draft Program Environmental Impact Report (PEIR) was circulated for a 65-day public review period, which ended February 23, 2017. The EIR was originally scheduled for adoption in March 2018. Due to the complexity of some of the issues associated with the steelhead trout it is anticipated that SMWD Board adoption of the EIR will be moved to late April or early May Board meeting.</p>



<b>South Orange County Projects (continued)</b>	<p><b><u>SMWD Trampas Canyon Recycled Water Reservoir</u></b>  Notice to Proceed was issued January 30, 2018. The contractor is currently clearing the site and nearing completion of excavation for the East Saddle Dam Embankment. The project is designed to create 5,000 acre-feet of recycled water storage capacity and will be the largest surface water reservoir in South Orange County. The project is currently projected to conclude on or before December 20, 2019.</p> <p style="text-align: center;"><b><u>Other Information on South County Projects:</u></b></p> <p><b><u>Expansion of the South County Interconnection Project</u></b>   See information under "Engineering &amp; Operations"</p> <p><b><u>Laguna Beach County Water District Groundwater Project with Newport Beach</u></b>  (Nothing new to report) MWDOC, MET, Laguna Beach County Water District and Newport Beach have been working to activate Laguna Beach County's access to 2,025 AF of groundwater from within the Orange County Water District Basin. Deliveries began in September 2016. MWDOC staff met individually with Laguna Beach County and Newport Beach in August to discuss possible future facility and operational modifications to the MET system as LBCWD now sources some of its supplies from the basin.  A meeting was held on February 8<sup>th</sup> between staff from MWDOC and senior MET staff to discuss a series of alternatives for CM-1 and the concurrent ability to deliver MET water and groundwater to LBCWD through Newport Beach's water system. MWDOC staff will continue to work with MET staff to identify/explore alternatives.</p> <p><b><u>Camp Pendleton Seawater Desalination Project</u></b>  (Nothing New to Report). San Diego County Water Authority (SDCWA) is studying the feasibility of a desalination project at the southwest corner of Camp Pendleton Marine Corps Base adjacent to the Santa Margarita River. The project is still in the feasibility study stage and SDCWA is conducting geological surveys, analyzing intake options, and studying the effect on ocean life and routes to bring desalinated water to SDCWA's delivery system. Michael Baker International has been retained to conduct the intake study and they are looking to lease the Doheny Mobile Test Facility from MWDOC and the Doheny Desal Participants. The intake study has been postponed until late 2018.</p>
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## ENGINEERING & PLANNING

<b>Orange County Reliability Study</b>	<p>MWDOC staff and consultant CDM Smith continue to work on the 2018 OC Reliability Study update which looks at both supply (drought supply) reliability and system (emergency) reliability. The update uses modeling assumptions based on recently available information on future assumptions for the Colorado River, and State Water Project (SWP). The update looks to include modeling of SWP supplies once the California WaterFix volumes are determined. The progress of our work has been halted while awaiting information on the yield of the California WaterFix available to MET under the various scenarios being analyzed.</p> <p>A meeting was held on March 5<sup>th</sup> at MET with Brandon Goshi and Bill Hasencamp regarding some of the climate work, IRP assumptions and Colorado shortage assumptions relative to the Reliability update.</p>
<b>South Orange County Emergency Services Program</b>	<p>An agreement completed in 2006 resulted in an investment by South Orange County (SOC) agencies in the Irvine Ranch Water District (IRWD) system to allow exchanges of water to be delivered by IRWD into SOC under emergency situations. The current Emergency Services Program Agreement “guaranteed” flows are in effect through 2029, however the Agreement includes a “best efforts” provision for IRWD to share resources thereafter. Project capacity was committed by IRWD to move up to 30 cfs of emergency supplies whereas the agreement allows moving up to 50 cfs, not to exceed 3,000 AF per emergency event. In accordance with the Agreement with IRWD, the monthly emergency capacity committed to the SOC agencies declines over time with zero capacity available in the months of July through September beginning in 2020 and goes to zero in all months by 2030.</p> <p>A Request for Proposals (RFP) was released on February 23<sup>rd</sup>, as part of a possible renewal/extension of the SOC Emergency Services Program with IRWD to study the ability/constraints of IRWD’s system to move water through their system to SOC agencies into the future. Three proposals were received and reviewed by MWDOC staff and IRWD Staff, and a recommendation to award a study contract is being brought to the Board for consideration.</p> <p><b><u>Use of East Orange County Feeder No. 2 for Conveyance of Groundwater and/or Poseidon Water</u></b></p> <p>MWDOC is also working on other options with OCWD and MET to move groundwater via the EOCF#2 to SOC during emergency events; MET staff is currently reviewing the concepts.</p>



<b>North and Central O.C. Integrated Regional Watershed Management Area</b>	<p>A stakeholders meeting for the IRWM Plan (OC Plan) was held on March 13<sup>th</sup> to provide a status report on the Plan project list. Next steps are to finalize scoring as required by the Department of Water Resources (DWR) and then submit the projects to Santa Ana Watershed Project Authority (SAWPA) for inclusion under the One Water One Watershed (OWOW) Plan.</p> <p>The OC Plan is a sub-regional plan for the Santa Ana Funding Area. As the OC Plan is not a DWR-approved plan for the Santa Ana Funding Area, all projects submitted to the OC Plan will be submitted to the SAWPA under the OWOW Plan.</p>
<b>Service Connection CM-1 Cost Issues with MET</b>	Nothing NEW to report. We are awaiting a response from MET.
<b>Poseidon Resources</b>	Nothing NEW to report. The Poseidon Project will come before the Santa Ana Regional Water Quality Control Board ("RWQCB") sometime this summer.
<b>Doheny Ocean Desalination Project</b>	<p>GHD is developing a Scope of Work for a 3rd party legal firm to assist with Design-Build-Operate (DBO) contract development. A Request For Proposals (RFP) for 3rd party legal firms is anticipated to be released in early April 2018.</p> <p>The release of the draft South Coast Water District EIR for public comments is anticipated in April 2018 with the final adoption scheduled for July:</p> <ul style="list-style-type: none"> <li>• 5/15/18 Release Draft EIR for Public Review</li> <li>• 5/16/18 - 7/13/18 60-day Public Review Period</li> <li>• June 2018 - Public Workshop</li> <li>• 8/10/18 Prepare Final EIR (Response to Comments)</li> <li>• 8/23/18 South Coast WD Board Meeting</li> </ul>
<b>California WaterFix Environmental Meetings</b>	Rob Hunter, Director Sat Tamaribuchi, and Karl Seckel participated in the continuing discussion regarding the fisheries habitat issues associated with the Bay Delta and the California WaterFix. The final report prepared by Dr. Peter Moyle for Orange County Coastkeeper has been published; the paper can be accessed at <a href="https://www.coastkeeper.org/white-paper/">https://www.coastkeeper.org/white-paper/</a> . A session is also being planned for the Spring ACWA meeting with Garry Brown from OC Coastkeeper, Dr. Peter Moyle and the Chief Scientific Officer for the Delta Stewardship Council.
<b>Santiago Aqueduct Commission</b>	Karl Seckel and MWDOC Director Jeff Thomas attended the quarterly meeting of the Santiago Aqueduct Commission (SAC) which oversees the operation of the Baker Pipeline system.
<b>UCI Meetings</b>	Karl Seckel and MWDOC Director Sat Tamaribuchi met with Soroosh Sorooshian who is the Director of the Center for Hydrometeorology & Remote Sensing (CHRS) and Distinguished Professor of Civil & Environmental Engineering and Earth System Science Departments at UC Irvine. We



<b>UCI Meetings (continued)</b>	<p>discussed various modeling approaches to test the implications of the changing climate on water supply.</p> <p>Karl Seckel provided a 2-hour presentation on OC's Water and Beyond as part of the Osher Lifelong Learning Institutes (OLLI) course through UCI on the Impacts of Climate Change: Part 5: Water Supply and Groundwater. This was the fifth (final) in a series of classes on the impacts that a changing climate is driving, with the focus was on water supply and groundwater.</p>
<h2>EMERGENCY PREPAREDNESS</h2>	
<b>Coordination with WEROC Member Agencies</b>	<p>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. Francisco met with the City of Orange Water Department to discuss the update to their capabilities assessment and the previous mitigation action items. A complete first draft was distributed to the planning team in March.</p> <p>Kelly Hubbard had a conference call with Claris Strategies to discuss their update of Irvine Ranch Water District's Emergency Operations Plan and to provide input on how WEROC is incorporated into the plan.</p> <p>Kelly met with Orange County Sanitation District (OCSD) to discuss filling their vacant Emergency Coordinator position. They discussed what they wanted to get out of the program in the future and what kind of candidates would be good for the position.</p>
<b>Training and Programs</b>	<p>WEROC hosted an Exercise Design meeting at the end of February. The purpose of the meeting is to get individuals to work together to develop their own internal exercises.</p> <p>Kelly provided two WebEOC (Disaster Computer system) trainings and two EOC Section Specific trainings that were for Plans &amp; Intelligence, and one on Management. They were both well attended and were received well.</p> <p>Kelly attended the Women in Water Breakfast hosted by MWDOC this month.</p>
<b>Coordination with the County of Orange</b>	<p>Francisco attended the March Orange County Emergency Management Organization (OCEMO) meeting and Exercise Design meeting that took place in Laguna Beach. Lt. Joe Torres of the Laguna Beach Police Department presented on the impacts the 2005 Laguna Beach Landslide had on the City and the lessons learned from the incident. Staff also attended the OCEMO Exercise Design meeting.</p> <p>WEROC staff has been participating in in the OA Agreement Revision Working Group and is providing input on the final couple of areas. They expect to finish review in the next monthly meeting.</p>



<b>EOC Readiness</b>	<p>Kelly and Francisco met with a Finance Recovery expert to clarify and discuss issues related to Special District Emergency Declaration, Public Assistance reimbursement claims, and MWDOC's emergency purchasing authority. Once clarified, these concepts were discussed with MWDOC management and incorporated into the Emergency Operations Plan as appropriate.</p> <p>Janine Schunk completed the 2018 update of the contact lists for California Water and Wastewater Agency Response Network (CalWARN) Region 1 and WEROC Member Agency. This includes updating information into AlertOC, Safety Center and the physical EOC Phone books.</p>
<b>Emergency Plan</b>	<p>Francisco worked on updating the Emergency Operations Plan (EOP) and hazard specific annexes. The update includes a streamlined approach, update to current information, and the incorporation of corrective actions from previous WEROC training and exercises.</p>
<b>Coordination with Outside Agencies</b>	<p>Francisco attended a tour of Lake Mathews in Riverside, California to look at the facility's chlorination operation and various other components.</p> <p>Staff participated in the MET MARS radio test and the OA Radio Test.</p>
<b>WATER USE EFFICIENCY</b>	
<b>Metropolitan Water Use Efficiency Workgroup</b>	<p><b>Metropolitan Water Use Efficiency Workgroup</b></p> <p>On March 15, 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"> <li>• Metropolitan Board Presentation for March to Conservation and Local Resources Committee</li> <li>• Metropolitan Water District Updates <ul style="list-style-type: none"> <li>○ Education Program Updates</li> <li>○ Canada Water and Energy Road Show</li> <li>○ CalWEP Update</li> </ul> </li> <li>• External Affairs and Outreach Update</li> <li>• ICP Project – University of Arizona Landscape Drip Schedule App</li> <li>• Crop Swap Update</li> <li>• Member Agency Updates</li> <li>• Future Meeting Items</li> </ul> <p>The next Workgroup meeting is scheduled for April 26, 2018 at Metropolitan.</p>



<b>California Landscape Contractors Association (CLCA) University Class #1</b>	On March 14, Matthew Conway attended the CLCA's University Class #1 in Irvine. Approximately 20 landscape industry and water industry staff members attended this class. Topics discussed included firescaping, petscaping, and new plants for 2018. Three additional University Classes will be held throughout the remainder of the year.
<b>Smart Water Distribution Workshop</b>	On March 19, Joe Berg participated in a Smart Water Distribution Workshop hosted by the Moulton Niguel Water District and sponsored by the Denmark Water Technology Alliance. The Workshop focused on Denmark's many years of experience in actively implementing water loss control techniques. More than 25 water agency representatives participated in this Workshop.
<b>Metropolitan Leak Detection Program Development</b>	On March 28, Joe Berg coordinated a meeting with Mark Graham at the Metropolitan Water District, Anthony Manzano from Yorba Linda Water District, David Crowe from Irvine Ranch Water District, Drew Atwater from Moulton Niguel Water District, and Lucy Andrews from Water Systems Optimization, Inc. Mark described Metropolitan's interest in evaluating the feasibility of developing a cost effective financial assistance program for retail water agencies. The OC representatives shared experiences implementing water loss control activities over the past two years. Mark encouraged us to consider submitting a proposal to Metropolitan to begin researching this opportunity. Staff will be submitting a research proposal to Metropolitan requesting funding to assist agencies in further developing long-term water loss control programs to minimize distribution system loss. If funded, this research will require two to three years before a funding program could be considered by Metropolitan.
<b>El Toro Water District Demonstration Garden Dedication</b>	On March 30, Joe Berg spoke at the El Toro Water District Demonstration Garden Dedication. More than 40 local elected officials and water agency representatives attended this dedication. The Demonstration Garden is located at the El Toro Water District headquarters building on Los Alisos Boulevard, a highly visible location. The Garden replaced more than 27,000 square feet of non-functional turf grass and contains seven interpretive signs describing arid climates from all over the world, more than 100 plant species, pathways, sitting areas, and storm water retention features.
<b>Grant Writing USA Grant Management Workshop</b>	On April 4 and 5, Beth, Steve Hedges, and Rachel Waite attended Grant Writing USA's Grant Management Workshop, hosted by the City of Anaheim Police Department. Topics discussed included Grant Management Concepts, Office of Management and Budget Rules, Uniform Guidance Changes, and Federal Single Audits.
<b>SWRCB Water Loss Stakeholder Workgroup</b>	On March 9, Joe participated in the SWRCB's first Water Loss Control Stakeholder Workgroup meeting held at the California EPA building in Sacramento. This stakeholder workgroup is charged with shaping the water loss standard required by SB555. According to the legislation, the standard must be adopted by 2019. The next meeting is scheduled for June.



<b>Water Loss Control Workgroup</b>	<p>On March 13, Joe hosted the Water Loss Control Workgroup meeting. Thirty-one staff members from 19 agencies attended the meeting. Items on the agenda included:</p> <ul style="list-style-type: none"> <li>• Water Loss Updates <ul style="list-style-type: none"> <li>○ WAV Certificate Program</li> <li>○ Leak Detection Equipment Acquisition</li> <li>○ Future Meeting Topics</li> <li>○ Water Loss Control Shared Services Business Plan</li> </ul> </li> <li>• The Finances of Water Loss Control <ul style="list-style-type: none"> <li>○ Water Audit Refresher</li> <li>○ Financial Inputs in the Water Audit</li> <li>○ Financial Input Data Validity Grades</li> <li>○ The Value of Leakage</li> <li>○ Planning Cost-Justified Intervention</li> </ul> </li> <li>• Year 3 Timeline Update <ul style="list-style-type: none"> <li>○ Spring Calendar and Activities</li> <li>○ Planning Contingent Tasks</li> <li>○ Future Years (Years 4 And 5)</li> </ul> </li> <li>• Discussion And Questions</li> </ul>
<b>PUBLIC/GOVERNMENT AFFAIRS</b>	
<b>Member Agency Relations</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>• Created a media kit for MWDOC member agencies for the 2018 National Mayor's Challenge the kit includes: <ul style="list-style-type: none"> <li>○ A promotional flyer</li> <li>○ A sample news release</li> <li>○ Sample social media posts</li> <li>○ Tips for success</li> </ul> </li> <li>• Continued to promote the annual Water Awareness Poster Contest, and received and organized submissions</li> <li>• Facilitated a Ricki Raindrop appearance with Westminster Water Division at the City of Westminster's <i>Spring Festival</i></li> <li>• Facilitated a Ricki Raindrop appearance with El Toro Water District at their <i>Water-Wise Garden Dedication Ceremony and Tour</i></li> </ul>
<b>Community Relations</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>• Updated website with upcoming community events</li> <li>• Participated as Presenters in the two-day Children's Water Education Festival, held at University of California, Irvine</li> </ul>
<b>Education</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>• Attended El Toro HS 2<sup>nd</sup> visit</li> <li>• Visited Inside the Outdoors headquarters for HS Program overview and discussion</li> <li>• Toured Argyros Girl Scout Leadership Center with Director Yoo Schneider to explore potential partnership opportunities</li> </ul>



<b>Education (continued)</b>	<ul style="list-style-type: none"> <li>• Provided information to East Orange County WD on HS Program attendance</li> <li>• Prepared slides for Director Yoo Schneider's Elected Officials' Forum presentation on MWDOC Education Programs</li> <li>• Created &amp; distributed National Mayor's Challenge for Water Conservation Classroom Edition flyers for OC Educators</li> <li>• Provided 18-19 Choice Program figures and targets for rate resolution</li> <li>• Provided information to City of Santa Ana on 17-18 program attendance numbers for both Elementary &amp; High School</li> <li>• Provided Mesa Water with updated schedule on the High School Program Expo</li> <li>• Provided City of Buena Park with information on the High School Program Expo</li> <li>• Provided El Toro WD with information on the High School Program Expo</li> <li>• Created and sent voting poll to Board and Staff to choose an OC winner for the #Voice4Water video contest</li> <li>• Attended the 2018 CAPIO conference. Sessions included: <ul style="list-style-type: none"> <li>○ Organizational Strategy for Cross-Departmental Collaboration</li> <li>○ Cracking the Media Code</li> <li>○ How to Measure Success of Communications Strategies in a Campaign</li> <li>○ Reaching Diverse Communities Through Meaningful Communication</li> <li>○ Making Your Social Media More Engaging</li> <li>○ Lead in the Headlines: Staying Ahead of a Developing Crisis</li> <li>○ Taking Digital Communications to the Next Level</li> </ul> </li> </ul>
<b>Media Relations</b>	<p>Public Affairs Staff:</p> <ul style="list-style-type: none"> <li>• Prepared &amp; sent out a news release for the Saddleback College World Water Forum Grand Award</li> <li>• Prepared &amp; sent out news release: Board Adopts Resolution in Support of MET's Increased Share of WaterFix</li> <li>• Met with the Daily Journal on potential outreach opportunities</li> </ul>
<b>Special Projects</b>	<p>Public Affairs staff:</p> <ul style="list-style-type: none"> <li>• Prepared and sent a MWDOC Board Workshop notice announcing guest speaker Roger Patterson</li> <li>• Participated in the annual Inspection Trip Coordinators Meeting at Metropolitan</li> <li>• Working with MWDOC/Met Directors to submit preferred dates/trip types to Metropolitan for the 2018-19 Inspection Trip season</li> <li>• Participated in a WEROC EOC Section Training</li> <li>• Prepared and distributed an eCurrents newsletter</li> <li>• Participated on a conference call with Metropolitan Media Relations team and Dee Zinke to discuss agency WaterFix messaging</li> <li>• Met with Wyland Foundation and Saddleback Community College to discuss the updated pocket park design and dew and fog catchment system technology</li> </ul>



<b>Special Projects (continued)</b>	<ul style="list-style-type: none"> <li>• Created &amp; distributed National Mayor's Challenge for Water Conservation flyer for the April 2018 competition</li> <li>• Prepared and distributed a second invite for the Water Policy Forum and Dinner featuring Karla Nemeth. Continue to assist with guest registration and reserved tables for this event. Additionally, completed negotiations with the hotel for event set-up, menu options, and A/V needs.</li> </ul> <p>Heather staffed the WACO Planning meeting. Director Dick also attended. She is currently working on the May program inviting potential speakers.</p> <p>Heather and Christina Hernandez prepared for the ISDOC Quarterly Luncheon by sending out reminder invitations, creating the agenda and the RSVP and check-in lists. Christina and Director Finnegan staffed the registration desk, while Heather coordinated with the speaker, OC Registrar of Voters, Neal Kelley.</p> <p>Heather participated in telephone interviews for the Executive Assistant position with Cathy Harris and Maribeth Goldsby.</p> <p>Heather staffed the April WACO meeting and coordinated the speaker, Brandon Goshi from the Metropolitan Water District of Southern California.</p>
<b>Legislative Affairs</b>	<p>Heather participated in the Southern California Water Coalition's Legislative Task Force meeting.</p> <p>Heather attended the ACWA State Legislative Committee meeting in Sacramento.</p> <p>Heather and Melissa participated in Metropolitan's Member Agency Legislative Coordinator meeting.</p> <p>Heather monitored the Water Affordability Symposium coordinated by the State Water Resources Control Board.</p> <p>Heather prepared slides on state legislation for Director Tamaribuchi to present at the Elected Officials Forum.</p> <p>Heather participated in ACWA's state legislative committee water shutoffs working group meeting.</p>
<b>Water Summit</b>	<p>Public Affairs staff:</p> <ul style="list-style-type: none"> <li>• Sent invitations to the following speakers <ul style="list-style-type: none"> <li>• Chris "Maven" Austin – <i>Maven's Notebook</i></li> <li>• Jon Coupal – Howard Jarvis Taxpayers Assoc.</li> <li>• Kurt Schwabe – PPIC</li> <li>• Harlan Kelly, Jr. – SFPUC</li> <li>• Maureen Stapleton – SDCWA</li> </ul> </li> <li>• Confirmed details for event transportation</li> </ul>



**INFORMATION CALENDAR**

**MWDOC GENERAL INFORMATION  
ITEMS**

**MWDOC BOARD OF DIRECTORS**

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