REGULAR MEETING
OF THE BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
18700 Ward Street, Board Room, Fountain Valley, California
November 16, 2016, 8:30 a.m.

AGENDA

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC COMMENTS/PARTICIPATION

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

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

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

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

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

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

EMPLOYEE SERVICE AWARDS

NEXT RESOLUTION NO. 2038

CONSENT CALENDAR (Items 1 to 4)

(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. October 5, 2016 Workshop Board Meeting
b. October 19, 2016 Regular Board Meeting

Recommendation: Approve as presented.

2. COMMITTEE MEETING REPORTS

a. Planning & Operations Committee: October 3, 2016
b. Administration & Finance Committee: October 12, 2016
c. Public Affairs & Legislation Committee: October 17, 2016
d. Executive Committee Meeting: October 20, 2016
e. MWDOC/OCWD Joint Planning Committee Meeting: October 26, 2016

Recommendation: Receive and file as presented.

3. TREASURER'S REPORTS

a. MWDOC Revenue/Cash Receipt Register as of October 31, 2016
b. MWDOC Disbursement Registers (October/November)

Recommendation: Ratify and approve as presented.

c. Summary of Cash and Investment and Portfolio Master Summary Report (Cash and Investment report) as of September 30, 2016
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 September 30, 2016
b. Quarterly Budget Report
c. Audit Report FY 2015/16

Recommendation: Receive and file as presented.

– **End Consent Calendar –**

ACTION ITEMS

5-1 ADOPT RESOLUTION AMENDING DISTRICT PENSION PLAN TO ALLOW CONTRIBUTIONS TO GENERAL MANAGER'S 401 ACCOUNT

RES. NO. _____

Recommendation: Adopt Resolution approving Amendment No. 1 to the District's Money Purchase Pension Plan, as presented.

5-2 VENDOR SELECTION FOR PRODUCTION OF CHOICE WHITEBOARD VIDEOS

Recommendation: Approve Spotlight Video as the CHOICE whiteboard vendor.

5-3 VENDOR SELECTION FOR PRODUCTION OF CHOICE OC WATER MAGAZINE

Recommendation: Approve the OC Register as the vendor for the OC Water Magazine CHOICE program.

5-4 APPROVE RECOMMENDATIONS IN THE EMERGENCY OPERATIONS CENTER (EOC) ASSESSMENT STUDY AND STAFF ACTIONS

Recommendation: *Accept the recommendations of the WEROC EOC Assessment Report submitted by Claris Strategies and authorize staff to move forward as follows: (1) Reduce primary WEROC EOC's from two to one in accordance with the study; and (2) Complete the following work at the South EOC: life safety recommendations, electrical study, and seismic assessment. Staff will utilize the FY2016/2017 budget and WEROC reserves for this work and will bring any items requiring board approval back for authorization.*

5-5 EXECUTION AND IMPLEMENTATION OF WATER USE EFFICIENCY GRANT AGREEMENTS

Recommendation: *Authorize the General Manager to sign grant agreements and for staff to implement: (1) the US Bureau of Reclamation Agreement for implementation of the Comprehensive Landscape Water Use Efficiency Program - Phase II, and (2) the South Orange County Integrated Regional Water Management Implementation Grant for Strategic Turfgrass Removal and Design Assistance Program.*

5-6 LRP AGREEMENT BETWEEN METROPOLITAN, MWDOC AND EL TORO WATER DISTRICT FOR THE EL TORO RECYCLED WATER SYSTEM EXPANSION PHASE II PROJECT

Recommendation: *Authorize the General Manager to execute the final Local Resources Program agreement with Metropolitan Water District of Southern California and El Toro Water District substantially in the form as attached for the El Toro Recycled Water System Expansion Phase II Project, subject to review and approval by Legal Counsel of any agreement changes.*

5-7 LRP AGREEMENT BETWEEN METROPOLITAN, MWDOC AND SANTA MARGARITA WATER DISTRICT FOR THE LAKE MISSION VIEJO ADVANCED PURIFICATION WATER TREATMENT FACILITIES PROJECT

Recommendation: *Authorize the General Manager to execute the final Local Resources Program agreement with Metropolitan Water District of Southern California and Santa Margarita Water District substantially in the form as attached for the Lake Mission Viejo Advanced Purification Water Treatment Facilities Project, subject to review and approval by Legal Counsel of any final agreement changes.*

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

6. GENERAL MANAGER'S REPORT, NOVEMBER 2016 (ORAL AND WRITTEN)

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

7. MWDOC GENERAL INFORMATION ITEMS

a. Board of Directors - Reports re: Conferences and Meetings and 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
October 5, 2016

At 8:30 a.m. President Osborne 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 McKenney led the Pledge of Allegiance and Secretary Goldsby called the roll.

MWDOC DIRECTORS
Brett R. Barbre*
Larry Dick*
Joan Finnegan
Susan Hinman
Wayne Osborne
Sat Tamaribuchi
Jeffrey M. Thomas (absent)

*Also MWDOC MET Directors

MWDOC STAFF
Robert Hunter, General Manager
Karl Seckel, Assistant General Manager
Joe Byrne, Legal Counsel
Maribeth Goldsby, Board Secretary
Harvey De La Torre, Associate General Mgr.
Joe Berg, Dir. of Water Use Efficiency
Jonathan Volzke, Public Affairs Manager
Melissa Baum-Haley, Sr. Water Resource Analys
Charles Busslinger, Principal Engineer
Andrew Kanzler, WUE Coordinator
Colin Eckerle, Intern
Kevin Hostert, Water Resources Analyst
Heather Baez, Government Affairs Manager

OTHER MWDOC MET DIRECTORS
Larry McKenney
Linda Ackerman (absent)

OTHERS PRESENT

Deven Upadhyay	Metropolitan Water District of So. Cal.
Mark Monin	El Toro Water District
William Kahn	El Toro Water District
Bob Hill	El Toro Water District
Katie Victoria	City of Garden Grove
Doug Reinhart	Irvine Ranch Water District
Steve LaMar	Irvine Ranch Water District
Paul Weghorst	Irvine Ranch Water District
Paul Shoenberger	Mesa Water
Don Froelich	Moulton Niguel Water District
Joone Lopez	Moulton Niguel Water District
Jake Vollebregt	Moulton Niguel Water District
John Kennedy	Orange County Water District
Adam Hutchinson	Orange County Water District
Ray Miller	San Juan Capistrano
Chuck Gibson	Santa Margarita Water District
Dan Ferons	Santa Margarita Water District
Jim Leach	Santa Margarita Water District
Dennis Erdman	South Coast Water District

Bill Green	South Coast Water District
Gary Melton	Yorba Linda Water District
Ed Means	Means Consulting
Kelly Rowe	Water Resources Consultant
Richard Eglash	Brady & Associates
Cathrene Glick	
Bob Denver	

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 Osborne inquired as to whether there were any items distributed to the Board less than 72 hours prior to the meeting with General Manager Hunter responding no items were distributed.

PUBLIC PARTICIPATION/PUBLIC COMMENTS
President Osborne inquired whether any members of the public wished to comment on agenda items.

Mr. Chuck Gibson (Santa Margarita Water District) announced that the next ACWA Region 10 meeting would be held in Vista, CA and would include a tour of the Carlsbad Desalination Project.

PRESENTATION/DISCUSSION/INFORMATION ITEMS

INPUT OR QUESTIONS ON MET ISSUES FROM THE MEMBER AGENCIES/MET DIRECTOR REPORTS

President Osborne requested reports from the MET Directors and comments, questions, or input from the audience.

Director Dennis Erdman (South Coast Water District) mentioned that Karl Seckel gave an excellent presentation on the OC Reliability Study at South Coast Water District, and that a slide from that presentation indicated that it would be prudent for all agencies to officially support the Water Fix. He asked what MWDOC's course of action for gaining regional support for the Water Fix would be (e.g., adopt resolutions).

Director Dick commented that a first step would be for agencies to reach out to local organizations (Rotary, Kiwanis, etc.) regarding the Water Fix. Director Hinman commented she would highlight this issue at the next Women in Water meeting.

General Manager Hunter noted that it is imperative for legislators (at the National level) to be educated on this issue.

Director McKenney highlighted his MET activities, with emphasis the MET Finance & Insurance Committee activities, legislative issues, and the ACWA Board support of the Amicus Brief in the San Diego County Water Authority/MET litigation.

Director Barbre mentioned that the election of the MET Chair is an important issue that will go before the MET Board in October, noting that Director Randy Record is seeking his second term (unopposed).

Director Dick highlighted his activities with respect to the MET Agriculture and Industry Relations Committee.

President Osborne reminded the audience that the purpose of this item is to provide the opportunity for MWDOC's Member Agencies to ask questions and communicate with the MWDOC MET Directors and he encouraged those in attendance to do so.

Mr. Osborne also announced that the Member Agency Elected Officials Forum is currently scheduled for November 3rd. He commented that due to the election (November 8th) it may be prudent to move the meeting to January. Following considerable discussion regarding January dates, it was decided that the next Elected Officials Forum would be held on Thursday, January 5, 2017 at 6:00 p.m.

ORANGE COUNTY'S WATER SUPPLY AND PERFORMANCE REPORT FOR JUNE 2016

Water Resources Analyst Kevin Hostert reported on Orange County's water supply conditions and conservation performance for August 2016, noting that for the month of August, Orange County saved 16.33% far exceeding the MWDOC Countywide saving goal of 10%. He also reviewed supply conditions, reservoir storage, snowpack levels, and the "Table A" State Water Project Allocations for 2016 (currently set at 60%).

Discussion ensued regarding the severe restrictions on the Delta (causing the loss of approximately 990,000 acre-feet of water to the ocean) and how the Water Fix would help decrease losses to the ocean.

The Board received and filed the report.

UPDATE ON IMPLEMENTING GOVERNOR'S EXECUTIVE ORDER B-37-16 MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

Director of Water Use Efficiency, Joe Berg, advised that Governor Brown signed Executive Order B-37-16 "Making Water Conservation A California Way of Life," which directed state agencies to update temporary emergency water restrictions, strengthen local drought contingency plans, and develop new permanent, long-term water use targets. He noted that to aid in the development of the recommendations to implement the Governor's Executive Oder actions, the state agencies convened an Urban Advisory Group (UAG) comprised of water agencies, cities, environmental organizations, and stakeholders. To date, two UAG meetings have taken place (one in Northern California and one at MET). To provide insight on the conceptual proposals presented by the states agencies and the UAG discussions, MWDOC asked UAG members Joe Berg, Deven Upadhyay (MET), and Joone Lopez (MNWD) to give their perspective of the process and proposals thus far.

Mr. Berg presented information regarding the State's implementing of the Executive Order, highlighting the four main areas of focus for the updated Order (out of 13), which included: (1) use water more wisely, (2) eliminate water waste, (3) strengthen local drought resilience, and (4) improve agricultural water use efficiency and drought planning. He also provided an overview of the process which includes meetings with the UAG and Technical Advisory Workgroup, the State Board, and DWR staff, as well as an overview of the long-term efficiency targets. One area of particular concern is the State's intention to impose water budgets upon local agencies.

Following his presentation, a panel discussion with Joe Berg, Joone Lopez, and Deven Upadhyay ensued. Topics covered in the discussion included outdoor irrigation areas, the need to preserve local agency investments and local decision making rather than the State, the legality of imposing water budgets, the need to put additional focus on supply (rather than just demand), the need to not discourage local investments in developing water supplies, the economic impacts of increased regulations, and the need to expand our circle of advocates statewide to provide meaningful input in the process.

The Board thanked the panelists and 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 September MET Board Meeting
b. Review Items of significance for the Upcoming MET Board and Committee Agendas

No new information was presented.

ADJOURNMENT

There being no further business to come before the Board, the meeting adjourned at 10:47 a.m.

_____
Maribeth Goldsby
Board Secretary

MINUTES OF THE REGULAR MEETING
OF THE BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
October 19, 2016

At 8:30 a.m., President Osborne 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 Dick led the Pledge of Allegiance and Secretary Goldsby called the roll.

MWDOC DIRECTORS	**STAFF**
Brett R. Barbre	Robert Hunter, General Manager
Larry Dick	Karl Seckel, Assistant General Manager
Joan Finnegan	Joe Byrne, Legal Counsel
Susan Hinman	Maribeth Goldsby, Board Secretary
Wayne Osborne	Harvey De La Torre, Associate General Manager
Sat Tamaribuchi	Jonathan Volzke, Public Affairs Manager
Jeffery M. Thomas (arr. at 8:42 am)	Cathy Harris, Admin. Services Manager
	Kevin Hostert, Water Resources Analyst
	Andrew Kanzler, Water Use Eff. Coordinator

ALSO PRESENT	
Christine Carson	Aleshire & Wynder
Larry McKenney	MWDOC MET Director
William Kahn	El Toro Water District
Bob Hill	El Toro Water District
John Kennedy	Orange County Water District
Dennis Erdman	South Coast Water District
Rick Erkeneff	South Coast Water District
Andy Brunhart	South Coast Water District
Gary Melton	Yorba Linda Water District
Marc Marcantonio	Yorba Linda Water District
Richard Eglash	Brady & Associates

EMPLOYEE SERVICE AWARD

President Osborne presented an award to Jeff Stalvey (Financial Analyst/Database Analyst) for ten years of service to the District.

PUBLIC PARTICIPATION/PUBLIC COMMENT

President Osborne 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.Osborne 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
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.)
No items were received.

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

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

No information was presented.

CONSENT CALENDAR

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

Director Hinman advised that the September 14, 2016 Administration & Finance Committee meeting minutes be revised to reflect her attendance, and General Manager Hunter advised that the September 19, 2016 Public Affairs & Legislation Committee meeting would be revised to reflect MWDOC MET Director McKenney's attendance.

Upon MOTION by Director Hinman, seconded by Director Finnegan, and carried (6-0), the Board approved the Consent Calendar items as revised. A roll call vote was taken, and Directors Barbre, Dick, Finnegan, Hinman, Osborne, and Tamaribuchi all voted in favor. Director Thomas was absent.

MINUTES

The following minutes were approved.

September 7, 2016 Workshop Board Meeting
September 21, 2016 MWDOC Water Facilities Corporation Board Meeting
September 21, 2016 Regular Board Meeting

COMMITTEE MEETING REPORTS

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

Planning & Operations Committee Meeting: September 6, 2016
Administration & Finance Committee Meeting: September 14, 2016 (as revised)
Public Affairs & Legislation Committee Meeting: September 19, 2016 (as revised)
Executive Committee Meeting: September 22, 2016

TREASURER'S REPORTS

The following items were ratified and approved as presented.

MWDOC Revenue/Cash Receipt Register as of September 30, 2016
MWDOC Disbursement Registers (September/October)

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 August 31, 2016

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 August 31, 2016

RECORD MANAGEMENT POLICIES

The Board approved the Trustworthy Electronic Documents Policy, the Electronic Mail (E-Mail) Policy, and revisions to the Administrative Code, as presented.

HEALTH SAVINGS ACCOUNT ELECTIONS FOR 2017

The Board established contributions to the Health Savings Accounts (HSA) as follows:

Plan	**2017 Recommended Annual HSA Contributions by District**		
	Employee only	Employee +1	Family
Kaiser CDHP	$1,150	$2,050	$2,400
Anthem PPO CDHP	$1,300	$2,600	$2,400

END CONSENT CALENDAR

ACTION CALENDAR

CONSIDER ADOPTING AN OPPOSE POSITION ON PROPOSITIONS, INCLUDING PROP. 53

Upon MOTION by Director Barbre, seconded by Director Dick, and carried (6-0), the Board adopted an oppose position on Proposition 53. Directors Barbre, Dick, Finnegan, Hinman, Osborne, & Tamaribuchi voted in favor; Director Thomas was absent.

DISCUSSION REGARDING ADOPTING SUPPORT POSITION ON THE CALIFORNIA WATER FIX

Director Tamaribuchi, Chair of the Public Affairs & Legislation Committee (PAL), advised that the Committee recommended this item be deferred until November; the Board generally concurred and recommended it be referred back to the PAL Committee in November.

(Director Thomas arrived at 8:42 a.m.)

ADOPT RESOLUTION HONORING DIRECTOR SUSAN HINMAN ON THE OCCASION OF HER RETIREMENT FROM THE MWDOC BOARD

Upon MOTION by Director Dick, seconded by Director Finnegan, and carried (6-0) the Board adopted RESOLUTION NO. 2037 Honoring Susan Hinman on the Occasion of Her Retirement from the MWDOC Board, by the following roll call vote:

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

CONSIDERATION OF GENERAL MANAGER'S COMPENSATION

President Osborne provided an overview of the General Manager's evaluation process, noting that Mr. Hunter met all the goals established, and that it was time to discuss a potential salary increase for the General Manager. He noted that he reviewed a salary comparison to other agencies, and would recommend a 3% salary increase.

Director Dick highlighted the fact that the General Manager (last year) suggested that in the future increases be contributed to his deferred compensation plan in lieu of an increase. Mr. Dick suggested legal counsel evaluate whether it was legally possible to defer the entire amount of this increase. Legal Counsel Byrne advised that once an amount is established, he could verify how much could be deferred (along with Mr. Hunter's other deferred compensation).

Responding to an inquiry from the Board, Administrative Services Manager Cathy Harris confirmed that the average salary increase for the MWDOC senior management staff ranged between 4-5%. As a result, Director Dick recommended the General Manager receive a 4% salary increase (consistent what the management staff increases).

Upon MOTION by Director Hinman, seconded by Director Thomas, and carried (7-0), the Board authorized authorized amending the General Manager's employment agreement to include a 4% salary increase to the General Manager, with the maximum amount allowed under the extent of the law contributed to his pension or deferred compensation plan. Directors Barbre, Dick, Finnegan, Hinman, Osborne, Tamaribuchi, and Thomas all voted in favor.

INFORMATION CALENDAR

GENERAL MANAGER'S REPORT, OCTOBER 2016

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

Responding to an inquiry from Director Barbre, Mr. Hunter advised that future contributions toward OPEB liability would be deferred and addressed next year.

The Board received and filed the report as presented.

MWDOC GENERAL INFORMATION ITEMS

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 Dick reported on attending the Executive Committee, Public Affairs & Legislation Committee, Planning & Operations Committee, and Administration & Finance Committee meetings, as well as the South Orange County Economic Coalition meeting, the WACO and WACO Planning Committee meetings, several Urban Water Institute Planning meetingsthe ISDOC and ISDOC Executive Committee meetings, the OCWD/MWDOC committee meeting, and the Workshop Board meeting. He also reported on attending the MET pre-meeting, the MET Executive Committee meeting, the MWDOC/MET Director meeting, the MET Board and Committee meetings, the MET Agriculture Inspection Trip, and a meeting with CoastKeepers.

Director Finnegan reported on attending the Executive Committee, Public Affairs & Legislation Committee, Planning & Operations Committee, and Administration & Finance Committee meetings, as well as the Board meeting, the ISDOC luncheon and ISDOC Executive Committee meeting, the Center for Demographic Research open house, the WACO Planning Committee meeting, and the Costa Mesa Republican Committee meeting (wherein she was a presenter).

Director Barbre stated that he attended the following meetings in his role as MET Director: a meeting with Senator Ackerman re MET strategies, the MWDOC MET Director luncheon, a meeting with Shimmick Construction regarding Diemer issues, the Brea Networking Group regarding California water issues, the MWDOC/MET Director caucus, the Inland-Empire caucus, the MET Board and Committee meetings, a tour of the Diemer Plant (with Congressman Rohrabacher's office), and the Engineering & Operations tour of Lake Mathews and the Diemer Plant. Mr. Barbre also reported on his attendance at the following meetings in his role as MWDOC Director: the Board

and Workshop Board meetings, Executive Committee, Planning & Operations Committee, Administration & Finance Committee, and Public Affairs & Legislation Committee meetings, as well as the YLWD Citizen's Advisory Committee meeting, the YLWD/OCWD/MWDOC joint meeting, the ISDOC luncheon, and the MWDOC/OCWD joint executive committee meeting.

Director Tamaribuchi advised that he attended the Board and Workshop Board meetings, Executive Committee, Planning & Operations Committee, Administration & Finance Committee, and Public Affairs & Legislation Committee meetings, as well as the CCEEB Longview Committee meeting, the South Orange County Economic Coalition meeting, the Southern California Water Dialogue meeting, two meetings with CoastKeepers, the IRWD Supply & Reliability Committee meeting, the OCBC Infrastructure Committee meeting, and meetings with Supervisor Steel and Supervisor Bartlett.

Director Thomas noted his attendance at the OCBC Infrastructure Committee meeting, the MET meetings, the WACO meeting, the Executive and Administration & Finance Committee meetings, the Board meeting, a Bay-Delta Inspection Trip, the ISDOC luncheon, a meeting with representatives from Tustin Unified School District, the Society of Marketing Professionals meeting, and the South County Water Expo.

Director Hinman reported on her attendance at the WEROC exercise, the ISDOC luncheon, the South County Water Expo, the MWDOC Board and Committee meetings, the WACO meeting, the San Juan Basin Authority meeting, the Association of University Women event, the San Juan Utilities Commission meeting, and the San Clemente City Council meeting. She advised that she would be attending a Bay-Delta Inspection Trip later in the week.

Director Osborne advised that he attended the Board and Workshop Board meetings, Executive Committee, Planning & Operations Committee, Administration & Finance Committee, and Public Affairs & Legislation Committee meetings, as well as the WACO meeting, and ISDOC luncheon.

Director Barbre suggested the General Manager arrange a presentation regarding the findings from MET's internal audit.

CLOSED SESSION

At 9:08 a.m., Legal Counsel Byrne advised that the Board would adjourn to closed session on the following matters:

> **CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION**
> Pursuant to Paragraph (1) of subdivision (d) of Government Code Section 54956.9. One Case: *San Diego County Water Authority v. Metropolitan Water District of Southern California; all persons interested in the validity of the rates adopted by the Metropolitan Water District of Southern California on April 13, 2010, et al.,* former Los Angeles Superior Court, Case No. BS 126888, transferred on October 21, 2010, to San Francisco Superior Court, Case No. CPF-10-510830.
>
> **CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION**
> Pursuant to Paragraph (1) of subdivision (d) of Government Code 54956.9. One Case: *San Diego County Water Authority v. Metropolitan Water District of Southern California;* all

persons interested in the validity of the rates adopted by the Metropolitan Water District of Southern California *on April 10, 2012 to be Effective January 1, 2013 and January 1, 2014; and Does 1-10, et al.*, former Los Angeles Superior Court, Case No. BS137830, transferred on August 23, 2012, to San Francisco Superior Court, Case No. CPF-12-512466.

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Paragraph (1) of subdivision (d) of Government Code Section 54956.9. One Case: *San Diego County Water Authority v. Metropolitan Water District of Southern California; all persons interested in the validity of the rates adopted by the Metropolitan Water of Southern California on April 8, 2014, et al.,* former Los Angeles Superior Court, Case No. BC547139, transferred on December 2, 2014, to San Francisco Superior Court, Case No. CPF-14-514004.

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Paragraph (1) of subdivision (d) of Government Code Section 54956.9. One Case: *San Diego County Water Authority v. Metropolitan Water District of Southern California; all persons interested in the validity of the rates adopted by the Metropolitan Water District of Southern California in April 2016, et al.,* former Los Angeles Superior Court, Case No. No. BS161729, transferred to San Francisco Superior Court.

RECONVENE

At 10:11 a.m., the Board reconvened and Legal Counsel Christine Carson announced that no reportable action was taken in closed session.

ADJOURNMENT

There being no further business to come before the Board, President Osborne adjourned the meeting at 10:12 a.m.

Respectfully submitted,

_____
Maribeth Goldsby, Secretary

MINUTES OF THE MEETING OF THE
BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Jointly with the
PLANNING & OPERATIONS COMMITTEE
October 3, 2016 - 8:30 a.m. to 10:37 a.m.
MWDOC Conference Room 101

P&O Committee:
Director Larry Dick
Director Susan Hinman
Director Joan Finnegan

Staff:
Robert Hunter, Karl Seckel, Joe Berg
Harvey De La Torre, Maribeth Goldsby,
Jonathan Volzke, Joe Berg, Heather Baez,
Charles Busslinger, Kevin Hostert

Also Present:
Director Wayne Osborne
Director Brett Barbre
Director Sat Tamaribuchi
Linda Ackerman, MWDOC MET Director
Larry McKenney, MWDOC MET Director
Paul Weghorst, Irvine Ranch Water District
Rich Mori, Irvine Ranch Water District
John Lewis, Lewis Consulting
Bill Kahn, El Toro Water District
Don Froelich, Moulton Niguel Water District
Chuck Gibson, Santa Margarita Water District
Justin McCusker, Santa Margarita WD
John Kennedy, OCWD
Adam Hutchinson, OCWD
Jake Vollebregt, Moulton Niguel Water Dist.

Director Dick called the meeting to order at 8:30 a.m. Assistant Manager Karl Seckel introduced Charles Busslinger, MWDOC's new Principal Engineer, to the Board.

In an effort to accommodate schedules, the agenda was reorganized as follows:

PUBLIC PARTICIPATION

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.

DISCUSSION ITEMS

OC FLOOD CONTROL DISTRICT PROPOSAL ON ENCROACHMENT PERMITS

Mr. Karl Seckel (Assistant General Manager), provided information regarding the OC Flood Control District proposal for encroachment permits. He advised that on September 19th, MWDOC attended a meeting with the County and a number of MWDOC's agencies to discuss the proposal for a "template" form of encroachment permit, with a built in rate based on square footage of the encroachment and market value of the land based on where in the County the encroachment is located. Staff believes Flood Control erred by not seeking wide input on this effort until the September 19th meeting was set. He reviewed a number of issues that were discussed at the meeting (mainly charging for crossing a right-of-way), as well as suggestions on moving forward.

Mr. Seckel advised that MWDOC's legal counsel preliminarily believes MWDOC is exempt from such provisions and is checking with other cities, the County, and other California water districts to see if they believe they are exempt also. He stated that a letter is being crafted (to the County) questioning whether the proposed fees are legal. Mr. Seckel noted that Mr. Michael Moore, City of Anaheim, will be meeting with the County regarding this issue that this meeting will be pivotal to the discussions, and that staff is working closely with Mr. Moore (and his legal counsel) to develop a final course of action.

The Committee discussed this issue and suggested that MWDOC be proactive in its approach. Mr. Hunter advised that MWDOC's strategy will be better defined following the Anaheim meeting.

The Committee received and filed the report.

IRWD BAKER WATER TREATMENT PLANT WATER QUALITY

Mr. Rich Mori (Irvine Ranch Water District) provided a status update on the Baker Water Treatment Plant Project (a reliability project for South Orange County in the event of an outage of the imported treated water supplies to South Orange County). Mr. Mori reviewed the background of the Project, the treatment process and treatment goals, the plant Operating Permit process, water quality responsibility and monitoring (IRWD is solely responsible for complying with all water quality requirements and for monitoring finished water quality), as well as plant start-up and commissioning (a 10-day test is anticipated to start in December 2016, and, if successful, the plant will remain on-line continuously).

The Committee discussed the Project's efficiency projections, Serrano Creek overflow, as well as the percentage each of the recipients will receive from the additional supply (IRWD, SMWD/MNWD, ETWD, and TCWD).

The Committee received and filed the report.

SAN JUAN BASIN OPTIMIZATION PROJECT

Mr. Don Bunts (Santa Margarita Water District) presented an overview of the San Juan Watershed Project (he advised this was the new name). Mr. Bunts advised that the current

supply to the San Juan Watershed Project is 80% imported, 5% local, and 15% recycled water, noting that water resources in the form of uncaptured groundwater, storm water runoff, ocean water disposal are under-utilized, and that the basin will serve as a reservoir. Mr. Bunts also reviewed the goals and benefits of the project (local supply, water quality, ecological enhancements, and water storage). Phase 1 will include the installation of rubber dams, and will cost approximately $34 million, and will enhance reliability, assist with drought proofing the region, and will utilize existing treatment facilities. He advised that the beneficiaries/partners for the Project include Santa Margarita Water District, South Coast Water District, the cities of San Juan Capistrano, Mission Viejo, Rancho Santa Margarita, Laguna Nigel and Dana Point, as well as the County of Orange, Cal Trans, and the OCTA. Mr. Bunts provided an overview of the timeline for completion (CEQA documentation to be completed by August 2017, design would take place by September 2017, and construction completion is anticipated by June 2018)

Mr. Bunts provided additional information on Phase 2 of the Project, noting that new water captured under Phase 2 would be anywhere from 2660 to 4920 acre-feet per year, and that its focus would be to capture and filter storm water and recycled water, at a cost of approximately $86 million. He also reviewed the benefits of Phase 2 (affordable/reliable supply, it will maximize use of recycled water, and increase water storage, as well as provide ecological enhancements). Mr. Bunts briefly identified key points of Phases 3 and 4 as additional recycled water expansions.

The Committee received and filed the report.

STATUS REPORT RE EMERGENCY GROUNDWATER SUPPLY CONTRACT

Mr. Karl Seckel reminded the Committee that in 2006 MWDOC, OCWD, and several South County agencies executed an agreement, titled Phase 1 of the Emergency Service Program Connecting IRWD's System to the South Orange County Import System to Improve Emergency Water Service, in 2006, and that this Agreement helps improve the delivery of emergency water in the event of an outage or reduction in flows of imported water to South Orange County.

He advised that IRWD is in the process of completing a study to evaluate their current and future demands and the ability of their system to continue to convey water to the South Orange County agencies; this evaluation should be completed later this fall and will determine whether or not they can extend the existing agreement beyond 2040, or whether the options such as a pump-in of groundwater to the EOCF#2 should be pursued.

It was noted that this issue will be discussed at the October 26th MWDOC/OCWD Joint Planning Committee.

The Committee received and filed the report.

INFORMATION ITEMS

MWDOC MEETING WITH SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT (SCAQMD)

Mr. Seckel provided an overview of a recent meeting held between MWDOC staff and staff from the SCAQMD to discuss a myriad of issues, including number of run hours for diesel generators, declaration of an emergency, voluntary efforts by water and wastewater agencies to avoid an impending grid outage, and reliability planning. Following the review of the issues discussed, it was noted that overall the meeting was good, that completion of a survey from our member agencies to ascertain the type, age, replacement cycle will help MWDOC better understand what we are facing in Orange County, and that MWDOC staff will follow-up on the offer of a "technical exchange" regarding the changing technology of power generation.

Discussion ensued regarding AQMD Rule #118 (Emergencies), the general concept of "pre-approved" emergency events under which addition run hours of the generators would be approved, as well as the make-up of the AQMD Board (staff or appointed), and whether there are reliable and cost effective retrofits to limit diesel emissions. The Committee also discussed, reciprocity with other Districts (approval for various districts to assist in the emergency).

The Committee received and filed the report.

METROPOLITAN REQUEST REGARDING AMP RIGHT OF WAY

The Board received and filed the report as written.

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 informational status reports were received and filed.

REVIEW OF ISSUES RELATED TO CONSTRUCTION PROGRAMS, WATER USE EFFICIENCY, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, DISTRICT FACILITIES, and MEMBER-AGENCY RELATIONS

No information was presented.

ADJOURNMENT

There being no further business to be brought before the Committee, the meeting adjourned at 10:37 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**
October 12, 2016 – 8:35 a.m. to 9:35 a.m.
MWDOC Conference Room 101

Committee Members:
Director Jeff Thomas, Chair
Director Joan Finnegan
Director Brett Barbre

Staff:
Robert Hunter, Karl Seckel, Harvey DeLaTorre, Katie Davanaugh, Cathy Harris, Hilary Chumpitazi, Jonathan Volzke, Charles Busslinger

Also Present:
Director Susan Hinman
Director Wayne Osborne
Director Larry Dick
Linda Ackerman, MWDOC MET Director
Andrew Hamilton, Mesa Water
Bill Kahn, El Toro Water District
Dough Reinhart, Irvine Ranch Water District
Paul Weghorst, Irvine Ranch Water District

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

PUBLIC COMMENTS

No comments were received.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

No items were presented.

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

Mr. Hunter noted that supplemental information on item 5 (GASB45 Valuation, Actuarial Report) had been distributed.

PROPOSED BOARD CONSENT CALENDAR ITEMS

TREASURER'S REPORT

a. Revenue/Cash Receipt Report – September 2016
b. Disbursement Approval Report for the month of October 2016
c. Disbursement Ratification Report for the month of September 2016
d. GM Approved Disbursement Report for the month of September 2016
e. Water Use Efficiency Projects Cash Flow – September 30, 2016
f. Consolidated Summary of Cash and Investment – August 2016
g. OPEB Trust Fund monthly statement

Following review of the Treasurer's Report and upon MOTION by Director Finnegan, seconded by Director Barbre, and carried (3-0), the Committee recommended the Treasurer's Report for approval at the October 19, 2016 Board meeting. Directors Barbre, Osborne and Finnegan all voted in favor.

Discussion was held pertaining to the Orange County Investment Pool and LAIF and what happens if the market yield turns drastically and how the District is positioned with respect to interest earnings. Mrs. Chumpitazi indicated that she would research and report findings.

Director Dick inquired who is representing the District from Dave Aleshire's office with Mr. Hunter reporting that services are still being performed by Christine Carson. Mr. Dick requested an update on what services they are providing and also requested a flowchart of legal activities and their current status.

Director Thomas inquired whether there are enough funds in the election account to cover the upcoming election with Mr. Hunter responding yes, funds are available.

FINANCIAL REPORT

a. Combined Financial Statements And Budget Comparative For The Period Ending August 31, 2016

Upon MOTION by Director Barbre, seconded by Director Finnegan, and carried (3-0), the Committee recommended the Financial Reports for approval at the October 19, 2016 Board meeting. Directors Barbre, Thomas and Finnegan all voted in favor.

ACTION ITEMS

RECORDS MANAGEMENT POLICIES

Mrs. Harris noted that staff continues to work on improving the District's current records management practices and procedures. The Trustworthy Electronic Records Mail (e-mail policy and revisions to the Administrative Code have been presented for consideration as presented in the staff report.

Discussion was held on how the Director's email is currently being memorialized with Mrs. Harris noting that email pertaining to official District business should be sent to the Records Coordinator. Staff will continue to work with the consultant to verify the appropriate procedure and notify the Directors of proper protocol.

Director Barbre requested that the records retention schedule, new policies and procedures, as well as the Personnel Manual be electronically hyper-linked to the District's Administrative code on the District's website.

Upon MOTION by Director Finnegan, seconded by Director Thomas, and carried (3-0), the Committee recommended approval of the revised records retention schedule at the October 19, 2016 Board meeting. Directors Barbre, Thomas and Finnegan all voted in favor.

HEALTH SAVINGS ACCOUNT ELECTIONS FOR 2017

Upon MOTION by Director Barbre, seconded by Director Thomas, and carried (3-0), the Committee recommended approval of the 2016 Conflict of Interest Code at the October 19, 2016 Board meeting. Directors Barbre, Thomas and Finnegan all voted in favor.

DISCUSSION ITEMS

OTHER POST EMPLOYEE BENEFITS (OPEB) ACTUARIAL AS OF JULY 1, 2016

Mr. Hunter reported that the District is currently funded between 85%-89% and recommended that additional funds not be deposited into the trust account as they can only be used for OPEB liabilities.

The Committee recommended that this item be returned in July 2017 for funding status review at that time and expressed satisfaction with the current funding level, noting that many other public agencies within the state are funded at significantly lower levels. No additional funding will be deposited at this time, pending the next actuarial review in July 2017, as well as consideration of a press release.

It was noted that the District's currently funding level with CalPERS is in the mid 80% range for funding as well.

INFORMATION ITEMS

HEALTH BENEFIT RATES FOR 2017

The staff report was received and filed without discussion.

DEPARTMENT ACTIVITIES REPORTS

a. Administration
b. Finance and Information Technology

Discussion was held on the recruitment activities for the Director of Public Affair, noting that approximately 35 applicants have been received and are being reviewed. Phone interviews will be scheduled in early November.

The Committee held considerable discussion on the critical functions of the individual selected for this position, noting the importance on educating the public on the California Water Fix, Bay Delta concerns, the drought and desalination. It was noted that MWDOC has not taken an official position on the CA Water Fix at this time, noting the complexities and cost of the issue, nor has Metropolitan Water District or most other water agencies throughout the state.

Mr. Hunter will inquire of legal counsel whether it is legal to take a position on the CA Water Fix and this item will be agendized for future discussion at a Public Affairs & Legislation Committee meeting.

MONTHLY WATER USAGE DATA, TIER 2 PROJECTION, AND WATER SUPPLY INFO.

The informational reports were received and filed.

OTHER ITEMS

REVIEW ISSUES REGARDING DISTRICT ORGANIZATION, PERSONNEL MATTER, 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 9:35 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
September 19, 2016 - 8:30 a.m. to 9:50 a.m.

MWDOC Conference Room 101

Committee:
Director Brett Barbre
Director Susan Hinman
Director Sat Tamaribuchi

Staff:
Karl Seckel, Heather Baez, Laura Loewen, Jonathan Volzke, Pat Meszaros, Tiffany Baca, Harvey De La Torre

Also Present:
Larry Dick, MWDOC Director
Jeff Thomas, MWDOC Director
Joan Finnegan, MWDOC Director
Wayne Osborne, MWDOC Director
Linda Ackerman, MWDOC MET Director
Larry McKenney, MWDOC MET Director
Dick Ackerman, Ackerman Consulting
John Lewis, Lewis Consulting
Steve Lamar, Irvine Ranch Water District
Paul Weghorst, Irvine Ranch Water District
Jim Leach, Santa Margarita W.D.
Lori Kiesser, OC Dept. of Ed.
Tony Solorzano, Discovery Cube
Stacy Taylor, Mesa Water District
Christine Compton, IRWD
Tim Jemal, Jemal Public Affairs

Chair Tamaribuchi 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.

DISCUSSION ITEMS

LEGISLATIVE ACTIVITIES

a. Federal Legislative Report (Barker)

Director Barbre reported that anything prior to the 2007 WRDA authorization (those projects that never got into play) were de-authorized or discontinued based on the 2016 WRDA.

b. State Legislative Report (BBK)

Mr. Syrus Devers (via phone) reported that his State report is short because there's very little happening. This week, ongoing hearings on the California WaterFix continue and they are now discussing a change in the point of diversion. Director Tamaribuchi asked if there is a schedule of hearings to which Mr. Devers responded that the Part I phase will go on for another month and he will provide a schedule of the process. Director Barbre requested a summary of the SWRCB Executive Order B-37-16 Mr. Devers referred to and he indicated he will provide that as well. Mr. Seckel stated that the State Board seems positioned to do what they want to do despite the input and comments they're getting. Mr. Devers responded that on the Emergency regulations they did take input—the water communities did get some changes in direction. Further, Mr. Devers stated that Emergency Regulations almost certainly will go into 2017 and regarding the current regulations, remember it's a rushed process to get to a proposal in January, not a finished project, so there is still time to push for changes. Director Tamaribuchi noted that their report in January will likely identify legislative components to cover the implementation of new regulations.

c. County Legislative Report (Lewis)

Mr. Lewis discussed the presidential polls because of the potential impact on local races as well and the victory margin will impact races in Orange County. There's been a bit of a shift and Mr. Trump has been hurt by the revelation of the tapes. Mr. Lewis suggested that if you're really curious about how the presidential race is coming along, check on realclearpolitics.com and look at the trends in the LA Times poll not the actual numbers. The polls are updated every day.

Mr. Lewis reported that he's been working with Mr. Seckel and Ms. Baez to schedule meetings with all the Supervisors to discuss the flood control assessment. Director Tamaribuchi, Mr. Hunter and he had an excellent meeting with Supervisor Michelle Steel where they brought up the flood control issue. Director Tamaribuchi stated that Supervisor Steel was not aware at all of the flood control issue so it was good that they could enlighten her.

d. Legal and Regulatory Report (Ackerman)

Mr. Dick Ackerman reported that since farmers in the San Joaquin valley have been cut off or severely reduced in their federal and state water allocations, they are trying to solve their own problems. These farmers drilled over 2,500 wells last year which is the highest number on record. Mr. Ackerman also reported that Nestle won its legal battle and can continue to operate.

e. MWDOC Legislative Matrix

f. Metropolitan Legislative Matrix

The reports were received and filed.

MWDOC'S POLICY PRINCIPLES

Ms. Baez recounted that every year we update policy principles, adding anything key moving forward, or deleting as need be. Under WUE on p. 37, item no. 7, which requires individual or sub-metering to be built in new construction of multiple-unit residential buildings passed this year under SB 7 so it's been deleted. The policy principles will be brought back next month for action. Ms. Baez reported further that we will also present these to our member agencies at the next MWDOC Managers' meeting. Directors Tamaribuchi and Hinman would like to see any comments from our managers prior to taking action.

ACTION ITEMS

DISCUSSION REGARDING ADOPTING AN OPPOSE POSITION ON PROPOSITIONS, INCLUDING PROP 53

Upon MOTION by Director Barbre, seconded by Director Hinman, and carried (3-0), the Committee recommended taking an oppose position on Proposition 53 at the October 19, 2016 Board meeting. Directors Hinman, Tamaribuchi and Barbre all voted in favor.

DISCUSSION REGARDING ADOPTING SUPPORT POSITION ON THE CALIFORNIA WATERFIX

Director Tamaribuchi initiated the discussion by stating that it would be helpful for us to outline why we really support the California WaterFix. He stated further that we must fine-tune our rationale for supporting it and then, that we do a press release to let the Orange County community know why we all should support it. Director Barbre agreed with Director Tamaribuchi that we need to have a very legally sound, logical "why" and further, the Orange County Reliability Study showed that it's critical for southern CA and one of the top reasons we need to support the California WaterFix. He stated further that too many agencies are looking at their own service areas instead of the entire MET service area and even further, the entire State. Director Dick stated that he supports Directors Tamaribuchi and Barbre but that we should coordinate with MET.

Director Hinman shared an event that she, Mr. Hunter and Mr. Seckel participated in on Saturday, The American Association of University Women of San Juan Capistrano and San Clemente's Luncheon meeting where about 40 guests heard about water. Mr. Hunter gave an overview of the California Water Fix and Mr. Seckel presented the Orange County Reliability Study. Director Hinman stated that she got really positive feedback and emails back Saturday night and Sunday. Many of the attendees were not aware of the California WaterFix or the Orange County Reliability Study so informing the public is so important. When Director Hinman showed in her presentation that South County is 95% dependent on imported water, many in the audience were unaware, and for this reason, it's critical that we inform the public through HOAs, Rotary, Lions, etc.

Director McKenney agreed that we need to have the educational push right now and that MET should advocate for the project even though there are still unknowns. MET should be strong and

supportive of the project firstly. Director McKenney stated that we should be thinking ahead to Spring and MET's cost allocation discussion on the project.

Director Tamaribuchi agrees there are things that could happen down the road but if this project doesn't move forward, ultimately, there'll be no water from the Delta in future. He suggested that we defer this item to next month to give staff the opportunity to put together our best ideas as to why this project should be supported. Director Tamaribuchi reiterated that it's very important that we support moving ahead with the project and that people need to understand that putting in the tunnels is an environmental improvement—that it's better to take water from the Sacramento rather than the South Delta and why.

Director Barbre stated that the most important thing to push here and at MET is that the reason MET was formed was to bring supplemental water into the service area. And that the message we're crafting be aimed at not only our agencies and our constituents but to MET and the State as well. Director Hinman stated that the economy is directly affected by this and she would like staff to put together a public relations piece with general information and a plan on how we'll reach out to the public. Director Thomas has also been out talking with folks and stated that it is most important just to take a position of yes or no for now and that we have a deadline here—we have only 2 years to get this accomplished. Director Dick stated we should wait to support the project when we know what the project is. Director Barbre suggested that we get the 3 Cities involved as well as that block of votes at MET is so important.

Mr. Seckel closed by stating that staff will bring this back in November.

INFORMATION ITEMS

SCHOOL PROGRAM PARTICIPATION REPORT

Director Hinman stated that she's hopeful staff will be aggressive and make contacts since we have only 7 High Schools confirmed. An issue was raised by Director Barbre about some of the schools being middle schools; staff indicated that the reach out to schools is at the direction of the member agencies since this is a Choice Program. The question of private schools was raised and discussed; staff indicated they would research the number of students in private schools at the middle and high school level for a follow up discussion, but again reiterated that the program is a Choice program. Ms. Lori Kiesser indicated that OCDE had several programs in alternative education schools and she indicated that it's a great way to showcase what at risk students can do. Director Tamaribuchi asked for follow-up at a subsequent meeting and stated that he thinks our school program is one of the more productive things we can do as these kids will be voting soon.

UPDATE ON POTENTIAL SAN JUAN CAPISTRANO UILITIES CONSOLIDATION

UPDATE ON WATER POLICY DINNER

PUBLIC AFFAIRS ACTIVITIES REPORT

The reports were received and filed.

OTHER ITEMS

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

No items were presented.

ADJOURNMENT

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

MINUTES OF THE MEETING OF THE
BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
jointly with the
EXECUTIVE COMMITTEE
October 20, 2016, 8:30 a.m. to 9:55 a.m.
Conference Room 102

Committee:
Director Osborne, President
Director Barbre, Vice President
Director Dick

Staff:
R. Hunter, M. Goldsby

Also Present:
Director Tamaribuchi
Director Hinman
Director Thomas
Director Finnegan

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

PUBLIC PARTICIPATION

No public comments were received.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

No comments were received.

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 November Committee meetings.

EXECUTIVE COMMITTEE PROPOSALS FOR FUTURE AGENDAS

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

a. MWDOC/OCWD Joint Planning Committee

The Committee discussed the potential new MET treated fixed water fee item, and recommended it be removed from the agenda, as there is no information to report.

b. Workshop Board Meeting

Committee discussed SMWD Director Chuck Gibson's request to have Tim Quinn (ACWA) present information on the Governor's Executive Order and determined that an ACWA

Region 10 event may be a better avenue for this presentation. Committee suggested staff offer this option, as well as hosting the event.

c. Planning & Operations Committee Meeting

No new items were added to the agenda.

d. Administration & Finance Committee

Committee discussed the OC Water Magazine item (a Choice program), and asked staff to research whether the cities of Anaheim, Santa Ana, or Fullerton chose to participate and report to the A&F Committee. It was also recommended that the staff report include information on who determines the content of the magazine.

e. Public Affairs & Legislation Committee

The Committee discussed the Water Policy dinner and suggested Mr. Mark Cowan be invited to speak, and in his absence, Dr. Sunding should be invited.

f. Executive Committee

No new items were added to the agenda.

DISCUSSION REGARDING UPCOMING ACTIVITIES OF SIGNIFICANCE

It was noted that the Elected Officials Forum would be held on Thursday, January 5, 2017 at 6:00 pm. Director Tamaribuchi asked that the invitation list be expanded to include representatives from OCBC, the BIA, and others.

The Committee asked that staff research other (less expensive) venue options for the next closed session meeting on the General Manager's performance evaluation. Although the Committee chose January 21st as the date to hold this meeting, subsequent to the Executive Committee meeting, the date was changed to January 28th.

MEMBER AGENCY RELATIONS

Committee discussed the coordination efforts and working relationship between MWDOC staff and OCWD staff and the Committee recommended President Osborne submit a letter to OCWD President Green on various efforts that need attention.

Committee also discussed the staff process for preparing resolutions/plaques/proclamations for outgoing member agency directors and it was determined that such ceremonial resolutions would be prepared at the discretion of each Director.

GENERAL MANAGER'S REPORTS

No new information was presented.

REVIEW AND DISCUSS DISTRICT AND BOARD ACTIVITIES

No new information was presented.

ADJOURNMENT

There being no further business to be brought before the Committee, the meeting adjourned at 9:55 a.m.

MEETING REPORT
JOINT PLANNING COMMITTEE WITH BOARD OF DIRECTORS
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY and
ORANGE COUNTY WATER DISTRICT
October 26, 2016 - 8:30 a.m. – 9:46 a.m.
MWDOC Conference Room 101

MWDOC DIRECTORS
Brett R. Barbre
Larry Dick
Joan C. Finnegan
Susan Hinman
Wayne Osborne
Jeffery M. Thomas
Satoru Tamaribuchi (absent)

OCWD DIRECTORS
Shawn Dewane
Phil Anthony (absent)
Roger Yoh (absent)
Dina Nguyen
Denis Bilodeau
Roman Reyna (absent)
Jan Flory (absent)
Jordan Brandman (absent)
Steve Sheldon
Cathy Green

MWDOC STAFF
Rob Hunter
Karl Seckel
Maribeth Goldsby
Harvey De La Torre
Kevin Hostert
Melissa Baum-Haley
Jonathan Volzke
Charles Busslinger
Andrew Kanzler

OCWD STAFF
Mike Markus
John Kennedy
Adam Hutchinson

ALSO PRESENT

Peer Swan	Irvine Ranch Water District
Steve LaMar	Irvine Ranch Water District
Paul Cook	Irvine Ranch Water District
Paul Weghorst	Irvine Ranch Water District
Don Froelich	Moulton Niguel Water District
Chuck Gibson	Santa Margarita Water District
Scott Maloni	Poseidon Resources
Kelly Rowe	
John Earl	
Debbie Cook	
Clem Dominguez	

MWDOC President Osborne chaired the meeting.

PUBLIC COMMENTS

Mr. John Earl commented that there was no packet information posted on the Districts' websites, and that only the agendas were posted; he suggested the presentation materials be posted prior to the meeting. He also suggested the meetings be live streamed to allow the public better access to the meetings.

President Osborne advised that this meeting was informational only, no action to be taken, and it was a coordination meeting between the two agencies.

MWD WATER SUPPLY UPDATE

MWDOC Water Resources Analyst Kevin Hostert presented the Orange County Drought Performance and Water Supply Report, which included updates on conservation efforts (cumulative savings for the County are 21.6%), local weather conditions, precipitation for the year (and comparisons to prior years), historical local precipitation, regional supply conditions (snowpack, accumulated precipitation, reservoir storage), and the Table "A" allocations (currently set at 60%).

The Boards received and filed the report as presented.

SOUTH ORANGE COUNTY EMERGENCY SERVICES AGREEMENT

Assistant General Manager, Karl Seckel, provided background information on the historic event in 2006 when the Emergency Services Agreement was executed, noting that it expires in 2030, that the conveyance facility was completed in 2009 and has been used approximately 5 times, and that it provides up to 50 cfs of emergency groundwater to be exchanged with imported water (not to exceed 30 days in duration per emergency). He advised that the OC Water Reliability Study identified emergency needs for south Orange County beyond 2030, that IRWD is currently evaluating their system capability to extend the agreement beyond 2030, and that other options may be possible.

Discussion ensued regarding OCWD's Act (it does not allow an exportation of local native water from the basin) and because this is considered an exchange of water, OCWD's legal counsel determined (in 2006) that the agreement is consistent with the Act. Discussion also ensued regarding IRWD's system capability evaluation, with Mr. Seckel advising that an updated report will be given in January once the evaluation is complete.

Mr. Seckel also provided an overview of how the Agreement has been used (normally during planned shut-downs), as well as other options for transporting the water (e.g., East Orange County Feeder No. 2).

The Committee received and filed the report.

OCWD PLANNED PURCHASES OF MET UNTREATED FULL SERVICE WATER

OCWD Executive Director of Engineering and Water Resources John Kennedy provided an overview of the basin, noting that OCWD is currently taking 130 cfs of MET untreated full

service water (through the end of November) at which time they will stop purchases to allow the system to capture storm water. He advised that OCWD will study the potential of issuing commercial paper to purchase more water later in the year.

Discussion was held regarding "in-lieu" deliveries, the price of imported water purchases (less expensive than desalinated water), and other proposals.

The Committee received and filed the report.

POSEIDON RESOURCES

a. Project Update
b. Survey Results (Justin Wallin from Probolsky Research)

Mr. Kennedy reported that OCWD is evaluating the best option for distributing the proposed desalinated water from the Poseidon Project, noting that OCWD would take most of the water and inject it into the basin. He advised that they are evaluating where the injection wells would be, as well as the EIR, noting that the OCWD approved a contract with a consultant to help with the EIR, and that it is anticipated the EIR will be released by the end of November.

Mr. Scott Maloni (Poseidon) then provided an overview of the permitting process to date, noting that this process should be complete by the end of 2017.

Mr. Justin Wallin (Probolsky Research) then provided an overview of survey completed by Probolsky Research with respect to the Huntington Beach Ocean Desalination Project. Several questions were raised regarding the validity of the questions outlined in the survey, including whether willingness to pay was correctly clarified, and whether the survey questions were obsolete.

The Committee received and filed the report.

GWRS FINAL EXPANSION – OCWD BOARD SEPTEMBER 21, 2016 ACTION

OCWD General Manager Mike Markus reported that the OCWD Board approved the CEQA documentation for the final expansion of the GWRS Project. He also provided an overview, including the estimated cost of $250 million for the expansion and $350 million total including the costs of getting the water in to the basin. He reviewed the next steps which include revising the operating agreement with OCSD and he anticipates that the final expansion will be complete in 2022.

The Committee received and filed the report.

CAMPUS SECURITY UPGRADES

President Osborne noted that the two agencies each adopted Resolutions committing to a positive, productive, working relationship. As a result he expressed some concern that MWDOC wasn't notified earlier about potential campus security upgrades.

Mr. Markus advised that the security upgrades were at the request of OCSD, and would include security patrolling at night, raising the height of the wall around the GWRS facility, and hiring a guard for the guard shack. He advised that no decision on cost-sharing with MWDOC had been made but that more information would be available at the next meeting. Mr. Hunter concurred, noting that MWDOC's cost-sharing would be limited to building a fence around the entire facility (currently the campus is a "walk-on" facility after hours).

IRWD Director Swan suggested the guard shack may create a traffic issue on Ward Street.

NEXT COMMITTEE MEETING

President Osborne advised that the next meeting would be held on January 25, 2017, but that the Executive Committees from both agencies agreed the meeting should be held every other month instead of quarterly beginning at that time.

OTHER

No information was presented.

Municipal Water District of Orange County
REVENUE / CASH RECEIPT REPORT
October 2016

WATER REVENUES

Date	From	Description	Amount
10/03/16	City of La Palma	August 2016 Water deliveries	99,070.73
10/04/16	City of San Juan Capistrano	August 2016 Water deliveries	619,000.75
10/06/16	City of La Habra	August 2016 Water deliveries	13,655.27
10/07/16	City of Huntington Beach	August 2016 Water deliveries	1,099,371.91
10/07/16	City of San Clemente	August 2016 Water deliveries	769,673.56
10/07/16	City of Garden Grove	August 2016 Water deliveries	1,080,056.39
10/11/16	City of Seal Beach	August 2016 Water deliveries	269,049.74
10/11/16	South Coast Water District	August 2016 Water deliveries	524,076.03
10/11/16	El Toro Water District	August 2016 Water deliveries	737,793.18
10/11/16	City of Buena Park	August 2016 Water deliveries	466,053.03
10/12/16	Laguna Beach County Water District	August 2016 Water deliveries	361,470.38
10/12/16	City of Westminster	August 2016 Water deliveries	369,264.02
10/13/16	East Orange County Water District	August 2016 Water deliveries	313,125.77
10/13/16	City of Orange	August 2016 Water deliveries	616,857.51
10/15/16	Santa Margarita Water District	August 2016 Water deliveries	2,751,053.32
10/15/16	Orange County Water District	August 2016 Water deliveries	3,530,325.83
10/15/16	City of Newport Beach	August 2016 Water deliveries	143,128.22
10/15/16	Irvine Ranch Water District	August 2016 Water deliveries	855,283.17
10/15/16	Santiago Aqueduct Commission	August 2016 Water deliveries	423,640.80
10/15/16	Moulton Niguel Water District	August 2016 Water deliveries	2,526,338.65
10/15/16	Yorba Linda Water District	August 2016 Water deliveries	659,611.92
10/15/16	Golden State Water Company	August 2016 Water deliveries	485,202.90
10/27/16	City of Fountain Valley	September 2016 Water deliveries	11,404.26
10/27/16	City of Garden Grove	September 2016 Water deliveries	752,985.41
10/27/16	Serrano Water District	September 2016 Water deliveries	82,907.00
10/28/16	Trabuco Canyon Water District	September 2016 Water deliveries	13,929.69
10/28/16	City of San Clemente	September 2016 Water deliveries	690,985.33
10/28/16	City of Brea	September 2016 Water deliveries	206,673.75
10/31/16	City of La Habra	September 2016 Water deliveries	7,899.61
10/31/16	City of San Juan Capistrano	September 2016 Water deliveries	686,140.87
10/31/16	City of Seal Beach	September 2016 Water deliveries	259,886.20
		TOTAL REVENUES	**$ 21,425,915.20**

Municipal Water District of Orange County
REVENUE / CASH RECEIPT REPORT
October 2016

MISCELLANEOUS REVENUES

Date	From	Description	Amount
10/04/16	Darcy Burke	October 2016 COBRA Health insurance	1,293.82
10/27/16	Stan Sprague	October 2016 Retiree Health insurance	211.14
10/06/16	Laura Loewen	Movie tickets	17.00
10/19/16	Kathryn Davanaugh	Movie tickets	17.00
10/20/16	Melissa Baum-Haley	Movie tickets	34.00
10/27/16	2 Checks	Movie tickets	170.00
10/15/16	Irvine Ranch Water District	ISDOC Registration deposited in error	37.00
10/31/16	Metropolitan Water District	Reimbursement for inspection trip meals	250.00
10/20/16	Metropolitan Water District	Oct 2015-Mar 2016 FAFP Slant Wells	24,748.36
10/11/16	Charlie Burk	Turf Removal refund	884.00
10/21/16	2 Checks	August 2016 Smartimer rebate program	327.95
10/31/16	Santa Margarita Water District	August 2016 Smartimer rebate program	1,717.96
10/11/16	El Toro Water District	August 2016 Turf Removal rebate program	2,552.00
10/17/16	City of San Juan Capistrano	August 2016 Turf Removal rebate program	402.70
10/21/16	City of Buena Park	August 2016 Turf Removal rebate program	222.00
10/27/16	City of Garden Grove	August 2016 Turf Removal rebate program	666.00
10/27/16	Irvine Ranch Water District	August 2016 Turf Removal rebate program	51,099.34
10/28/16	Laguna Beach County Water District	August 2016 Turf Removal rebate program	396.00
10/19/16	City of Orange	August 2016 Smartimer and Turf Removal rebate program	291.00
10/17/16	Moulton Niguel Water District	August 2016 Smartimer and Turf Removal rebate program	84,426.49
10/04/16	Irvine Ranch Water District	July 2016 So Cal Watersmart Commercial rebate program	212,190.00
10/03/16	Golden State Water Company	July 2016 So Cal Watersmart Residential rebate program	50.00
10/19/16	Santa Margarita Water District	July 2016 So Cal Watersmart Residential rebate program	4,535.00
10/04/16	Irvine Ranch Water District	Jul-Aug 2016 So Cal Watersmart Residential rebate program	46,201.00
10/11/16	Moulton Niguel Water District	Jul-Aug 2016 So Cal Watersmart Residential rebate program	17,600.00
10/15/16	Trabuco Canyon Water District	August 2016 So Cal Watersmart Residential rebate program	100.00
10/19/16	Santa Margarita Water District	August 2016 So Cal Watersmart Residential rebate program	1,810.00
10/31/16	Bureau of Reclamation	Oct 2015-Sep 2016 CA Friendly Technical Design Assistance	907.94
10/31/16	Bureau of Reclamation	Apr-Sep 2016 Comprehensive Landscape WUE program	28,103.89
10/31/16	Bureau of Reclamation	Apr-Sep 2016 Spray to Drip Conversion Pilot Project	7,736.53
10/11/16	County of Orange	Oct 2013-Dec 2014 South OC Water Smart Landscape	25,297.04
10/11/16	South Coast Water District	FY 16-17 Choice Programs Billing Invoice	30,848.84
10/12/16	City of Westminster	FY 16-17 Choice Programs Billing Invoice	19,431.91
10/15/16	El Toro Water District	FY 16-17 Choice Programs Billing Invoice	51,975.80
10/15/16	Trabuco Canyon Water District	FY 16-17 Choice Programs Billing Invoice	9,073.46
10/17/16	East Orange County Water District	FY 16-17 Choice Programs Billing Invoice	11,715.14
10/17/16	Golden State Water Company	FY 16-17 Choice Programs Billing Invoice	57,929.50
10/19/16	Santa Margarita Water District	FY 16-17 Choice Programs Billing Invoice	110,787.39
10/19/16	Serrano Water District	FY 16-17 Choice Programs Billing Invoice	9,255.93
10/21/16	City of Brea	FY 16-17 Choice Programs Billing Invoice	24,860.70
10/21/16	City of Orange	FY 16-17 Choice Programs Billing Invoice	36,446.02
10/24/16	City of Santa Ana	FY 16-17 Choice Programs Billing Invoice	5,204.85
10/27/16	City of Garden Grove	FY 16-17 Choice Programs Billing Invoice	38,408.37
10/28/16	City of Huntington Beach	FY 16-17 Choice Programs Billing Invoice	64,145.66
10/28/16	City of La Habra	FY 16-17 Choice Programs Billing Invoice	13,141.47
10/28/16	Yorba Linda Water District	FY 16-17 Choice Programs Billing Invoice	28,999.25
		TOTAL MISCELLANEOUS REVENUES	**$ 1,026,519.45**
		TOTAL REVENUES	**$ 22,452,434.65**

Robert J. Hunter, General Manager

Hilary Chumpitazi, Treasurer

Municipal Water District of Orange County
Disbursement Approval Report
For the month of November 2016

Invoice#	Vendor / Description	Amount to Pay
Core Expenditures:		
	Richard Ackerman	
1120	October 2016 Consulting for legal & regulatory matters	1,375.00
	*** Total ***	1,375.00
	ACWA	
919-2017	2017 Annual membership renewal	17,484.00
	*** Total ***	17,484.00
	ALTA FoodCraft	
516101007	10/10/16 Coffee & tea supplies	296.73
	*** Total ***	296.73
	American Water Works Assoc.	
7001251786	2017 Annual membership renewal	1,589.00
	*** Total ***	1,589.00
	Association of Metropolitan Water Agencies	
2017MEMBERSHIP	2017 Annual membership renewal	17,645.00
	*** Total ***	17,645.00
	Best Best and Krieger LLP	
55401-SEP16	September 2016 Legal services	14,033.19
781913	August 2016 State legislative advocacy services	8,613.77
	*** Total ***	22,646.96
	Bryton Printing Inc.	
13041	Bill inserts for 12 agencies to promote Water Use Efficiency programs	1,831.25
	*** Total ***	1,831.25
	CDW Government	
FQT4869	2 Hard drives for Storage Area Network device	1,668.64
	*** Total ***	1,668.64
	Hunter T. Cook	
AUG-OCT2016	August-October 2016 Coastal retiree health insurance	1,505.52
	*** Total ***	1,505.52
	Dissinger Associates	
AP-MWD09/30/16	September 2016 Pension plan distribution processing fee	50.00
	*** Total ***	50.00
	Eagle Communications	
715580	Re-locate WEROC radios during office refurbishment	395.93
	*** Total ***	395.93

Municipal Water District of Orange County
Disbursement Approval Report
For the month of November 2016

Invoice#	Vendor / Description	Amount to Pay
	ECS Imaging, Inc.	
11803	Laserfiche Avante software upgrade and training for records management	7,610.00
	*** Total ***	7,610.00
	Floor Technology Group	
13572	Carpet installation for offices 105 & 107	2,589.03
	*** Total ***	2,589.03
	Gladwell Governmental Services, Inc.	
3553	October 2016 Records management services	1,500.00
	*** Total ***	1,500.00
	GovConnection, Inc.	
54213471	Windows Server license upgrades for Backup and Abra servers	1,326.08
	*** Total ***	1,326.08
	Great Wolf Lodge	
110116	12/16/16 Groups & Meetings Holiday event registration for T. Baca, I. Flores, L. Loewen, B. Roberto and J. Volzke	275.00
	*** Total ***	275.00
	Immersiv Media, Inc.	
020(MWDOC2016)	October-December 2016 MWDOC website hosting & maintenance	525.00
	*** Total ***	525.00
	James C. Barker, P.C.	
105-1016	October 2016 Federal legislative advocacy services	8,000.00
	*** Total ***	8,000.00
	Karen's Detail Custom Frames	
2852	2 Custom framed resolutions	226.80
	*** Total ***	226.80
	Lewis Consulting Group, LLC	
2016-157	October 2016 Consulting services	3,875.00
	*** Total ***	3,875.00
	Edward G. Means III	
MWDOC-1042	October 2016 Support for MET issues & guidance to Engineering staff	1,261.88
	*** Total ***	1,261.88
	Mission RCD	
2107	September 2016 Turf Removal program surveys and audits	4,702.75
	*** Total ***	4,702.75

Municipal Water District of Orange County
Disbursement Approval Report
For the month of November 2016

Invoice#	*Vendor / Description*	*Amount to Pay*
	Norco Delivery Services	
706846	10/14/16 Delivery charges for Board packets	142.19
	*** Total ***	142.19
	Office Solutions	
I-01048852	10/24/16 Office supplies	287.66
I-01049395	10/25/16 Office supplies	28.34
I-01052402	1 Double lateral file with 4 drawers for H. De La Torre's office	1,002.78
I-01052476	10/31/16 Office supplies	98.56
I-01053751	11/2/16 Office supplies	155.26
	*** Total ***	1,572.60
	Orange County Business Council	
0008181-IN	2016 Annual membership renewal	5,000.00
	*** Total ***	5,000.00
	Orange County Fast Print, Inc.	
53657	Business cards for I. Flores	59.00
	*** Total ***	59.00
	Orange County Water District	
16769	September 2016 Postage, shared office & maintenance expense	8,251.06
16825	October 2016 50% share of WACO expense	226.72
	*** Total ***	8,477.78
	Patricia Kennedy Inc.	
21044	November 2016 Plant maintenance	214.00
	*** Total ***	214.00
	Prowest Building Services, Inc.	
16-247	Services to paint offices 105 & 107	5,435.00
	*** Total ***	5,435.00
	San Juan Basin Authority	
139835-6	April-October 2016 MET Foundational Actions Funding for Groundwater & Desal Optimization	59,045.34
	*** Total ***	59,045.34
	South Coast Water District	
139834-10	April-October 2016 MET Foundational Actions Funding for Slant Well Seawater Desal project	50,113.47
	*** Total ***	50,113.47

Municipal Water District of Orange County
Disbursement Approval Report
For the month of November 2016

Invoice#	*Vendor / Description*	*Amount to Pay*
	SPS Data Communications	
00101613	1 Additional data jack installed in new WEROC office	296.50
	*** Total ***	296.50
	Vavrinek, Trine, Day & Co., LLP	
0128389-IN	September 2016 Services for FY 15-16 audit	6,400.00
	*** Total ***	6,400.00
	White Nelson Diehl Evans LLC	
2016 TAX SEMINAR	2016 Government Tax seminar registration for H. Chumpitazi and Lina Gunawan	575.00
	*** Total ***	575.00
	Z Cater	
50089	11/2/16 Brunch for Director Hinman retirement event	785.74
	*** Total ***	785.74
	Total Core Expenditures	236,496.19

Choice Expenditures:

	Laguna Beach County Water District	
CRM15571	FY 16-17 Choice Programs refund	1,190.59
	*** Total ***	1,190.59
	Orange County Water District	
16769	September 2016 Postage for rebate programs	50.89
	*** Total ***	50.89
	Top Hat Productions	
92117	10/6/16 Lunch for Water Use Efficiency workgroup meeting	467.91
92151	10/18/16 Lunch for Water Loss Control workgroup meeting	338.85
92208	11/1/16 Lunch for Water Loss Control workgroup meeting	243.00
92224	11/3/16 Lunch for Water Use Efficiency workgroup meeting	403.38
	*** Total ***	1,453.14
	Total Choice Expenditures	2,694.62

Other Funds Expenditures:

	Best Best and Krieger LLP	
55401-SEP16	September 2016 AMP legal services	362.60
	*** Total ***	362.60

Municipal Water District of Orange County
Disbursement Approval Report
For the month of November 2016

Invoice#	*Vendor / Description*	*Amount to Pay*
	Bryton Printing Inc.	
13041	Bill inserts for 12 agencies to promote Water Use Efficiency programs - Grant reimbursable portion	2,500.00
	*** Total ***	2,500.00
	Claris Strategy Inc.	
10160100-02	WEROC EOC site facility assessment	7,365.36
	*** Total ***	7,365.36
	El Toro Water District	
PC-00576	Reimburse for 2 uncashed HET rebate checks	100.00
	*** Total ***	100.00
	Golden State Water Company	
PC-000577	Reimburse for 4 uncashed HET rebate checks	100.00
	*** Total ***	100.00
	Mission RCD	
2109	September 2016 Field verifications for rebate programs	7,568.90
2109A	September 2016 Services to perform Turf Removal inspections	1,201.88
	*** Total ***	8,770.78
	Widgix LLC (SurveyGizmo)	
708266	Annual subscription for SurveyGizmo online application and database tool	675.00
	*** Total ***	675.00
	Water Systems Optimization, Inc.	
1079	September 2016 Water Loss Control program	22,730.50
	*** Total ***	22,730.50
	Total Other Funds Expenditures	42,604.24
	Total Expenditures	281,795.05

Municipal Water District of Orange County
Disbursement Ratification Report
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
Core Disbursements:				
136083	10/6/16	TIMEWA	Time Warner Cable	
		5210-OCT16	October 2016 Telephone and internet expense	1,280.57
			***Total ***	1,280.57
136084	10/6/16	VERIZO	Verizon Wireless	
		9772549024	September 2016 4G Mobile broadband unlimited service	76.02
			***Total ***	76.02
136088	10/7/16	KANZLE	Andrew Kanzler	
		060216	April-June 2016 Business expense (re-issue)	170.47
			***Total ***	170.47
136095	10/14/16	DAVANK	Kathryn Davanaugh	
		100616	October 2016 Business expense	100.00
			***Total ***	100.00
136097	10/14/16	IRONMO	Iron Mountain	
		NBA9547	October 2016 Storage/retrieval of archived documents	460.68
			***Total ***	460.68
136098	10/14/16	FLORES	Ivan Flores	
		093016	September 2016 Business expense	46.44
			***Total ***	46.44
136104	10/14/16	TIMEWA	Time Warner Cable	
		3564-OCT16	October 2016 Telephone expense for 4 analog fax lines	143.32
			***Total ***	143.32
136107	10/14/16	VANDYK	Corinne Van Dyke	
		092416	September 2016 Business expense	163.84
			***Total ***	163.84
136108	10/14/16	VOLZKE	Jonathan Volzke	
		100316	September-October 2016 Business expense	120.96
			***Total ***	120.96
ACH002186	10/14/16	ACKEEX	Linda Ackerman	
		093016	September 2016 Business expense	60.48
			***Total ***	60.48
ACH002191	10/14/16	BARBRE	Brett Barbre	
		093016	September 2016 Business expense	191.16
			***Total ***	191.16

Municipal Water District of Orange County
Disbursement Ratification Report
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
ACH002192	10/14/16	BERGJO	Joseph Berg	
		093016	September 2016 Business expense	139.93
			***Total ***	139.93
ACH002197	10/14/16	CHUMPI	Hilary Chumpitazi	
		093016	September 2016 Business expense	15.12
			***Total ***	15.12
ACH002198	10/14/16	DELATO	Harvey De La Torre	
		091916	September 2016 Business expense	23.50
			***Total ***	23.50
ACH002199	10/14/16	DICKEX	Larry Dick	
		093016	September 2016 Business expense	160.92
			***Total ***	160.92
ACH002200	10/14/16	FINNEG	Joan Finnegan	
		093016	September 2016 Business expense	84.80
			***Total ***	84.80
ACH002205	10/14/16	HINMAN	Susan Hinman	
		093016	September 2016 Business expense	317.56
			***Total ***	317.56
ACH002208	10/14/16	LOEWEN	Laura Loewen	
		093016	September 2016 Business expense	194.24
			***Total ***	194.24
ACH002216	10/14/16	ROBERT	Bryce Roberto	
		093016	September 2016 Business expense	126.84
			***Total ***	126.84
ACH002217	10/14/16	THOMAS	Jeffery Thomas	
		093016	September 2016 Business expense	167.44
			***Total ***	167.44
136169	10/31/16	USBANK	U.S. Bank	
		4140/5443-SEP16	08/23/16-09/22/16 Cal Card charges	15,813.92
			***Total ***	15,813.92
			(See attached sheet for details)	
		BACATI	Tiffany Baca	
ACH002221	10/31/16	101316	October 2016 Business expense - Inspection trip meals reimbursed by MET	250.00
ACH002222	10/31/16	101516	September-October 2016 Business expense	361.08
			***Total ***	611.08

Municipal Water District of Orange County
Disbursement Ratification Report
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
ACH002223	10/31/16	BAUMHA	Melissa Baum-Haley	
		101516	August-October 2016 Business expense	326.78
			***Total ***	326.78
ACH002226	10/31/16	DOUGLA	Ryan Douglass	
		093016	September 2016 Business expense	18.36
			***Total ***	18.36
			Total Core Disbursements	20,814.43

Choice Disbursements:

136166	10/31/16	SDGE	San Diego Gas and Electric	
		7768-OCT16	9/19/16-10/19/16 Electric service for Doheny Ocean Desal project	165.06
			***Total ***	165.06
			Total Choice Disbursements	165.06

Other Funds Disbursements:

136084	10/6/16	VERIZO	Verizon Wireless	
		9772549024	September 2016 4G Mobile broadband unlimited service	38.01
			***Total ***	38.01
		TURFRP	Turf Removal Program	
136089	10/7/16	TR6-MNT-7500-26341	B. Bengali (re-issue)	2,723.00
136090	10/7/16	TR7-MNT-23514-1	Riviera at Bear Brand (Laguna Niguel) (re-issue)	5,500.00
			***Total ***	8,223.00
136093	10/14/16	ATTUVEOC	AT&T	
		8599-OCT16	October 2016 U-verse internet service for WEROC N. EOC	55.00
			***Total ***	55.00
		TURFRP	Turf Removal Program	
136106	10/14/16	TR7-SJC-11281-31742	J. Wede (re-issue)	1,400.00
136109	10/14/16	TR7-R-IRWD-4233-4157	T. DeStasio	1,648.33
136110	10/14/16	TR8-R-MNT-6297-6225	L. Gordon	4,364.50
136111	10/14/16	TR7-R-SOCO-4761-4680	D. Alderman	2,896.00
136112	10/14/16	TR7-R-WEST-4468-4391	H. Nguyen	1,994.00
136113	10/14/16	TR8-R-IRWD-6253-6182	E. Laugle	2,932.00
136114	10/14/16	TR8-R-IRWD-5196-5125	M. Pourkhaatoun	4,172.00

Municipal Water District of Orange County
Disbursement Ratification Report
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
136115	10/14/16	TR7-R-HB-3157-4325	C. Sitko-Bellile	3,531.09
136116	10/14/16	TR8-R-MNT-7321-7272	G. Macha	5,789.00
136117	10/14/16	TR9-R-MNT-7458-7418	S. Blume	2,100.00
136118	10/14/16	TR7-R-GG-4446-4368	S. Nguyen	5,994.00
136119	10/14/16	TR7-MNT-24937-24902	J. Bailey	3,208.00
136120	10/14/16	TR8-MNT-24960-26376	J. Van Wyk	3,074.50
136121	10/14/16	TR7-R-IRWD-4823-4742	L. Coleman	1,176.00
136122	10/14/16	TR7-R-MNT-4392-4314	S. Hopp	3,118.50
136123	10/14/16	TR7-R-FV-4431-4353	B. Ballou	836.00
136124	10/14/16	TR7-R-BREA-4541-4461	J. Mammen	3,000.00
136125	10/14/16	TR7-R-SM-4420-4338	N. Adly	1,876.00
136126	10/14/16	TR7-MNT-24909-14	C. Berlin	628.00
136127	10/14/16	TR7-R-IRWD-4198-4128	J. Silsby	1,310.00
136128	10/14/16	TR7-R-SM-4703-4619	I. Chavez	974.00
136129	10/14/16	TR7-R-MNT-4697-4613	Y. Lu	3,810.00
136130	10/14/16	TR8-R-MNT-4898-4822	S. Bortz	1,144.00
136131	10/14/16	TR7-R-IRWD-4726-4645	E. Javier	994.00
136132	10/14/16	TR7-R-WEST-4727-4646	Q. Nguyen	3,804.00
136133	10/14/16	TR7-C-ETWD-4589-4508	Grace Community Church (Lake Forest)	23,019.00
136134	10/14/16	TR7-R-SM-4786-4705	B. George	5,012.00
136135	10/14/16	TR7-R-BP-4747-4664	V. Chang	1,222.00
136136	10/14/16	TR8-R-MNT-7283-7211	A. Baniassad	11,870.50
136137	10/14/16	TR7-R-MNT-4796-4715	L. Anguiano	856.00
136138	10/14/16	TR8-R-MNT-4938-4864	R. Venanzi	4,095.00
136139	10/14/16	TR8-R-MNT-5165-5094	J. Mathews	2,901.42
136140	10/14/16	TR8-R-IRWD-4916-4839	Y. Yamasaki	5,370.00
136141	10/14/16	TR8-R-MNT-4982-4910	E. Johnson	1,011.00
136142	10/14/16	TR8-R-MNT-5041-4967	M. Velligan	6,563.00
136143	10/14/16	TR8-R-MNT-5255-5186	D. Ito	2,030.50
136144	10/14/16	TR8-R-MNT-6283-6208	C. La Chapelle	1,446.00
136145	10/14/16	TR8-R-IRWD-6290-6219	M. Craw	1,692.00
136146	10/14/16	TR7-MESA-10628-1107	T. Lamb	4,672.00
136147	10/14/16	TR8-R-MNT-5198-5127	A. Schuurs	1,200.00
136148	10/14/16	TR8-R-MNT-5191-5121	P. Del Pizzo	3,090.00
136149	10/14/16	TR8-R-MNT-6256-6185	D. Averyt	3,696.00
136150	10/14/16	TR8-R-IRWD-6286-6213	Y. Yamauchi	898.00
136151	10/14/16	TR8-R-MNT-6304-6230	S. Roberts	2,181.00
136152	10/14/16	TR9-R-MNT-7642-7604	J. Long	560.00
136153	10/14/16	TR8-R-MNT-4981-4909-ADJ	E. Besner	1,012.50
136154	10/14/16	TR5W-SC-6003A/B	J. Ray	4,246.00
			***Total ***	154,417.84
ACH002192	10/14/16	BERGJO	Joseph Berg	
		093016	September 2016 Business expense	4.50
			***Total ***	4.50

Municipal Water District of Orange County
Disbursement Ratification Report
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
ACH002209	***10/14/16***	***MESAWA***	***Mesa Water***	
		8973	August 2016 Credit for Local Resources program	82,896.57
			***Total ***	82,896.57
136157	***10/26/16***	***TURFRP***	***Turf Removal Program***	
		TR6-MNT-6157-29642	Foothill Townhomes Community Assoc. (Laguna Niguel) (re-issue)	102,596.50
			***Total ***	102,596.50
136160	***10/31/16***	***CATALI***	***Catalina Island Conservancy***	
		0013338	October 2016 WEROC radio repeater site lease	1,636.47
			***Total ***	1,636.47
136169	***10/31/16***	***USBANK***	***U.S. Bank***	
		4140-SEP16	8/23/16-9/22/16 Cal Card charges	700.20
			***Total ***	700.20
			(See attached sheet for details)	
		TURFRP	***Turf Removal Program***	
136170	***10/31/16***	TR9-R-MNT-7382-7338	J. Southworth	480.00
136171	***10/31/16***	TR7-R-MNT-4659-4576	K. Wolfson	1,876.00
136172	***10/31/16***	TR7-GG-24811-10181	D. Lastra	1,926.00
136173	***10/31/16***	TR7-R-WEST-4445-4367	M. Nguyen	3,106.00
136174	***10/31/16***	TR7-R-BREA-4338-4262	D. Banken	2,600.00
136175	***10/31/16***	TR7-MNT-24883-27681	D. Pagels	1,242.54
136176	***10/31/16***	TR7-R-GG-4794-4713	W. Tran	2,852.47
136177	***10/31/16***	TR7-R-O-4842-4763	C. Jackson	1,442.00
136178	***10/31/16***	TR8-R-MNT-4940-4866	X. Liu	2,714.00
136179	***10/31/16***	TR8-R-IRWD-6291-6220	W. Ignash	2,984.98
136180	***10/31/16***	TR8-R-IRWD-5131-5063	K. Kotnik	410.00
136181	***10/31/16***	TR9-R-MNT-7651-7612	A. Afshar	3,010.00
136182	***10/31/16***	TR8-R-MNT-7317-7257	K. Tanski	1,575.00
136183	***10/31/16***	TR9-R-MNT-7392-7347	W. James	618.00
			***Total ***	26,836.99
ACH002229	***10/31/16***	***HUBBAR***	***Kelly Hubbard***	
		093016	September 2016 Business expense	206.88
			***Total ***	206.88
ACH002236	***10/31/16***	***SANTAM***	***Santa Margarita Water District***	
		AUG2016	August 2016 SCP Operation Surcharge	33,255.15
			***Total ***	33,255.15

Municipal Water District of Orange County
Disbursement Ratification Report
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
WIRE-161031	***9/30/16***	***METWAT***	***Metropolitan Water District***	
		8792	August 2016 Water deliveries	18,646,791.52
			***Total ***	18,646,791.52
			Total Other Funds Disbursements	19,057,658.63
			Total Disbursements	19,078,638.12

Robert J. Hunter, General Manager

Hilary Chumpitazi, Treasurer

Cal Card Statement Detail
Statement Date: September 22, 2016
Payment Date: October 31, 2016

Date	Description	Amount
K. Seckel Card		
08/22/16	Lunch for MET Directors' meeting	195.96
08/23/16	UPS delivery charges for Board packets on Aug. 12, 2016	46.76
08/23/16	Computer supplies	208.50
08/23/16	2 Toner cartridges	177.02
08/24/16	4 Dell Inspiron touchscreen laptops (Costco refund for price reduction)	(432.00)
08/24/16	Upgrade Sage Human Resources software	2,430.00
08/25/16	Suspenders and cooling bandanas for Ricki Raindrop costume	29.29
08/27/16	Urban Water Institute conference in San Diego, CA from Aug. 24-26, 2016 - Accommodations for Director Osborne	565.62
08/29/16	1 Year renewal for Creative Cloud Team software for graphic design	2,999.40
08/31/16	Southern California Water Committee Annual meeting in Santa Ana, CA on Oct. 27, 2016 - Registration for H. Baez	200.00
08/31/16	Southern California Water Committee Annual meeting in Santa Ana, CA on Oct. 27, 2016 - Registration for Director Tamaribuchi	200.00
08/31/16	Legislative activities in Washington, DC from Nov. 16-18, 2016 - Airfare for H. Baez	1,089.95
09/01/16	Sympathy flowers	74.50
09/01/16	Association of Metropolitan Water Agencies Executive Management conference in Scottsdale, AZ from Oct. 16-18, 2016 - Registration for R. Hunter	795.00
09/01/16	Association of Metropolitan Water Agencies Executive Management conference in Scottsdale, AZ from Oct. 16-18, 2016 - Airfare for R. Hunter	323.96
09/07/16	Water Smart Innovations conference in Las Vegas, NV from Oct. 5-7, 2016 - Registration for J. Berg	395.00
09/07/16	American Water Works Association California-Nevada Section conference in San Diego, CA from Oct. 24-27, 2016 - Registration for J. Berg	495.00
09/07/16	Lunch for MET Directors' meeting	180.80
09/07/16	California Special Districts Association conference in San Diego, CA from Oct. 10-13, 2016 - Registration for H. Baez	580.00
09/07/16	ACWA Region 10 program in Vista, CA on Oct. 28, 2016 - Registration for H. Baez	50.00
09/07/16	Water Smart Innovations conference in Las Vegas, NV from Oct. 5-7, 2016 - Accommodations for J. Berg	268.80
09/09/16	2 Flash drives	20.50
09/08/16	Water Smart Innovations conference in Las Vegas, NV from Oct. 5-7, 2016 - Airfare for J. Berg	260.96
09/12/16	San Gabriel Valley Water Forum in Pomona, CA on Sep. 20, 2016 - Registration for J. Volzke, I. Flores & L. Loewen	225.00

Cal Card Statement Detail
Statement Date: September 22, 2016
Payment Date: October 31, 2016

Date	Description	Amount
09/12/16	UPS delivery charges for Board packets on Jul. 29, 2016	17.76
09/12/16	Brown and Caldwell employment ad for Director of Public Affairs position	200.00
09/13/16	YourMembership employment ad for Director of Public Affairs position	350.00
09/13/16	International Association of Emergency Managers Annual conference in Savannah, GA from Oct. 14-19, 2016 - Airfare for K. Hubbard	700.20
09/14/16	American Water Works Association employment ad for Director of Public Affairs position	249.00
09/14/16	ACWA Fall conference in Anaheim, CA from Nov. 29-Dec. 2, 2016 - Registration for H. Baez	695.00
09/15/16	2 Cisco telephones	453.90
09/16/16	9 Water conservation pledge signs for community events	194.40
09/16/16	Food for Staff development meeting	29.98
09/16/16	Facebook posts for Coastal Cleanup Day event	25.00
09/19/16	UPS delivery charges for Board packets on Sep. 9 & 14, 2016	101.34
09/19/16	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 14-16, 2016 - Registration and membership for H. De La Torre	505.00
09/19/16	Legislative activities in Washington, DC from Jan. 11-13, 2017 - Airfare change for Director Barbre	181.01 [1]
09/19/16	Colorado River Water Users Association Annual conference in Las Vegas, NV from Dec. 14-16, 2016 - Accommodations for H. De La Torre	405.44
09/20/16	6 Slimline power failure lites	50.40
09/21/16	Federal Express delivery charge to J. Byrne	16.43
09/21/16	Computer supplies	26.98
	Total	**15,581.86**

[1] Director Barbre to reimburse MWDOC for $181.01

Cal Card Statement Detail
Statement Date: September 22, 2016
Payment Date: October 31, 2016

Date	Description	Amount
R. Hunter Card		
07/22/16-08/22/16	Meals for R. Hunter's meetings	266.88
08/26/16	Urban Water Institute conference in San Diego, CA from Aug. 24-25, 2016 - Accommodations and meal for R. Hunter	258.46
09/12/16	Environmental Inspection trip in Sacramento, CA from Sep. 12-14, 2016 - Meals for guests	360.92
09/14/16	Environmental Inspection trip in Sacramento, CA from Sep. 12-14, 2016 - Parking for R. Hunter	46.00
	Total	**932.26**

Municipal Water District of Orange County
GM Approved Disbursement Report [1]
For the month of October 2016

Check #	Date	Vendor # Invoice/CM #	Name / Description	Net Amount
Core Disbursements:				
136082	10/6/16	DRAPER	Drapery Works	
		092916DEP	Deposit for new roller shades for refurbishment of offices 105 & 107	500.00
			***Total ***	500.00
ACH002230	10/31/16	ISDOC	Independent Special Dist of OC	
		092916-IRWD	Reimburse for IRWD check for ISDOC Lunch registration, check deposited by MWDOC	37.00
			***Total ***	37.00
			Total Core Disbursements	537.00
Choice Disbursements:				
ACH002225	10/31/16	DISCOV	Discovery Science Center	
		DSOC/IV/000416	FY 16-17 Retainer for School program	75,000.00
			***Total ***	75,000.00
			Total Choice Disbursements	75,000.00
Other Funds Disbursements:				
			Total Other Funds Disbursements	-
			Total Disbursements	75,537.00

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

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

Municipal Water District of Orange County
Consolidated Summary of Cash and Investment
September 30, 2016

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

Fund	Book Value	% of Portfolio
Designated Reserves		
General Operations	$2,494,603	15.19%
Grant & Project Cash Flow	1,480,000	9.01%
Election Expense	215,463	1.31%
Building Repair	500,407	3.05%
Total Designated Reserves	4,690,473	28.56%
General Fund	7,504,034	45.69%
Water Fund	4,157,973	25.32%
Conservation Fund	(388,614)	(2.37%)
Desalination Feasibility Study Fund	222,385	1.35%
WEROC Fund	230,082	1.40%
Trustee Activities	8,660	0.05%
Total	**$16,424,993**	**100.00%**

The funds are invested as follows:

Term of Investment	% of Portfolio	Book Value	Market Value
Cash	0.84%	$138,743	$138,743
Short-term investment			
• LAIF	0.96%	$157,777	$157,777
• OCIP	79.30%	13,025,554	13,025,554
Long-term investment			
• Corporate Bond	4.58%	752,919	761,475
• Certificates of Deposit	14.32%	2,350,000	2,383,122
Total	**100.00%**	**$16,424,993**	**$16,466,671**

The average number of days to maturity/call as of September 30, 2016 equaled 155 and the average yield to maturity is 0.965%. During the month, the District's average daily balance was $26,499,439.17. 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 September 2016.

The $41,678 difference between the book value and the market value on September 30, 2016 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

WATER: DO MORE WITH LESS

Portfolio Management - Portfolio Summary

September 30, 2016

9/30/2016	Par Value	Market Value	Book Value	% of Portfolio	Days to Mat/Call	YTM @ Cost
Negotiable Certificate Of Deposit	2,350,000.00	2,383,121.50	2,350,000.00	14.43	652	1.697
Corporate Bond	750,000.00	761,475.00	752,918.31	4.61	1,296	2.238
Local Agency Investment Funds	157,777.38	157,777.38	157,777.38	0.97	1	0.634
Orange County Investment Pool	13,025,553.80	13,025,553.80	13,025,553.80	79.99	1	0.763
Total Investments	**16,283,331.18**	**16,327,927.68**	**16,286,249.49**	**100.00**	**155**	**0.965**
Cash						
Cash	138,743.07	138,743.07	138,743.07		1	0.00
Total Cash and Investments	**16,422,074.25**	**16,466,670.75**	**16,424,992.56**		**155**	**0.965**

Total Earnings	Month Ending August	Fiscal Year to Date
Current Year	**18,806.97**	**51,381.23**
Average Daily Balance	**26,499,439.17**	
Effective Rate of Return	**0.965%**	

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.

Robert J. Hunter, General Manager — Date: 11-1-16

Hilary Chumpitazi, Treasurer — Date: 11/1/2016

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Portfolio Management
Long-Term Portfolio Details - Investments
September 30, 2016

Issuer	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
Negotiable Certificate Of Deposit									
Ally Bank	02006LFV0	7/23/2014	250,000.00	250,945.00	250,000.00	1.150	1.150	297	7/24/2017
American Express Bank	02587CEA4	7/29/2015	250,000.00	252,072.50	250,000.00	1.450	1.450	486	1/29/2018
Barclays Bank	06740KJP3	9/24/2015	250,000.00	256,790.00	250,000.00	1.900	1.900	1,088	9/23/2019
Capital One Bank	140420TY6	8/5/2015	250,000.00	253,045.00	250,000.00	1.700	1.700	675	8/6/2018
Capital One Natl Assn	14042E6C9	9/2/2015	250,000.00	257,062.50	250,000.00	1.950	1.950	1,068	9/3/2019
Discover Bank	2546712Y5	7/23/2014	250,000.00	252,885.00	250,000.00	1.600	1.600	661	7/23/2018
Goldman Sachs Bank	38143A4T9	1/23/2013	100,000.00	100,164.00	100,000.00	1.050	1.050	115	1/23/2017
Goldman Sachs Bank	36163FJC8	7/25/2014	250,000.00	250,945.00	250,000.00	1.200	1.200	298	7/25/2017
HSBC Bank	40434AK65	1/21/2016	250,000.00	252,537.50	250,000.00	1.550	2.534	478	1/21/2021
Synchrony Bank	87164XBY1	7/25/2014	250,000.00	256,675.00	250,000.00	2.050	2.050	1,033	7/30/2019
Sub Total			**2,350,000.00**	**2,383,121.50**	**2,350,000.00**	**1.593**	**1.697**	**652**	
Corporate Bond									
JP Morgan Chase	46625HKA7	11/2/2015	500,000.00	506,570.00	501,540.93	2.250	2.152	1,179	1/23/2020
Wells Fargo	94974BGR5	1/13/2016	250,000.00	254,905.00	251,377.38	2.550	2.409	1,529	12/7/2020
Sub Total			**750,000.00**	**761,475.00**	**752,918.31**	**2.350**	**2.238**	**1,296**	
Total Investments			**3,100,000.00**	**3,144,596.50**	**3,102,918.31**	**1.776**	**1.828**	**808**	

Total Earnings	Month Ending September	Fiscal Year To Date
Current Year	4,430.56	13,639.31

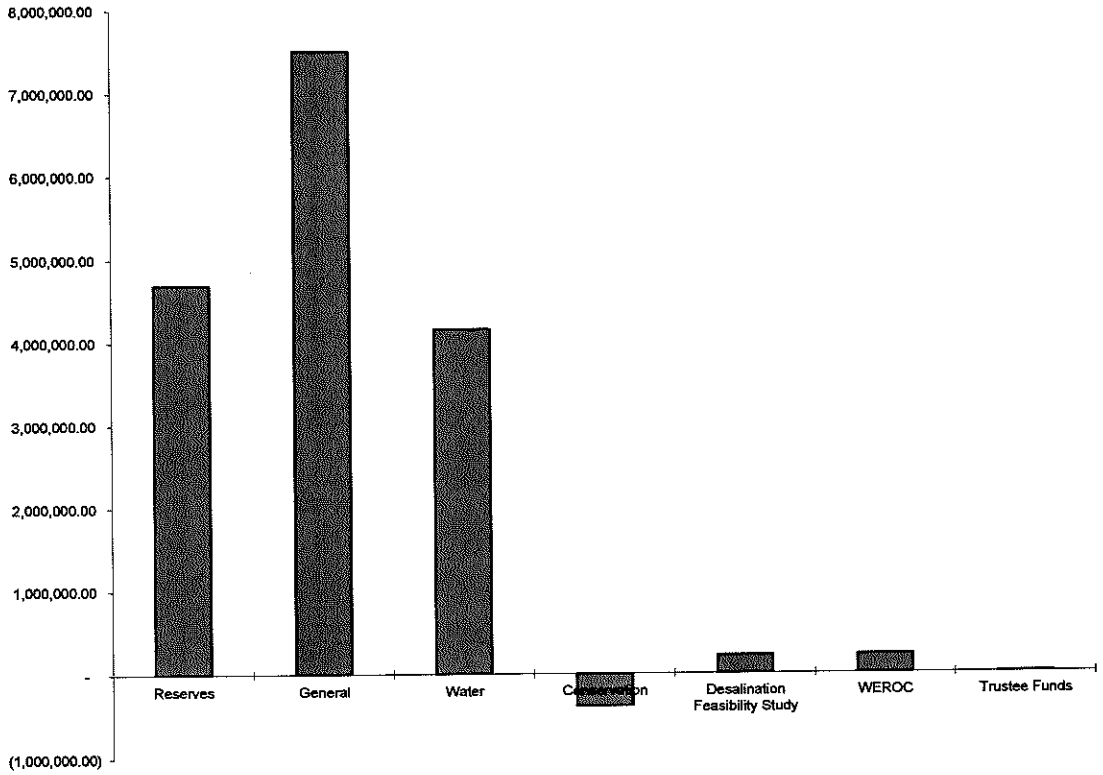
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Portfolio Management
Short-Term Portfolio Details - Cash and Investments
September 30, 2016

Investments	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
Local Agency Investment Funds									
LAIF LGIP	LAIF	6/30/2010	157,777.38	157,777.38	157,777.38	0.634	0.634	1	N/A
Sub Total			**157,777.38**	**157,777.38**	**157,777.38**	**0.634**	**0.634**	**1**	
Orange County Investment Pool									
County of Orange LGIP	OCIP	6/29/2005	13,025,553.80	13,025,553.80	13,025,553.80	0.763	0.763	1	N/A
Sub Total			**13,025,553.80**	**13,025,553.80**	**13,025,553.80**	**0.763**	**0.763**	**1**	
Total Investments			**13,183,331.18**	**13,183,331.18**	**13,183,331.18**	**0.761**	**0.761**		
Cash									
Bank of America Cash	CASH0547	7/1/2011	138,243.07	138,243.07	138,243.07	0.000	0.000	1	N/A
Petty Cash Cash	CASH	7/1/2011	500.00	500.00	500.00	0.000	0.000	1	N/A
Total Cash			**138,743.07**	**138,743.07**	**138,743.07**	**0.000**	**0.000**	**1**	
Total Cash and Investments			**13,322,074.25**	**13,322,074.25**	**13,322,074.25**	**0.761**	**0.761**	**1**	

Total Earnings	Month Ending September	Fiscal Year To Date
Current Year	14,376.41	37,741.92

Municipal Water District of Orange County
Cash and Investments at September 30, 2016

ALLOCATION	AMOUNT	%
MWDOC		
Designated Reserves		
General	$ 2,494,603	15.19%
Grant & Project Cash Flow	1,480,000	9.01%
Election Expense	215,463	1.31%
Building Repair	500,407	3.05%
Total Designated Reserves	4,690,473	28.56%
General	7,504,034	45.69%
Water	4,157,973	25.32%
Conservation	(388,614)	-2.37%
Desalination Feasibility Study	222,385	1.35%
WEROC	230,082	1.40%
TOTAL MWDOC	$ 16,416,333	99.95%
TRUSTEE ACTIVITIES		
AMP Sales Admin	$ 8,660	0.05%
TOTAL TRUSTEE ACTIVITIES	$ 8,660	0.05%
TOTAL CASH & INVESTMENTS	**$ 16,424,993**	**100.00%**



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PUBLIC AGENCY RETIREMENT SERVICES | PARS

MUNICIPAL WATER DIST OF ORANGE COUNTY
PARS OPEB Trust Program

Monthly Account Report for the Period
9/1/2016 to 9/30/2016

Rob Hunter
General Manager
Municipal Water Dist of Orange County
18700 Ward Street
Fountain Valley, CA 92708

Account Summary

Source	Beginning Balance as of 9/1/2016	Contributions	Earnings	Expenses	Distributions	Transfers	Ending Balance as of 9/30/2016
Employer Contribution	$1,435,814.69	$400,000.00	$5,702.80	$926.72	$0.00	$0.00	$1,840,590.77
Totals	**$1,435,814.69**	**$400,000.00**	**$5,702.80**	**$926.72**	**$0.00**	**$0.00**	**$1,840,590.77**

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

			Annualized Return			
1-Month	**3-Months**	**1-Year**	**3-Years**	**5-Years**	**10-Years**	**Plan's Inception Date**
0.36%	3.51%	8.47%	5.18%	7.39%	-	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 (unless invoiced), Trustee and Investment Management fees

Municipal Water District of Orange County
WATER USE EFFICIENCY PROJECTS
Cash Flow as of 10/31/16

	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	TOTALS
Cash - Beginning Balance	$ (2,257,956.55)	$ (3,225,466.67)	$ (2,271,560.26)	$ (400,725.76)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	
REVENUES:													
BUREC				36,748.36									$ 36,748.36
City of Brea	339.97		144.99										484.96
City of Buena Park	332.10		111.00	222.00									665.10
City of Fountain Valley													-
City of Fullerton		75.00											75.00
City of Garden Grove			222.00	666.00									888.00
City of Huntington Beach	640.85	49.99	519.99	117.96									1,328.79
City of La Habra	111.00		111.00										222.00
City of San Clemente		111.00											111.00
City of San Juan Capistrano	111.00		111.00	402.70									624.70
City of Santa Ana													-
City of Tustin	11,583.00	25,459.59											37,042.59
City of Newport Beach		450.00	238.99										688.99
City of Orange	2,869.43		333.00	291.00									3,493.43
City of Westminster													-
County of Orange				25,297.04									25,297.04
Department of Water Resources		40,479.67											40,479.67
East Orange County Water District													-
El Toro Water District	75.00	75.00	75.00	2,552.00									2,777.00
East Orange County Water District													-
Golden State Water Company	1,980.00		75.00	50.00									2,105.00
Irvine Ranch Water District	93,764.10	542,331.88	132,095.59	309,490.34									1,077,681.91
Laguna Beach County Water District	1,110.00	1,041.00		396.00									2,547.00
Mesa Water District	1,127.37		80.00	209.99									1,417.36
Metropolitan Water District			1,934,765.85	28,195.82									1,962,961.67
Moulton Niguel Water District	459,396.32	683,295.61	17,279.42	102,026.49									1,261,997.84
MWDOC													-
Santa Margarita Water District	6,821.55	3,703.49	10,737.34	8,062.96									29,325.34
Serrano Water District	75.00												75.00
South Coast Water District													-
Trabuco Canyon Water District	475.00	150.00	200.00	100.00									925.00
Yorba Linda Water District													-
Miscellaneous Revenues													-
Miscellaneous		103.68											103.68
Interest Revenue													-
Total Revenues	580,811.69	1,297,325.91	2,097,100.17	514,828.66	-	-	-	-	-	-	-	-	$ 4,490,066.43
EXPENDITURES:													
Aquaficient	5,400.00												$ 5,400.00
Autumn Print Group													-
Awards & Trophies													-
Conservision Consulting, LLC				28,894.25									28,894.25
City of Newport Beach													-
El Toro WD													-
Enterprise Information Systems													-
Golden State Water Company													-
Hotel Program													-
Industrial Program													-
Irvine Ranch Water District													-
Karen's Detail Custom Frames													-
Laguna Beach CWD													-
Metropolitan Water District	229,162.49	111,028.73											340,191.22
MESA													-
Mission RCD	18,300.13	14,225.68	38,367.35										70,893.16
Public Spaces program													-
Santa Margarita Water District													-
South Coast Water District													-
Spray to Drip program													-
Turf Removal	1,287,489.27	214,655.09	175,786.98	179,854.83									1,857,786.17
US Bank													-
URS													-
Waterwise Consulting													-
Miscellaneous Expenses													
Interest Expense	7,579.92												7,579.92
Salary & Benefit	390.00	3,510.00	12,111.34										16,011.34
Total Expenditures	1,548,321.81	343,419.50	226,265.67	208,749.08	-	-	-	-	-	-	-	-	$ 2,326,756.06
Cash - Ending Balance	$ (3,225,466.67)	$ (2,271,560.26)	$ (400,725.76)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	$ (94,646.18)	

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

COMBINED FINANCIAL STATEMENTS

AND

BUDGET COMPARATIVE

JULY 1, 2016 THRU SEPTEMBER 30, 2016

Municipal Water District of Orange County
Combined Balance Sheet
As of September 30, 2016

ASSETS	**Amount**
Cash in Bank	138,743.07
Investments	16,286,249.49
Accounts Receivable	38,719,180.31
Accounts Receivable - Other	99,170.36
Accrued Interest Receivable	25,282.59
Prepaids/Deposits	561,485.16
Leasehold Improvements	3,415,059.92
Furniture, Fixtures & Equipment	447,719.37
Less: Accum Depreciation	(2,655,662.85)
Net OPEB Asset	117,085.00
TOTAL ASSETS	$57,154,312.42
LIABILITIES AND FUND BALANCES	
Liabilities	
Accounts Payable	35,889,625.94
Accounts Payable - Other	622.71
Accrued Salaries and Benefits Payable	336,356.46
OCWD CUP Balance Payable	3,117,524.80
Other Liabilities	802,820.44
Unearned Revenue	2,076,778.49
Total Liabilities	42,223,728.84
Fund Balances	
Restricted Fund Balances	
Water Fund - T2C	964,353.72
Total Restricted Fund Balances	964,353.72
Unrestricted Fund Balances	
Designated Reserves	
General Operations	2,611,687.51
Grant & Project Cash Flow	1,480,000.00
Election Expense	215,463.03
Building Repair	500,407.45
Total Designated Reserves	4,807,557.99
GENERAL FUND	2,803,673.61
WEROC	101,241.62
Total Unrestricted Fund Balances	7,712,473.22
Excess Revenue over Expenditures	
Operating Fund	6,312,992.44
Other Funds	(59,235.80)
Total Fund Balance	14,930,583.58
TOTAL LIABILITIES AND FUND BALANCES	$57,154,312.42

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
General Fund
From July thru September 2016

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
REVENUES						
Retail Connection Charge	0.00	6,786,864.75	6,786,865.00	100.00%	0.00	0.25
Ground Water Customer Charge	0.00	392,666.00	392,666.00	100.00%	0.00	0.00
Water rate revenues	0.00	7,179,530.75	7,179,531.00	100.00%	0.00	0.25
Interest Revenue	19,610.48	54,510.79	123,000.00	44.32%	0.00	68,489.21
Subtotal	19,610.48	7,234,041.54	7,302,531.00	99.06%	0.00	68,489.46
Choice Programs	1,217,338.08	1,217,338.08	1,494,789.00	81.44%	0.00	277,450.92
Choice Prior Year Carry Over	0.00	0.00	44,416.00	0.00%	0.00	44,416.00
Miscellaneous Income	549.71	600.45	3,000.00	20.02%	0.00	2,399.55
School Contracts	0.00	0.00	70,000.00	0.00%	0.00	70,000.00
Transfer-In From Reserve	0.00	0.00	535,873.00	0.00%	0.00	535,873.00
Subtotal	1,217,887.79	1,217,938.53	2,148,078.00	56.70%	0.00	930,139.47
TOTAL REVENUES	1,237,498.27	8,451,980.07	9,450,609.00	89.43%	0.00	998,628.93

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
General Fund
From July thru September 2016

	Month to Date	Year to Date	Annual Budget	% Used	Encumbrance	Budget Remaining
EXPENSES						
Salaries & Wages	248,056.23	753,157.21	3,444,620.00	21.86%	0.00	2,691,462.79
Salaries & Wages - Grant Recovery	(7,299.50)	(7,299.50)	(31,600.00)	23.10%	0.00	(24,300.50)
Salaries & Wages - Recovery	(2,402.40)	(5,678.40)	0.00	0.00%	0.00	5,678.40
Directors' Compensation	17,240.32	52,259.72	231,937.00	22.53%	0.00	179,677.28
MWD Representation	10,236.44	29,901.18	132,535.00	22.56%	0.00	102,633.82
Employee Benefits	80,067.79	214,341.71	968,160.00	22.14%	0.00	753,818.29
OPEB Annual Contribution	400,000.00	400,000.00	105,249.00	380.05%	0.00	(294,751.00)
Employee Benefits - Grant Recovery	(1,951.84)	(1,951.84)	0.00	0.00%	0.00	1,951.84
Employee Benefits - Recovery	(457.60)	(1,081.60)	0.00	0.00%	0.00	1,081.60
Director's Benefits	5,280.19	15,655.16	66,297.00	23.61%	0.00	50,641.84
Health Ins $'s for Retirees	2,042.03	7,683.03	50,326.00	15.27%	0.00	42,642.97
Training Expense	0.00	960.00	12,000.00	8.00%	0.00	11,040.00
Tuition Reimbursement	0.00	0.00	5,000.00	0.00%	0.00	5,000.00
Personnel Expenses	750,811.66	1,457,946.67	4,984,524.00	29.25%	0.00	3,526,577.33
Engineering Expense	1,009.72	35,464.33	405,000.00	8.76%	125,435.23	244,100.44
Legal Expense	16,828.19	43,288.04	320,000.00	13.53%	276,711.96	0.00
Audit Expense	0.00	7,000.00	24,000.00	29.17%	11,437.00	5,563.00
Professional Services	40,711.95	119,004.44	1,496,997.00	7.95%	564,916.51	813,076.05
Professional Fees	58,549.86	204,756.81	2,245,997.00	9.12%	978,500.70	1,062,739.49
Conference-Staff	3,910.00	5,277.10	22,125.00	23.85%	0.00	16,847.90
Conference-Directors	285.00	1,385.00	10,725.00	12.91%	0.00	9,340.00
Travel & Accom.-Staff	3,124.78	6,464.79	71,130.00	9.09%	0.00	64,665.21
Travel & Accom.-Directors	641.71	1,692.17	38,250.00	4.42%	0.00	36,557.83
Travel & Conference	7,961.49	14,819.06	142,230.00	10.42%	0.00	127,410.94
Membership/Sponsorship	30.00	63,486.78	134,458.00	47.22%	0.00	70,971.22
CDR Support	0.00	9,992.88	39,972.00	25.00%	29,978.62	0.50
Dues & Memberships	30.00	73,479.66	174,430.00	42.13%	29,978.62	70,971.72
Business Expense	305.10	1,116.91	6,000.00	18.62%	0.00	4,883.09
Maintenance Office	7,300.83	20,196.44	123,185.00	16.40%	100,343.56	2,645.00
Building Repair & Maintenance	884.29	2,291.95	11,000.00	20.84%	5,708.05	3,000.00
Storage Rental & Equipment Lease	372.62	1,117.33	7,000.00	15.96%	4,882.67	1,000.00
Office Supplies	2,153.59	5,692.11	38,280.00	14.87%	2,563.41	30,024.48
Postage/Mail Delivery	654.85	2,152.04	11,400.00	18.88%	3,961.62	5,286.34
Subscriptions & Books	0.00	95.47	2,000.00	4.77%	0.00	1,904.53
Reproduction Expense	441.08	1,870.74	36,225.00	5.16%	8,259.79	26,094.47
Maintenance-Computers	347.63	531.21	10,000.00	5.31%	1,709.42	7,759.37
Software Purchase	5,429.40	17,805.20	31,300.00	56.89%	1,987.82	11,506.98
Software Support	1,274.78	16,942.42	46,000.00	36.83%	7,610.00	21,447.58
Computers and Equipment	982.82	14,161.84	32,500.00	43.57%	0.00	18,338.16
Automotive Expense	1,317.20	3,761.07	13,828.00	27.20%	0.00	10,066.93
Toll Road Charges	50.34	93.08	1,100.00	8.46%	0.00	1,006.92
Insurance Expense	8,479.29	27,846.15	90,000.00	30.94%	0.00	62,153.85
Utilities - Telephone	1,621.35	4,864.74	19,200.00	25.34%	0.00	14,335.26
Bank Fees	1,102.73	3,184.25	10,500.00	30.33%	0.00	7,315.75
Miscellaneous Expense	4,381.33	15,103.23	114,020.00	13.25%	0.00	98,916.77
MWDOC's Contrb. To WEROC	12,532.50	37,597.50	150,390.00	25.00%	0.00	112,792.50
Depreciation Expense	607.57	1,822.70	0.00	0.00%	0.00	(1,822.70)
Other Expenses	50,239.30	178,246.38	753,928.00	23.64%	137,026.34	438,655.28
Election Expense	0.00	0.00	592,000.00	0.00%	0.00	592,000.00
MWDOC's Building Expense	500.00	186,940.00	495,000.00	37.77%	13,129.14	294,930.86
Capital Acquisition	11,069.57	22,799.05	62,500.00	36.48%	0.00	39,700.95
TOTAL EXPENSES	879,161.88	2,138,987.63	9,450,609.00	22.63%	1,158,634.80	6,152,986.57
NET INCOME (LOSS)	358,336.39	6,312,992.44	0.00			

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
Water Fund
From July thru September 2016

	Month to Date	Year to Date	Annual Budget	% Used	Budget Remaining
WATER REVENUES					
Water Sales	15,524,722.90	50,976,547.90	121,881,702.00	41.82%	70,905,154.10
Readiness to Serve Charge	1,055,607.64	3,166,822.92	12,674,093.00	24.99%	9,507,270.08
Capacity Charge CCF	402,482.50	1,207,447.50	4,829,790.00	25.00%	3,622,342.50
SCP Surcharge	28,297.89	96,297.81	365,000.00	26.38%	268,702.19
Interest	661.92	1,942.09	4,800.00	40.46%	2,857.91
TOTAL WATER REVENUES	17,011,772.85	55,449,058.22	139,755,385.00	39.68%	84,306,326.78
WATER PURCHASES					
Water Sales	15,524,722.90	50,976,547.90	121,881,702.00	41.82%	70,905,154.10
Readiness to Serve Charge	1,055,607.64	3,166,822.92	12,674,093.00	24.99%	9,507,270.08
Capacity Charge CCF	402,482.50	1,207,447.50	4,829,790.00	25.00%	3,622,342.50
SCP Surcharge	28,297.89	96,297.81	365,000.00	26.38%	268,702.19
TOTAL WATER PURCHASES	17,011,110.93	55,447,116.13	139,750,585.00	39.68%	84,303,468.87
EXCESS OF REVENUE OVER EXPENDITURES	661.92	1,942.09	4,800.00		

Municipal Water District of Orange County
WUE Revenues and Expenditures (Actuals vs Budget)
From July thru September 2016

	Year to Date Actual	Annual Budget	% Used
Landscape Performance Certification			
Revenues	79.52	118,900.00	0.07%
Expenses	0.00	118,900.00	0.00%
Excess of Revenues over Expenditures	79.52	0.00	
Industrial Water Use Reduction			
Revenues	0.00	91,236.00	0.00%
Expenses	95,010.00	91,236.00	104.14%
Excess of Revenues over Expenditures	(95,010.00)	0.00	
Spray To Drip Conversion			
Revenues	675.00	468,552.34	0.14%
Expenses	681.52	468,552.34	0.15%
Excess of Revenues over Expenditures	(6.52)	0.00	
Water Smart Landscape for Public Property			
Revenues	0.00	168,588.80	0.00%
Expenses	0.00	168,588.80	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
Member Agency Administered Passthru			
Revenues	0.00	150,000.00	0.00%
Expenses	0.00	150,000.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
ULFT Rebate Program			
Revenues	22,800.20	205,000.00	11.12%
Expenses	22,800.20	205,000.00	11.12%
Excess of Revenues over Expenditures	0.00	0.00	
HECW Rebate Program			
Revenues	84,034.22	432,000.00	19.45%
Expenses	84,040.43	432,000.00	19.45%
Excess of Revenues over Expenditures	(6.21)	0.00	
CII Rebate Program			
Revenues	212,190.00	325,000.00	65.29%
Expenses	249,790.00	325,000.00	76.86%
Excess of Revenues over Expenditures	(37,600.00)	0.00	
Large Landscape Survey			
Revenues	301.89	30,000.00	1.01%
Expenses	0.00	30,000.00	0.00%
Excess of Revenues over Expenditures	301.89	0.00	

Municipal Water District of Orange County
WUE & Other Funds Revenues and Expenditures (Actuals vs Budget)
From July thru September 2016

	Year to Date Actual	Annual Budget	% Used
Indoor-Outdoor Survey			
Revenues	0.00	3,500.00	0.00%
Expenses	10.19	3,500.00	0.29%
Excess of Revenues over Expenditures	(10.19)	0.00	
Turf Removal Program			
Revenues	470,826.56	1,750,000.00	26.90%
Expenses	495,360.75	1,750,000.00	28.31%
Excess of Revenues over Expenditures	(24,534.19)	0.00	
Comprehensive Landscape (CLWUE)			
Revenues	101,842.27	399,751.00	25.48%
Expenses	66,084.32	399,751.00	16.53%
Excess of Revenues over Expenditures	35,757.95	0.00	
CII, Large Landscape, Performance (OWOW)			
Revenues	0.00	121,210.00	0.00%
Expenses	22,348.77	121,210.00	18.44%
Excess of Revenues over Expenditures	(22,348.77)	0.00	
WUE Projects			
Revenues	892,749.66	4,263,738.14	20.94%
Expenses	1,036,126.18	4,263,738.14	24.30%
Excess of Revenues over Expenditures	(143,376.52)	0.00	
WEROC			
Revenues	187,987.50	300,780.00	62.50%
Expenses	77,432.09	293,780.00	26.36%
Excess of Revenues over Expenditures	110,555.41	7,000.00	

Memorandum

DATE: November 09, 2016

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

FROM: Robert Hunter

SUBJECT: Quarter ending September 2016 Financials Actual versus Budget

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The following reports are attached:

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

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget Summary Report
Fiscal Year to Date ending September 2016 (Unaudited)
($000 Omitted)
General Fund and Reserve Fund

GENERAL FUND

	YTD Actual	Annual Budget	% Used
REVENUES			
Water Rate revenues:			
Retail connection fees	6,787	6,787	100.0%
Subtotal	6,787	6,787	100.0%
Other Revenues:			
Interest income (1)	55	123	44.3%
Choice Programs (2)	1,217	1,539	79.1%
School Contracts (3)	0	70	0.0%
Other income	1	3	20.0%
Transfer in from Reserve (4)	0	536	0.0%
Subtotal	1,272	2,271	56.0%
TOTAL REVENUES	8,059	9,058	89.0%
EXPENSES			
Personal Expenses (incl. Dir.)	1,458	4,985	29.2%
Professional services	126	1,521	8.3%
Outside engineering	35	405	8.8%
Legal expense	43	320	13.5%
Travel & Conference	15	142	10.4%
Dues and memberships (5)	73	174	42.1%
General & Admin expense	178	1,346	13.2%
Building Repair & Maintenance	187	495	37.8%
Capital acquisition (not including building repairs)	23	63	36.5%
TOTAL EXPENSES	2,139	9,451	22.6%
EXCESS OF REVENUES OVER EXPENSES	5,920		

RESERVE FUND

Beginning Balance	3,483
Nov 2015 - excess from FY 14-15 General Fund	1,207
Net OPEB Asset	117
TOTAL RESERVE FUND	4,807

(1) Interest Income is higher in the beginning of the year due to receiving our budget upfront.
(2) Choice programs were billed in September. One more program to bill.
(3) School program begins in October.
(4) Transfer in from Reserves is for the Board of Directors election expense.
(5) Dues and memberships are primarily paid in the beginning of the year.

Municipal Water District of Orange County
Revenues and Expenditures Actual vs Budget Line Item Report
Fiscal Year to Date ending September 2016 (Unaudited)
General Fund

	YTD ACTUAL	ANNUAL BUDGET	% Used
REVENUES			
Retail Connection Charge	6,786,865	6,786,865	100.00%
Ground Water Customer Charge	392,666	392,666	100.00%
Water rate revenues	7,179,531	7,179,531	100.00%
Choice Programs	1,217,338	1,494,789	81.44%
Choice Prior Year Carry Over	0	44,416	0.00%
Interest Revenue	54,511	123,000	44.32%
Miscellaneous Income	600	3,000	20.02%
School Contracts	0	70,000	0.00%
Transfer in from Reserve	0	535,873	0.00%
Other revenues	1,272,449	2,271,078	56.03%
TOTAL REVENUES	8,451,980	9,450,609	89.43%

OPERATING EXPENSES			
Salaries & Wages	753,157	3,444,620	21.86%
less Recovery's	(12,978)	(31,600)	41.07%
Directors' Compensation	52,260	231,937	22.53%
MWD Representation	29,901	132,535	22.56%
Employee Benefits	214,342	968,160	22.14%
less Recovery's	(3,033)	0	0.00%
OPEB Annual Contribution	400,000	105,249	380.05%
Directors Benefits	15,655	66,297	23.61%
Health Insurances for Retirees	7,683	50,326	15.27%
Training Expense	960	12,000	8.00%
Tuition Reimbursement	0	5,000	0.00%
Personnel Expenses	1,457,947	4,984,524	29.25%
Engineering Expense	35,464	405,000	8.76%
Legal Expense	43,288	320,000	13.53%
Audit Expense	7,000	24,000	29.17%
Professional Services	119,004	1,496,997	7.95%
Professional Fees	204,757	2,245,997	9.12%
Conference-Staff	5,277	22,125	23.85%
Conference-Directors	1,385	10,725	12.91%
Travel & Accom.-Staff	6,465	71,130	9.09%
Travel & Accom.-Directors	1,692	38,250	4.42%
Travel & Conference	14,819	142,230	10.42%
Membership/Sponsorship	63,487	134,458	47.22%
CDR Support	9,993	39,972	25.00%
Dues & Memberships	73,480	174,430	42.13%

Municipal Water District of Orange County
Revenues and Expenditures Actual vs Budget Line Item Report
Fiscal Year to Date ending September 2016 (Unaudited)
General Fund

	YTD ACTUAL	ANNUAL BUDGET	% Used
Business Expense	1,117	6,000	18.62%
Maintenance Office	20,196	123,185	16.40%
Building Repair & Maintenance	2,292	11,000	20.84%
Storage Rental & Equipment Lease	1,117	7,000	15.96%
Office Supplies	5,692	38,280	14.87%
Postage/Mail Delivery	2,152	11,400	18.88%
Subscriptions & Books	95	2,000	4.77%
Reproduction Expense	1,871	36,225	5.16%
Maintenance-Computers	531	10,000	5.31%
Software Purchase	17,805	31,300	56.89%
Software Support	16,942	46,000	36.83%
Computers and Equipment	14,162	32,500	43.57%
Automotive Expense	3,761	13,828	27.20%
Toll Road Charges	93	1,100	8.46%
Insurance Expense	27,846	90,000	30.94%
Utilities - Telephone	4,865	19,200	25.34%
Bank Fees	3,184	10,500	30.33%
Miscellaneous Expense	15,103	114,020	13.25%
MWDOC's Contribution To WEROC	37,598	150,390	25.00%
Depreciation Expense	1,823	0	0.00%
Election Expense	0	592,000	0.00%
MWDOC Building Expense	186,940	495,000	37.77%
Capital Acquisition	22,799	62,500	0.00%
Other Expenses	387,985	1,903,428	20.38%
TOTAL EXPENSES	2,138,988	9,450,609	22.63%

EXCESS OF REVENUES OVER EXPENSES	6,312,992	0	

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Statement of Revenues and Expenditures
Fiscal Year to Date ending September 2016 (Unaudited)
Water Funds

	YTD Actual	Annual Budget	Balance
Water Revenues			
Water Sales	50,976,548	121,881,702	(70,905,154)
Ready to Serve Charge	3,166,823	12,674,093	(9,507,270)
Capacity Charge Flat Rate	1,207,448	4,829,790	(3,622,343)
SCP Surcharge	96,298	365,000	(268,702)
Interest	1,942	4,800	(2,858)
Total Water Revenues	55,449,058	139,755,385	(84,306,327)
Water Purchases			
Water Sales	50,976,548	121,881,702	(70,905,154)
Ready to Serve Charge	3,166,823	12,674,093	(9,507,270)
Capacity Charge	1,207,448	4,829,790	(3,622,343)
SCP Surcharge	96,298	365,000	(268,702)
Total Water Purchases	55,447,116	139,750,585	(84,303,469)
EXCESS OF REVENUES OVER EXPENDITURES	1,942	4,800	(2,858)

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending September 2016 (Unaudited)
Other Funds

	YTD Actual	Annual Budget	Balance
WEROC			
Revenues	187,988	300,780	(112,793)
Expenditures	77,432	293,780	(216,348)
Excess of Revenues over Expenditures	110,555	7,000	103,555
WUE Projects (details on next page)			
Revenues	892,750	4,263,738	(3,370,988)
Expenditures	1,036,126	4,263,738	(3,227,612)
Excess of Revenues over Expenditures	(143,377)	0	(143,377)

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

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending September 2016 (Unaudited)
Water Use Efficiency Projects

	Actual	Variance %	Fiscal Year Budget	% of Budget	Projected Final FY Budget
Landscape Performance Certification					
Revenues	80		118,900	0.07%	118,900
Expenditures	-		118,900	0.00%	118,900
Excess of Revenues over Expenditures	80	100%	0		

Actual Variance: MET reporting is every two months.

Budget Variance: Actual is less than Budgeted due to the program halting in order to distribute a new RFP.

Industrial Water Use Reduction					
Revenues	-		91,236	0.00%	91,236
Expenditures	95,010		91,236	104.14%	91,236
Excess of Revenues over Expenditures	(95,010)	0%	0		

Actual Variance: Expenses came in ahead of grant reporting. Grant report due by current year end.

Budget Variance: No comment needed.

Spray to Drip Conversion					
Revenues	675		468,552	0.14%	468,552
Expenditures	682		468,552	0.15%	468,552
Excess of Revenues over Expenditures	(7)	-1%	0		

Actual Variance: Program hs not started up this fiscal year. Plan start up is December 2016.

Budget Variance: Program has not started up this fiscal year. Plan start up is December 2016.

Water Smart Landscape for Public Property					
Revenues	-		168,589	0.00%	168,589
Expenditures	-		168,589	0.00%	168,589
Excess of Revenues over Expenditures	-	0%	0		

Actual Variance: No activity to report.

Budget Variance: No activity to report.

Notes:
[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.
[2] Fiscal year budget versus Actual
[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending September 2016 (Unaudited)
Water Use Efficiency Projects

	Actual	Variance %	Fiscal Year Budget	% of Budget	Projected Final FY Budget
Member Agency Administered Pass thru					
Revenues	-		150,000	0.00%	150,000
Expenditures	-		150,000	0.00%	150,000
Excess of Revenues over Expenditures	-	0%	0		

Actual Variance: No activity to report.

Budget Variance: No activity to report.

ULFT Rebate Program					
Revenues	22,800		205,000	11.12%	205,000
Expenditures	22,800		205,000	11.12%	205,000
Excess of Revenues over Expenditures	-	0%	0		

Actual Variance: No activity to report.

Budget Variance: Agencies slow to report.

HECW Rebate Program					
Revenues	84,034		432,000	19.45%	432,000
Expenditures	84,040		432,000	19.45%	432,000
Excess of Revenues over Expenditures	(6)	0%	0		

Actual Variance: No activity to report.

Budget Variance: Pass-thru program. Agencies slow to report.

CII Rebate Program					
Revenues	212,190		325,000	65.29%	325,000
Expenditures	249,790		325,000	76.86%	325,000
Excess of Revenues over Expenditures	(37,600)	-18%	0		

Actual Variance: Revenues come from Grants. Reporting to Grants is quarterly, Expenses are monthly.

Budget Variance: No comment needed.

Notes:
[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.
[2] Fiscal year budget versus Actual
[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending September 2016 (Unaudited)
Water Use Efficiency Projects

	Actual	Variance %	Fiscal Year Budget	% of Budget	Projected Final FY Budget
Large Landscape Survey					
Revenues	302		30,000	1.01%	30,000
Expenditures	-		30,000	0.00%	30,000
Excess of Revenues over Expenditures	302	100%	0		

Actual Variance: No comment needed.

Budget Variance: No activity to report.

Indoor-Outdoor Survey					
Revenues	-		3,500	0.00%	3,500
Expenditures	10		3,500	0.29%	3,500
Excess of Revenues over Expenditures	(10)	0%	0		

Actual Variance: No comment needed.

Budget Variance: No activity at this time.

Turf Removal Program					
Revenues	470,827		1,750,000	26.90%	1,750,000
Expenditures	495,361		1,750,000	28.31%	1,750,000
Excess of Revenues over Expenditures	(24,534)	-5%	0		

Actual Variance: MET is invoiced after expenditures have incurred.

Budget Variance: No comment needed.

Comprehensive Landscape (CLWUE)					
Revenues	101,842		399,751	25.48%	399,751
Expenditures	66,084		399,751	16.53%	399,751
Excess of Revenues over Expenditures	35,758	35%	0		

Actual Variance: Revenues out ahead of expenses.

Budget Variance: Program activity slow to materialize.

Notes:
[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.
[2] Fiscal year budget versus Actual
[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Revenues and Expenditures Actual versus Budget
Fiscal Year to Date ending September 2016 (Unaudited)
Water Use Efficiency Projects

	Actual	Variance %	Fiscal Year Budget	% of Budget	Projected Final FY Budget
CII, Large Landscape, Performance (OWOW)					
Revenues	-		121,210	0.00%	121,210
Expenditures	22,349		121,210	18.44%	121,210
Excess of Revenues over Expenditures	(22,349)	0%	0		

Actual Variance: Granting agency (DWR) slow to pay on invoices submitted to them.

Budget Variance: No comment needed.

Notes:
[1] Variance from Revenues to Expenses. When greater than 5%, an explanation is provided.
[2] Fiscal year budget versus Actual
[3] With each quarterly report the projected fiscal year end budget may be re-adjusted.

Vavrinek, Trine, Day & Co., LLP
Certified Public Accountants

VALUE THE DIFFERENCE

Item No. 4c

Board of Directors
Municipal Water District of Orange County
Fountain Valley, California

We have audited the financial statements of the Municipal Water District of Orange County (District) for the year ended June 30, 2016. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated July 25, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the District are described in Note 1 to the financial statements. As described in Note 1 to the financial statements, the District adopted Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. We noted no transactions entered into by the District during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the District's financial statements were:

Management's estimates of the:

- Fair value measurement for investments are based on observable market inputs and information from the District's custodian bank,
- Amounts related to the District's medical retiree (OPEB) plan are based on actuarial valuations,
- Amounts related to the net pension liability, deferred outflows of resources and deferred inflows of resources, pension expense, and related disclosures are based on actuarial valuations and calculations of the proportionate share of the CalPERS collective net pension liability.

We evaluated the key factors and assumptions used to develop these estimates in determining that they were reasonable in relation to the financial statements taken as a whole.

25231 Paseo De Alicia, Suite 100 Laguna Hills, CA 92653 Tel: 949.768.0833 www.vtdcpa.com Fax: 949.768.8408

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

> The disclosures within Note 2 to the financial statements include authorized investments, interest rate and credit risks, and fair value measurements. Additionally, it was noted that the District's investment policy adopted June 2015 requires negotiable certificates of deposit to not exceed 20% of the portfolio in effect immediately after such investment. However, the District's Reserve Funds portfolio includes negotiable certificates of deposit totaling 23.95% of the Reserve Fund portfolio at June 30, 2016.
>
> The disclosure of the District's cost-sharing defined benefit pension plan, net pension liability, and related deferred outflows and inflows of resources in Note 10 to the financial statements. The valuation of the net pension liability and related deferred outflows and inflows of resources are sensitive to the underlying actuarial assumptions used including, but not limited to, the investment rate of return and discount rate, and the District's proportionate share of the Plan's collective net pension liability. As disclosed in Note 10, a 1% increase or decrease in the discount rate has a significant effect on the District's net pension liability.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated November 2, 2016.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the District's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the District's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to management's discussion and analysis, schedule of funding progress for the other post-employment benefit plan, schedule of the District's proportionate share of the net pension liability and schedule of contributions for the cost-sharing retirement plan, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

Restriction on Use

This information is intended solely for the use of the Board of Directors and management of the District and is not intended to be, and should not be, used by anyone other than these specified parties.

Vavrinek, Trine, Day & Co., LLP

Laguna Hills, California
November 2, 2016

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Directors
Municipal Water District of Orange County
Fountain Valley, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Municipal Water District of Orange County (District), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated November 2, 2016. Our reported included an emphasis of matter related to the District's adoption of Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*, effective July 1, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

25231 Paseo De Alicia, Suite 100 Laguna Hills, CA 92653 Tel: 949.768.0833 www.vtdcpa.com Fax: 949.768.8408

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Vavrinek, Trine, Day & Co., LLP

Laguna Hills, California
November 2, 2016

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

MANAGEMENT LETTER

FOR THE YEAR ENDED JUNE 30, 2016

Board of Directors and Management
Municipal Water District of Orange County
Fountain Valley, California

We have audited the basic financial statements of the Municipal Water District of Orange County (District) for the year ended June 30, 2016 and have issued our report thereon dated November 2, 2016. In planning and performing our audit of the basic financial statements of the District, we considered internal control in order to determine our auditing procedures for the purpose of expressing our opinion on the basic financial statements. An audit does not include examining the effectiveness of internal control and does not provide assurance on internal control. We have not considered internal control since the date of our report.

During our audit we noted certain matters involving internal control and other operational matters that are presented for your consideration. These observations and recommendations, all of which have been discussed with the appropriate members of management, are intended to improve internal control or result in other operating efficiencies and are summarized as follows:

CURRENT YEAR MANAGEMENT LETTER COMMENTS

JOURNAL ENTRIES AND FINANCIAL REPORTING

Observation:

We noted the District's financial reporting system allows for journal entries to be prepared and posted by one individual. Journal entries related to cash receipts are manually entered into the general ledger, and posted by one person, without secondary approval or authorization. We further noted that closing entries related to the prior year audit were not posted to the general ledger. As a result, the opening balances within the general ledger did not agree to the prior year audited financial statements. By posting all such activity within the general ledger system (including those identified as part of the audit), this aids in maintaining accurate accounting records.

Recommendation:

All journal entries posted to the financial reporting system should be subject to a secondary review by someone other than the preparer prior to posting to the general ledger. Further, evidence of this secondary review by someone other than the preparer should be retained by the District (i.e. signature approval, system audit trail, etc.). For closing or year-end adjustments, journal entries should be posted to the financial reporting system to ensure opening net position, and other financial statement captions such as deferred outflows and inflows of resources and net pension liability agree or reconcile to audited financial statements.

Management Response:

The District will review our procedures for a secondary review by someone other than the preparer prior to posting to the general ledger and documentation of this process. The District will also review our procedures for posting closing or year-end adjustments to the financial reporting system.

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COMPLIANCE RELATED TO UNIFORM GUIDANCE

Observation:

The District retained a consultant to review certain aspects of the District's processes and procedures related to grants. The District has been modifying its grant procedures in response to these recommendations. Additionally, based on our inquiry with management, we noted the District should establish written policies and procedures related to key changes required under *Title 2 U.S. Code of Federal Regulations, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), which is in effect for new Federal awards made after December 26, 2014:

- *Title 2 CFR Section 200.302(b)(6) and (7)* of the Uniform Guidance requires all non-Federal entities to establish written procedures to implement the requirements of *2 CFR section 200.305* (Cash Management) and for determining the allow ability of costs in accordance with *Subpart E – Cost Principles* and the conditions of the Federal award.
- *Title 2 CFR Section 200.318(c)(1) and (2)* of the Uniform Guidance requires the non-Federal entity to maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts, and covering organization conflicts of interest.
- *Title 2 CFR 200.319(c)(1) and (2)* also requires written procedures for procurement transactions to ensure all solicitations include an clear and accurate description and identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

Recommendation:

We recommend the District review its policies and internal control procedures, and formalize written procedures related to cash management requirements under *2 CFR Section 200.305,* allowable costs in accordance with *Subpart E – Cost principles,* and procurement as defined by *2 CFR Section 200.318 and 200.319*.

Management Response:

The District will review our policies and internal control procedures and formalize written procedures related to cash management requirements, allowable costs, and procurement under the Uniform Guidance.

INVESTMENT COMPLIANCE

Observation:

The District's investment policy dated June 17, 2015 allows for Operating and Fiduciary funds to be invested in negotiable certificates of deposits of up to 20% of the portfolio in effect immediately after such investment. The policy further states that permissible investments for the Reserve funds include all investments permitted for the Operating and Fiduciary funds. The District calculates separate percentages for Operating and Fiduciary funds, and Reserve funds, for purposes of monitoring compliance. We further note Government Code Section 53600 allows up to 30% of total investments in negotiable certificates of deposit.

As of June 30, 2016, the District held the following negotiable certificates of deposit:

- Operating and Fiduciary funds - $1,259,533 – 19.16% of Operating and Fiduciary funds
- Reserve funds - $1,123,134 – 23.95% of Reserve funds

While the negotiable certificates of deposit held were within the maximum limits of the Government Code, they exceeded the 20% maximum established in the policy.

Recommendation:

We recommend the District review its investment policy and procedures to ensure the securities held by the District are consistent with the approved investment policy, and the policy is clarified with respect to the percentage limits within the Reserve funds.

Management Response:

The District will review our investment policy and procedures to clarify the percentage limits within the Reserve fund.

PRIOR YEAR MANAGEMENT LETTER COMMENTS

FINANCIAL REPORTING FOR PENSIONS

Observation:

As described in Note 1 to the financial statements, the District adopted Governmental Accounting Standards Board (GASB) Statements No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB No. 27,* and *No. 71, Pension Transition for Contributions Made Subsequent to the Measurement Date – an amendment of GASB Statement No. 68,* effective July 1, 2014. We proposed audit adjustments to correct the District's net position, net pension liability, deferred inflows and outflows of resources, and pension expense in accordance with those standards.

Current Year Status:

Partially implemented – refer to Current Year Observation related to opening net position above.

CLOSING PROCEDURES RELATED TO RESTRICTED ASSETS AND NET POSITION

Observation:

During the year, we noted the District tracks activity within restricted accounts using separate general ledger accounts, including monitoring of cash and related receivable balances. During the closing process, negative cash associated with the restricted accounts were noted. These negative funds result from internal borrowing of funds from the District's unrestricted cash and investment accounts. As a result, we proposed audit adjustments to reclassify certain restricted cash and investments, accounts receivable, and the related net position.

Current Year Status:

Implemented.

****

Our audit procedures are designed primarily to enable us to form an opinion on the financial statements, and therefore may not bring to light all weaknesses in policies or procedures that may exist. We aim, however, to use our knowledge of the District gained during our work to make comments and suggestions that we hope will be useful to you.

We would be pleased to discuss these comments and recommendations with you at any time.

This report is intended solely for the information and use of the Board of Directors, the District's management and others within the organization and should not be used by anyone other than these specified parties.

Vavrinek, Trine, Day & Co., LLP

Laguna Hills, California
November 2, 2016

MUNICIPAL WATER DISTRICT
OF ORANGE COUNTY

FINANCIAL REPORT
FOR THE YEAR ENDED JUNE 30, 2016

Table of Contents

Independent Auditors' Report

INDEPENDENT AUDITORS' REPORT

Board of Directors
Municipal Water District of Orange County
Fountain Valley, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Municipal Water District of Orange County (District), as of and for the year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the District, as of June 30, 2016, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

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Emphasis of Matter

As described in Note 1 to the financial statements, the District adopted Governmental Accounting Standards Board (GASB) Statements No. 72, *Fair Value Measurement and Application*, effective July 1, 2015. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of funding progress for the other post-employment benefit plan, schedule of the District's proportionate share of the net pension liability and schedule of contributions for the cost sharing retirement plan on pages 3 through 9 and 34 through 36 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Prior-Year Comparative Information

We have previously audited the 2015 financial statements of the District, and we expressed an unmodified audit opinion on the financial statements in our report dated November 25, 2015. The financial statements include summarized prior-year comparative information. Such information does not include all of the information required to constitute a presentation in accordance with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the District's financial statements for the year ended June 30, 2015, from which such summarized information was derived.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 2, 2016, on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

Vavrinek, Trine, Day & Co., LLP

Laguna Hills, California
November 2, 2016

Management's Discussion and Analysis

(Unaudited)

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
MANAGEMENT'S DISCUSSION AND ANALYSIS
JUNE 30, 2016

The following is a brief discussion of the Municipal Water District of Orange County's (District) activities and financial performance for the year ended June 30, 2016. Please read in conjunction with the District's basic financial statements and accompanying notes which follow this section.

FINANCIAL HIGHLIGHTS

- The District's revenues were $183.6 million in FY 2015-16, compared to $210.6 million in the prior fiscal year, a 12.8% decrease.
- The District's expenses were $181.7 million in FY 2015-16, compared to $209.5 million in the prior fiscal year, a 13.3% decrease.
- The District's assets at June 30, 2016 were $50.4 million, a 24.7% increase compared to total assets of $40.4 million at June 30, 2015.
- The District's liabilities at June 30, 2016 were $43.0 million, a 24.3% increase compared to total liabilities of $34.6 million at June 30, 2015.
- The District's net position at June 30, 2016 was $7.5 million, a 33.4% increase compared to net position of $5.6 million at June 30, 2015.

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

Measurement focus is a term used to describe which transactions are recorded within the various financial statements. Basis of accounting refers to when transactions are recorded regardless of the measurement focus applied. The accompanying financial statements are reported using the economic resources measurement focus, and the accrual basis of accounting.

Under the economic resources measurement focus all assets, deferred inflows and outflows of resources, and liabilities (whether current or noncurrent) associated with these activities are included on the Statement of Net Position. The Statement of Revenues, Expenses and Changes in Net Position presents increases (revenues) and decreases (expenses) in total net position. Under the accrual basis of accounting, revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

OVERVIEW OF THE BASIC FINANCIAL STATEMENTS

The District's financial statements, prepared in accordance with generally accepted accounting principles (GAAP), offer key, high-level financial information about District activities during the reporting period. The financial statements of the District consist of three interrelated statements designed to provide the reader with relevant information on the District's financial condition and operating results. These statements offer short-term and long-term financial information about the District's activities utilizing the full accrual basis of accounting.

The *Statement of Net Position* includes all of the District's assets and deferred outflows of resources, less liabilities and deferred inflows of resources, with the difference being reported as net position. It also provides the basis for computing rate of return, evaluating the capital structure of the District, and assessing the liquidity and financial flexibility of the District.

All of the current year's revenues and expenses are accounted for in the *Statement of Revenues, Expenses, and Changes in Net Position*. This statement measures the District's operations over the past year and can be used to determine whether the District has successfully recovered all its projected costs through its rates and other service related charges.

The final required financial statement is the *Statement of Cash Flows* which presents information about the District's cash receipts and cash payments during the reporting period classified as cash receipts, cash payments, and net changes in cash resulting from operations, and investing, non-capital financing, and capital and related financing activities. This statement also provides comparative information on the sources and uses of the District's cash during the reporting period.

FINANCIAL ANALYSIS OF THE DISTRICT

One of the most important questions asked about the District's finances is: "Is the District, as a whole, financially better off or worse off as a result of the year's activities?" The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position report information about the District's activities in a way that will help answer this question. These two statements report the net position of the District and changes in them. You can think of the District's net position (the difference between assets plus deferred outflows of resources and liabilities plus deferred inflows of resources) as one way to measure financial health or financial position. Over time, increases or decreases in the District's Net Position are one indicator of whether its financial health is improving or deteriorating. However, you will need to consider other non-financial factors, such as changes in economic conditions, population growth, changes in rates and charges and new or changed government legislation or accounting standards.

STATEMENT OF NET POSITION

Net position is the difference between assets plus deferred outflows of resources, less liabilities plus deferred inflows of resources, and may serve over time as a useful indicator of a government's financial position. The following is a summary of the District's Statement of Net Position.

Table 1
Condensed Statements of Net Position
(In thousands of dollars)
June 30:

	2016	2015	Variance	Total Percent Change
Current Restricted Assets	$ 4,783	$ 3,876	$ 907	23.4%
Current Unrestricted Assets	44,264	35,500	8,764	24.7%
Capital Assets	1,209	929	280	30.1%
Other Assets	117	93	24	25.8%
Total Assets	**50,373**	**40,398**	**9,975**	**24.7%**
Deferred Outflows of Resources	**454**	**356**	**98**	**27.5%**
Liabilities Payable from Restricted Current Assets	3,719	2,826	893	31.6%
Liabilities Payable from Unrestricted Current Assets	37,935	30,430	7,505	24.7%
Noncurrent Unrestricted Liabilities	1,377	1,360	17	1.3%
Total Liabilities	**43,031**	**34,616**	**8,415**	**24.3%**
Deferred Inflows of Resources	**320**	**535**	**(215)**	**(40.2%)**
Net Position:				
Net Investment in Capital Assets	1,209	929	280	30.1%
Restricted for Trustee Activities	1,064	1,050	14	1.3%
Unrestricted	5,202	3,624	1,578	43.5%
Total Net Position	**$ 7,475**	**$ 5,603**	**$ 1,872**	**33.4%**

As can be seen from the table above, net position increased by $1.87 million from Fiscal Year 2015 to 2016. This increase is the result of the following:

- Current Unrestricted Assets increased by $8.8 million due to a repayment of amounts owed in the Turf Removal Program and $1.2 million more was received in accelerated water payments this year compared to last fiscal year in June.

- Capital Assets increased by $0.3 million due to building improvements.

- Liabilities Payable from Unrestricted Current Assets increased $7.5 million mainly due to the upfront costs MWDOC pays for the increased activity in the Turf Removal Program.

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

While the Statement of Net Position shows the financial position at year-end, the Statement of Revenues, Expenses, and Changes in Fund Net Position provides information as to the nature and source of these changes in Net Position. The District reported an increase in net position of $1,872 thousand for the year ended June 30, 2016, as compared to an increase of $1,161 thousand for the year ended June 30, 2015. The following is a summary of the change in the District's net position.

Table 2
Condensed Statements of Revenues, Expenses, and Changes in Net Position
(In thousands of dollars)
Year Ended June 30:

	2016	2015	Variance	Total Percent Change
Operating Revenues	$ 154,568	$ 196,165	$ (41,597)	(21.2%)
Special Projects Revenue	28,674	14,260	14,414	101.1%
Non-operating Revenues	341	210	131	62.4%
Total Revenues	**183,583**	**210,635**	**(27,052)**	**(12.8%)**
Operating Expense	152,903	195,068	(42,165)	(21.6%)
Special Projects Expense	28,674	14,260	14,414	101.1%
Depreciation Expense	134	146	(12)	(8.2%)
Total Expenses	**181,711**	**209,474**	**(27,763)**	**(13.3%)**
Change in Net Position	**1,872**	**1,161**	**711**	**61.2%**
Beginning Net Position	**5,603**	**4,442**	**1,161**	**26.1%**
Ending Net Position	**$ 7,475**	**$ 5,603**	**$ 1,872**	**33.4%**

The source of change in net position is due to the following:

- Operating Revenues are lower due to the State mandated water conservation efforts which reduced water sales.
- Operating Expense is lower due to reduced water sales and vacancies for three positions.
- Special Projects Revenue and Expenses increased primarily due to rebates issued for the Turf Removal Program.
- Non-operating Revenues have increased due to pension reimbursements.

CAPITAL ASSETS

The following is a summary of the District's capital assets at June 30, 2016 and June 30, 2015.

Table 3
Capital Assets
(In thousands of dollars)
June 30:

	2016	2015	Variance	Total Percent Change
Leasehold Improvements	$ 3,415	$ 3,027	$ 388	12.8%
Furniture & Fixtures	448	437	11	2.5%
Subtotal	**3,863**	**3,464**	**399**	**11.5%**
Less Accumulated Depreciation	**(2,653)**	**(2,535)**	**(118)**	**4.7%**
Net Capital Assets	**$ 1,210**	**$ 929**	**$ 281**	**30.2%**

The District purchased a color copier, remodeled our entry way and bathrooms, and contributed to the remodel of the common area shared with Orange County Water District. Additional information regarding capital assets can be found in Notes 1 and 4 of the notes to financial statements.

DEBT ADMINISTRATION

The District had no debt outstanding as of June 30, 2016. No new long-term debt was incurred in the year ended June 30, 2016, and the District does not plan to issue new debt in the year ending June 30, 2017.

BUDGETARY HIGHLIGHTS

The District is governed by a Board of Directors consisting of seven elected members. The Board adopts an annual appropriated budget prior to the start of the fiscal year. The Budget may be revised by Board action during the fiscal year. All amendments to the budget, or transfers of operating budget appropriations to or from reserve accounts, require Board approval. The General Manager is authorized to transfer budget amounts within programs. The legal level of budgetary control is at the total fund level. An actual vs. budget comparison statement for FY 2015-16 is presented in Table 4 to demonstrate compliance with the adopted budget.

Table 4
FY 2016 Actual vs. FY 2016 Budget
(In thousands of dollars)
Year Ended June 30, 2016:

	Actual	Budget	Variance	Total Percent Change
Revenues:				
From Operations	$ 183,242	$ 188,273	$ (5,031)	(2.7%)
Non-Operating Revenues	341	124	217	175.0%
Total Revenues	**183,583**	**188,397**	**(4,814)**	**(2.6%)**
Expenses:				
From Operations				
Cost of Water	146,211	157,044	10,833	6.9%
Other Operating	35,366	31,280	(4,086)	(13.1%)
Depreciation	134	135	1	0.7%
Total Expenses	**181,711**	**188,459**	**6,748**	**3.6%**
Change In Net Position	**$ 1,872**	**$ (62)**	**$ 1,934**	**(3,119.4%)**

The variances on the budget to actual are as follows:

- Revenues from Operations were $5 million lower than budget due to water sales being lower which was offset by the increase in the Turf Removal Program.

- Non-Operating Revenues are higher than budgeted by $217 thousand due to benefits reimbursed and the State of California reimbursement for the Brown Act State Mandated Costs from 1997 – 2002.

- Expenses from Cost of Water purchased were $10.8 million lower than budget due to conservation efforts mandated by the State which decreased water purchases from Metropolitan.

- Expenses from Other Operating were $4 million higher mainly due to the Turf Removal Program.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET AND RATES

The District's Board of Directors and management considered many factors during preparation and approval of the annual budget for FY 2016-17. The budgeted operating expenses total $149.3 million and operating and non-operating revenues total $148.7 million.

Historically, the District has recouped the cost of water purchased from the resale of imported water to the District's 28 water agencies located in Orange County. In addition MWDOC has charged both a per acre-foot surcharge and a per retail meter charge to cover its operating budget. In past history, the District's operating revenue has been approximately 65% from per retail connection charges, and 35% from per acre-foot charges. Beginning in 2011-12, MWDOC began transitioning from the two-component rate structure to one involving only a single component. Over a five year period, ending in 2015-16, MWDOC had been transitioning from a water rate structure involving a per acre-foot charge and a fixed per retail meter charge to a 100% on the per retail meter charge. Beginning FY 2016-17 MWDOC has established two classes of customers, a retail meter and a groundwater customer. Our budget is now allocated between our retail meter customer and groundwater customer. In addition MWDOC's agencies will also pay for the resale cost of imported water.

CONTACTING THE DISTRICT'S FINANCIAL MANAGEMENT

This financial report is intended to provide the Board of Directors, customers, taxpayers, creditors, and other interested parties with a general overview of the District's financial operations and condition at the year ended June 30, 2016, and to demonstrate the District's accountability for the funds it receives. If you have questions about this report or need additional information, you may contact the Municipal Water District of Orange County, Finance Dept., at 18700 Ward Street, Fountain Valley, California 92708, (714) 963-3058, www.mwdoc.com.

Basic Financial Statements

Statement of Net Position
Statement of Revenues, Expenses and Changes in Net Position
Statement of Cash Flows

Municipal Water District of Orange County
Statement of Net Position
June 30, 2016
(with comparative data as of June 30, 2015)

	2016	2015
ASSETS		
Current Assets:		
Restricted Assets:		
Cash and Cash Equivalents (Note 2)	$ 2,949,837	$ 2,474,168
Accounts Receivable Other (Note 6)	1,830,906	1,400,372
Accrued Interest Receivable	1,887	995
Total Restricted Assets	4,782,630	3,875,535
Unrestricted Assets:		
Cash and Cash Equivalents (Note 2)	5,169,438	165,596
Investments (Note 2)	3,144,608	3,115,157
Accounts Receivable:		
Water Sales	31,613,865	26,409,818
Other	4,159,609	5,622,854
Accrued Interest Receivable	36,428	30,658
Deposits and Prepaid Expenses	139,782	156,401
Total Unrestricted Assets	44,263,730	35,500,484
Total Current Assets	49,046,360	39,376,019
Noncurrent Assets:		
Unrestricted Assets:		
Capital Assets, Net (Note 4)	1,209,464	929,243
Net Other Post Employment Benefits (OPEB) Asset (Note 8)	117,085	92,806
Total Noncurrent Assets	1,326,549	1,022,049
TOTAL ASSETS	50,372,909	40,398,068
DEFERRED OUTFLOWS OF RESOURCES		
Deferred amount related to pensions (Note 10)	453,547	355,780
TOTAL DEFERRED OUTFLOWS OF RESOURCES	453,547	355,780

See accompanying notes to basic financial statements.

Municipal Water District of Orange County
Statement of Net Position (Continued)
June 30, 2016
(with comparative data as of June 30, 2015)

	2016	2015
LIABILITIES		
Current Liabilities:		
Payable from Restricted Assets		
Accrued Liabilities	$ 1,637,376	$ 519,213
Advances from Participants	1,967,473	1,123,166
Unearned Revenue (Note 6)	109,305	1,179,095
Due to Participants (Note 5)	4,823	4,746
Total Payable from Restricted Assets	3,718,977	2,826,220
Unrestricted Liabilities:		
Accounts Payable, Metropolitan Water District of Southern California	35,825,894	29,320,297
Accrued Liabilities	2,109,579	1,109,940
Total Unrestricted Liabilities	37,935,473	30,430,237
Total Current Liabilities	41,654,450	33,256,457
Noncurrent Liabilities:		
Unrestricted Liabilities:		
Net Pension Liability (Note 10)	1,376,955	1,360,017
Total Noncurrent Liabilities	1,376,955	1,360,017
TOTAL LIABILITIES	43,031,405	34,616,474
DEFERRED INFLOWS OF RESOURCES		
Deferred amount related to pensions (Note 10)	319,906	534,451
TOTAL DEFERRED INFLOWS OF RESOURCES	319,906	534,451
NET POSITION		
Net Investment in Capital Assets	1,209,464	929,243
Restricted for Trustee Activities	1,063,653	1,049,315
Unrestricted	5,202,028	3,624,365
TOTAL NET POSITION	$ 7,475,145	$ 5,602,923

See accompanying notes to basic financial statements.

Municipal Water District of Orange County

Statement of Revenues, Expenses and Changes in Net Position
For the Fiscal Year Ended June 30, 2016
(with comparative data as of June 30, 2015)

	2016	2015
Operating Revenues:		
Water Sales	$ 154,567,913	$ 196,165,166
Special Projects Revenue	26,801,114	13,678,299
Federal Grant Revenue	556,037	325,874
State Grant Revenue	1,317,104	255,956
Total Operating Revenues	183,242,168	210,425,295
Operating Expenses:		
Cost of Water Sold	146,210,635	188,196,586
Salaries and Employee Benefits	3,861,895	4,092,711
General and Administrative	2,830,610	2,778,997
Special Project Expenses (Note 6)	28,674,255	14,260,129
Depreciation	133,911	145,718
Total Operating Expenses	181,711,306	209,474,141
Operating Income	1,530,862	951,154
Nonoperating Revenues:		
Investment Income	179,964	77,496
Other Income	161,396	132,553
Total Non-Operating Revenues	341,360	210,049
Change in Net Position	1,872,222	1,161,203
NET POSITION - BEGINNING OF YEAR	5,602,923	4,441,720
NET POSITION - END OF YEAR	$ 7,475,145	$ 5,602,923

See accompanying notes to basic financial statements.

Municipal Water District of Orange County

Statement of Cash Flows
For the Fiscal Year Ended June 30, 2016
(with comparative data as of June 30, 2015)

	2016	2015
Cash Flows from Operating Activities:		
Cash received from member agencies-water deliveries	$ 149,363,866	$ 202,907,791
Cash payments to Metropolitan Water District of Southern California	(139,705,039)	(195,299,781)
Cash payments for salaries and employee benefits	(4,181,548)	(4,153,774)
Cash payments for general and administrative expenses	(351,108)	(7,961,175)
Cash received from special projects	28,292,093	15,142,107
Cash payments for special projects	(27,829,947)	(14,325,983)
Cash received for other income	161,396	132,553
Net Cash (used) provided by Operating Activities	5,749,714	(3,558,262)
Cash Flows from Noncapital and Related Financing Activities:		
Payments to RPOI participants (Note 5)	77	81
Net Cash provided by Noncapital and Related Financing Activities	77	81
Cash Flows from Capital and Related Financing Activities:		
Acquisition of capital assets	(414,132)	(11,836)
Net Cash used by Capital and Related Financing Activities	(414,132)	(11,836)
Cash Flows from Investment Activities:		
Investment income	179,964	66,758
Investments purchased	(36,112)	(944,721)
Net Cash provided (used) by Investment Activities	143,852	(877,963)
Net increase/(decrease) in cash and cash equivalents	5,479,511	(4,447,980)
Cash and cash equivalents at beginning of year	2,639,764	7,087,744
Cash and Cash Equivalents at End of Year	$ 8,119,275	$ 2,639,764
Financial Statement Presentation:		
Cash and Cash Equivalents (Restricted)	$ 2,949,837	$ 2,474,168
Cash and Cash Equivalents (Unrestricted)	5,169,438	165,596
Totals	$ 8,119,275	$ 2,639,764

See accompanying notes to basic financial statements.

Municipal Water District of Orange County

Statement of Cash Flows (Continued)
For the Fiscal Year Ended June 30, 2016
(with comparative data as of June 30, 2015)

	2016	2015
Reconciliation of Operating Income to Net Cash (Used)/Provided for Operating Activities		
Operating Income	$ 1,530,862	$ 951,154
Adjustments to Reconcile Operating Income to Net Cash Provided (used) by Operating Activities:		
Depreciation	133,911	145,718
Pension Expense	(74,857)	240,306
Other income	161,396	132,553
Change in Assets and Liabilities:		
(Increase)/Decrease in accounts receivable - water deliveries	(5,204,047)	6,742,625
Decrease in accounts receivable - other	1,463,245	2,345,116
(Increase)/Decrease in deposits and prepaid expenses	16,619	(81,871)
(Increase) in OPEB asset	(24,279)	(55,765)
(Increase) in accounts receivable - special projects	(430,534)	(175,027)
(Increase) in deferred outflows related to contributions subsequent to the measurement date	(220,517)	(288,065)
Increase in accrued and other liabilities	999,639	409,744
(Decrease) portion of accrued liabilities for special item	-	(7,812,706)
Increase/(Decrease) in restricted accrued liabilities	1,118,163	(122,090)
Increase/(Decrease) in advances from participants	844,307	(65,854)
Increase/(Decrease) in unearned revenue for special projects	(1,069,790)	1,179,095
Increase/(Decrease) in accounts payable to Metropolitan Water District of Southern California	6,505,597	(7,103,195)
Total Adjustments	4,218,852	(4,509,416)
Net Cash Provided by Operating Activities	$ 5,749,714	$ (3,558,262)

See accompanying notes to basic financial statements.

Notes to Financial Statements

(1) Organization and Summary of Significant Accounting Policies

Reporting Entity

The Municipal Water District of Orange County (the District) was formed as a municipal water district on January 11, 1951 under the Municipal Water District Act of 1911. The District is a wholesale water supplier and resource planning agency that serves all of Orange County through 28 cities and water agencies (except the Cities of Anaheim, Fullerton, and Santa Ana which are independent member agencies of the Metropolitan Water District of Southern California ("Metropolitan"). As a public agency member of the Metropolitan, the District purchases imported water from Metropolitan and provides the water to the District's 28 member agencies, which provide retail water services to approximately 2.3 million residents with the District's service area of approximately 600 square miles. The District's primary sources of water from Metropolitan are the California State Water Project (SWP) and the Colorado River Aqueduct.

The District is an independent special district of the State of California governed by an elected seven-member board. On January 2001, the District merged with the Coastal Municipal Water District (Coastal) under the recommendation of the Local Agency Formation Commission of Orange County (LAFCO) as part of an effort to streamline local government. The consolidation of the two agencies allows the new district to more efficiently provide wholesale water services at an improved efficiency for the benefit of residents living throughout the service area.

The District's reporting entity includes the accounts of the District and the Municipal Water District of Orange County Water Facilities Corporation (WFC). Formed as a separate California nonprofit corporation on April 20, 1978 to assist in the financing of the Allen-McColloch Pipeline (AMP) and the Flow Augmentation Project (FAP), the WFC has no employees (see Note 5). The WFC is governed by a seven-member board comprised of the District's board members. The WFC had no activity or balances for the year ended June 30, 2016 and is kept active for potential future financing arrangements. WFC is a blended component unit of the District and the District has operational responsibility for WFC.

Basic Financial Statements

The District's basic financial statements consist of the Statement of Net Position the Statement of Revenues, Expenses and Changes in Net Position, the Statement of Cash Flows, and the Notes to the Basic Financial Statements.

Basis of Presentation

The District accounts for its activities as an enterprise fund. An enterprise fund is a proprietary type fund used to account for operations (a) that are financed and operated in a manner similar to private business enterprises - where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

The District's basic financial statements have been prepared on the accrual basis of accounting, and are presented on an economic measurement focus reporting all economic resources and obligations for the period ended June 30, 2016.

Net Position

In the Statement of Net Position, net position is classified in the following categories:

- Net investment in capital assets – This amount consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets as applicable.

- Restricted net position – This amount consists of restricted assets reduced by liabilities. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported. Or a resource subject to constraints that are externally imposed by creditors, grantors, contributors, or laws or regulations of other governments, or imposed by law through constitutional provisions or enabling legislation.

- Unrestricted net position – This amount is the net amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

When both restricted and unrestricted resources are available, it is the District's policy to use restricted resources first and then unrestricted resources as they are needed.

Operating and Non-Operating Revenues and Expenses

The District's primary purpose is to provide a dependable wholesale supply of imported water for its 28 member agencies. Accordingly, operating revenues such as water sales, result from exchange transactions associated with the principal activity of the District, which is the purchase and resale of imported water to the District's member agencies.

Revenues from federal and state grants, reimbursements from participants and special projects (see Note 6), as well as special projects expenses are defined as operating revenues and expenses, respectively. Non-operating revenues consist of investment income and other miscellaneous income.

Water Sales and Cost of Water Sold

Historically, the District's primary source of revenue has been from the resale of imported water to the District's 28 member agencies located in Orange County. Based on Metropolitan's cost of water, each year Metropolitan's Board of Directors approves water rates comprised of a per retail connection charge, readiness to serve charge and a per acre-foot charge. Metropolitan's rates are based on cost of service studies performed on a biennial basis. Water rates are not subject to regulation by the California Public Utilities Commission or by any other local, state, or federal agency. Revenue from sales of water is recognized on the accrual basis as water is delivered.

Over the years, the District's revenue has been approximately 65% from a per retail connection charges, and 35% from per acre-foot charges. In June 2010, MWDOC and its member agencies came to an agreement on changes to MWDOC's structure of charging for its services. First, MWDOC agreed to segregate our services between "Core" services and "Choice" services to give our agencies more "choices" to the services received. It was also agreed that, in addition to the cost of water and other charges from Metropolitan, MWDOC would transition its method of charging for "Core" services in the following manner. Commencing in fiscal year 2011 -12, MWDOC began transitioning to a 100% fixed charge. In the first year of this process, 80% of MWDOC's water rate charges for its operating budget would be fixed, and 20% would be based on water sales charges. Each year for the subsequent four years, MWDOC would increase the amount on fixed charges by 5%, reaching 100% in fiscal year 2015-16. Choice services would be charged directly to the agencies as a "fee for service" on a subscription basis. The settlement agreement that established this fixed charge basis for the operating budget expired at the end of fiscal year 2015-16. The member agencies also pay for the resale of imported water in addition to the other charges noted.

Investments

Fair Value Measurement

As of July 1, 2015, the District retrospectively applied Governmental Accounting Standards Board ("GASB") Statement No. 72, *Fair Value Measurement and Application*. GASB Statement No. 72 provides guidance for determining a fair value measurement for reporting purposes and applying fair value to certain investments and disclosures related to all fair value measurements. The District categorizes the fair value measurements of its investments based on the hierarchy established by generally accepted accounting principles. The fair value hierarchy, which has three levels, is based on the valuation inputs used to measure an asset's fair value: Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The District's investment policy and delegation of investment authority, is reviewed and approved each year by the Board of Directors. The investment policy authorizes the Treasurer to invest, reinvest, sell or exchange permitted fixed income securities in accordance with the California Government Code. Investment income from restricted assets remains restricted.

Cash and Cash Equivalents

Cash and cash equivalents are defined as cash and short-term, highly liquid investments (i.e., Local Agency Investment Fund and Orange County Investment Pool) which are readily convertible to cash and mature within ninety (90) days of original purchase.

Accounts Receivable

The District extends credit to customers in the normal course of operations. Management believes all accounts receivable are collectible. In the event any accounts receivable are determined they are uncollectible, an allowance is recorded.

Capital Assets

Capital Assets are defined by the District as assets with an initial, individual cost of more than $5,000 and useful life greater than one (1) year. Upon retirement, sale or other disposition of capital assets, the cost and related accumulated depreciation are removed from respective accounts and any gains or losses are recognized. Depreciation is computed using the straight-line method over the estimated useful life of the asset, which range from 3 to 5 years for furniture, fixtures, and equipment, and up to 30 years for leasehold improvements.

Deposits and Prepaid Expenses

Certain payments to vendors reflect costs or deposits applicable to future accounting periods and are recorded as Deposits and Prepaid items in the basic financial statements.

Deferred Outflows and Inflows of Resources

The District reported deferred outflows and inflows of resources related to pensions. A deferred outflow of resources is a consumption of net position by the District that is applicable to a future reporting period. A deferred inflow of resources represents an acquisition of net position by the District that is applicable to a future period. Refer to Note 10 for items identified as deferred inflows and outflows as of June 30, 2016.

Compensated Absences

As vacation leave is a vested employee benefit, the District is obligated to compensate employees for all earned but unused vacation days. Employee vacation days are accrued each pay period and reported as accrued liabilities. Depending on the length of employment, employees earn a minimum of 10 to a maximum of 21 vacation days per year. Accumulated vacation days may not exceed 2 times the number of days earned per year without prior approval of the General Manager. Sick leave time is a non-vested employee benefit (i.e. accumulated sick leave is not payable in the event of employee termination), is considered a contingent liability and is not reflected in the accompanying financial statements.

Unearned Revenue

Unearned revenue represents grant revenues received in advance of the recognition of the related expense. Refer to Note 6 for items identified as of June 30, 2016.

Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Municipal Water District of Orange County's (District) California Public Employees Retirement System (CalPERS) plans and additions to and deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United State requires management to make estimates and assumptions that could affect certain reported amounts in the financial statements and accompanying notes. Actual results could differ from those estimates. Also, the preparation of the financial statements inherently requires rounding of amounts and estimates. Management believes that any differences due to rounding are not material.

New Accounting and Reporting Requirements

For the fiscal year beginning July 1, 2015 the District was required to apply the following GASB Statements:

GASB Statement No. 72 – On March 2, 2015, GASB released Statement No. 72 - *Fair Value Measurement and Application*, which would generally require state and local governments to measure investments at fair value. GASB's goal is to enhance comparability of governmental financial statements by requiring fair value measurement for certain assets and liabilities using a consistent definition and accepted valuation techniques. This standard expands fair value disclosures to provide comprehensive information for financial statement users about the impact of fair value measurements on a government's financial position. The requirements are effective for financial statements for periods beginning after June 15, 2015, with early application encouraged. The District implemented this pronouncement effective July 1, 2015.

GASB Statement No. 76 – In June 2015, GASB released Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments.* The objective of this statement is to reduce the GAAP hierarchy to two categories of authoritative GAAP from the four categories under GASB Statement No. 55. The Statement is effective for fiscal years beginning after June 15, 2015. The District implemented this pronouncement effective July 1, 2015.

Effective in Future Years

GASB Statement No. 73 - In June, 2015, GASB released Statement No. 73 *Accounting and Financial Reporting for Pensions and Related Assets that are not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68* – effective for fiscal years beginning after June 15, 2016, except for certain provisions applicable beginning after June 15, 2015. For the provisions effective June 30, 2016, there was no material impact to the District. For the provisions effective subsequent to fiscal year 2015-16, the District has not yet determined the effect on the financial statements.

GASB Statement No. 74 - In June, 2015, GASB released Statement No. 74 *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* – effective for fiscal years beginning after June 15, 2016. This statement applies to OPEB plans and parallels GASB Statement 67 and replaces GASB Statement 43. The District has not yet determined the effect on the financial statements.

GASB Statement No. 75 - In June, 2015, GASB released Statement No. 75 *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* – effective for fiscal years beginning after June 15, 2017. This statement applies to government employers who provide OPEB plans to their employees and basically parallels GASB Statement 68 and replaces GASB Statement 45. The District has not yet determined the effect on the financial statements.

GASB Statement No. 77 – In August 2015, GASB released Statement No. 77, *Tax Abatement Disclosures*. The Statement requires state and local governments to disclose information about tax abatement agreements. The Statement is effective for fiscal years beginning after December 15, 2015. The District has not yet determined the effect on the financial statements.

GASB Statement No. 79 – In December 2015, GASB released Statement No. 79, *Certain External Investment Pools and Pool Participants*. This Statement addresses accounting and financial reporting for certain external investment pools and pool participants. Specifically, it establishes criteria for an external investment pool to qualify for making the election to measure all of its investments at amortized cost for financial reporting purposes. An external investment pool qualifies for that reporting if it meets all of the applicable criteria established in this Statement. The specific criteria address (1) how the external investment pool transacts with participants; (2) requirements for portfolio maturity, quality, diversification, and liquidity; and (3) calculation and requirements of a shadow price. Significant noncompliance prevents the external investment pool from measuring all of its investments at amortized cost for financial reporting purposes. Professional judgment is required to determine if instances of noncompliance with the criteria established by this Statement during the reporting period, individually or in the aggregate, were significant. The requirements of this Statement are effective for reporting periods beginning after June 15, 2015, except for the provisions in paragraphs 18, 19, 23–26, and 40, which are effective for reporting periods beginning after December 15, 2015. For the provisions effective June 30, 2016, there was no material impact to the District. For the provisions effective subsequent to fiscal year 2015-16, the District has not yet determined the effect on the financial statements.

GASB Statement No. 80 – In January 2016, GASB released Statement No. 80, *Blending Requirements for Certain Component Units—an amendment of GASB Statement No. 14*. The objective of this Statement is to improve financial reporting by clarifying the financial statement presentation requirements for certain component units. This Statement amends the blending requirements established in paragraph 53 of Statement No. 14, *The Financial Reporting Entity*, as amended. The requirements of this Statement are effective for reporting periods beginning after June 15, 2016. The District has not yet determined the effect on the financial statements.

GASB Statement No. 81 – In March 2016, GASB released Statement No. 81, *Irrevocable Split-Interest Agreements.* The objective of this Statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of this Statement are effective for periods beginning after December 15, 2016. The District has not yet determined the effect on the financial statements.

GASB Statement No. 82 – In March 2016, GASB released Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73*. The objective of this Statement is to address certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. Specifically, issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2016. The District has not yet determined the effect on the financial statements.

(2) Cash and Investments

Cash and investments at June 30, 2016, are classified in the accompanying financial statements as follows:

Statement of net position:		
Cash and cash equivalents (restricted)	$	2,949,837
Cash and cash equivalents (unrestricted)		5,169,438
Investments (unrestricted)		3,144,608
Total Cash and Investments	$	11,263,883

Cash and investments as of June 30, 2016 consist of the following:

Cash on hand	$	500
Deposits with financial institutions		386,427
Investments		10,876,956
Total Deposits and Investments	$	11,263,883

Investments Authorized by the California Government Code and the District's Investment Policy

The table below identifies the investment types that are authorized for the District by the California Government Code (or the District's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the District's investment policy, where more restrictive) that address interest rate risk and concentration of credit risk. The District's investment policy allows for funds to be divided into two categories, and the policies vary with the nature of the fund. The Operating and Fiduciary Funds authorized investments are below:

Authorized Investment Type	Maximum Maturity	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
U.S. Treasury Obligations	None	None	None
U.S. Government Sponsored Entities Securities	5 years	None	None
Corporate Securities	5 years	30%	None
Commercial Paper	270 days	20%	10%
Negotiable Certificates of Deposit	None	20%	None
Bankers' Acceptances	None	20%	20%
Repurchase Agreements	None	10%	None
Money Market Mutual Funds	N/A	20%	10%
County Investment Pool	N/A	None	None
State Investment Pool	N/A	None	None

The Reserve Funds follow the same authorized investments above, except for Corporate Securities may not exceed 20% of the total Reserve Fund portfolio.

As of June 30, 2016, the District held negotiable certificates of deposit in the amount of $2,382,666, which includes $1,259,533 within the Operating and Fiduciary Funds, and $1,123,134 within the Reserve Funds. This represents 19.16% of Operating and Fiduciary Funds, and 23.95% of Reserve Funds, which exceeds the 20% limit above, but is within the limit for negotiable certificates of deposit allowable by California Government Code. The District plans to clarify its policy to reflect percentage limits within the Reserve Funds in line with California Government Code, pending Board approval.

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair market value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair market value to changes in market interest rates. One of the ways that the District manages its exposure to interest rate risk is by purchasing a combination of shorter-term and longer-term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations. Information about the sensitivity of the fair market values of the District's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the District's investments by maturity:

		Remaining Maturity (in Months)		
Investment Type		12 Months or Less	13 to 24 Months	25-60 Months
Negotiable Certificate of Deposits*	$ 2,382,666	$ 100,264	$ 753,840	$ 1,528,562
Corporate Securities*	764,160	-	-	764,160
Orange County Investment Pool*	7,572,469	7,572,469	-	-
State Investment Pool	157,661	157,661	-	-
	$ 10,876,956	$ 7,830,394	$ 753,840	$ 2,292,722

*Reserve Funds as of June 30, 2016 include $1,123,134 of Negotiable Certificate of Deposit, $764,160 of Corporate Securities, and $2,803,179 of Orange County Investment Pool investments.

Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the minimum rating required by (where applicable) the California Government Code or District's investment policy, or debt agreements, and the actual rating by Standard and Poor's (S&P) as of the year end of each investment type. The District purchases all investments at the minimum rating but some investments' ratings may downgrade during its life but it is the District's policy to hold investments until their maturity.

			Ratings as of Year End			
Investment Type		Minimum Legal Rating	AAAm	A	** A-	Not Rated
Negotiable Certificate of Deposits	$ 2,382,666	N/A	$ -	$ -	$ -	$ 2,382,666
Corporate Securities	764,160	A	-	257,285	506,875	-
Orange County Investment Pool	7,572,469	N/A	7,572,469	-	-	-
State Investment Pool	157,661	N/A	-	-	-	157,661
	$ 10,876,956		$ 7,572,469	$ 257,285	$ 506,875	$ 2,540,327

** Investments conformed to District's investment Policy at time of acquisition

Disclosures Relating to Fair Value Measurement and Application

Fair value measurements are categorized based on the valuation inputs used to measure fair value: Level 1 inputs are quoted prices in active markets for identical assets, Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Investments categorized as Level 2 are valued using market approach using quoted market prices.

The District had the following recurring fair value measurements as of June 30, 2016:

		Fair Value Application			
Investment Type		1	2	3	Uncategorized
Negotiable Certificate of Deposits	$ 2,382,666	$ -	$ 2,382,666	$ -	$ -
Corporate Securities	764,160	-	764,160	-	-
Orange County Investment Pool	7,572,469	-	-	-	7,572,469
State Investment Pool	157,661	-	-	-	157,661
	$ 10,876,956	$ -	$ 3,146,826	$ -	$ 7,730,130

Investments in LAIF and OCIP are uncategorized as deposits and withdrawals are made on the basis of $1 and not fair value. Accordingly, under the fair value hierarchy, these investments are uncategorized.

Concentration of Credit Risk

The District's investment policy contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code. At June 30, 2016 the District did not have investments in more than one issuer (other than U.S. Treasury securities, mutual funds, external investment pools) that represented 5% or more of total District investments.

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and the District's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits:

The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agency. The Government Code also allows financial institutions to secure public agency deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. As of June 30, 2016 the District's deposits with financial institutions are covered by FDIC up to $250,000 the remaining amounts of $1,955,289 were collateralized as described above.

Investment in State and County Investment Pool

The District is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California, and in the Orange County Investment Pool (OCIP) under the oversight of the Orange County Treasurer. The fair market value of the District's investment in these pools are reported in the accompanying financial statements at amounts based upon the District's pro-rata share of the fair market value provided by LAIF and OCIP for the entire LAIF and OCIP portfolios (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF and OCIP, which are recorded on an amortized cost basis.

LAIF is a governmental investment pool managed and directed by the California State Treasurer and is not registered with the Securities and Exchange Commission. An oversight committee comprised of California State officials and various participants provides oversight to the management of the fund. The daily operations and responsibilities of LAIF fall under the auspices of the State Treasurer's office.

The Agency is a participant in the County Treasurer’s Orange County Investment Pool (OCIP). The OCIP is an external investment pool, and is not registered with the Securities Exchange Commission (SEC). The County Treasury Oversight Committee conducts OCIP oversight. The OCIP values participant shares on an amortized cost basis during the year and adjusts to fair value at year-end. For further information regarding the OCIP, refer to the County of Orange Comprehensive Annual Financial Report.

(3) Restricted Assets

Restricted assets are monies held in restricted funds or accounts by the District for the benefit of member agencies, including a rate stabilization fund. As of June 30, 2016, $4,782,630 was reported as restricted assets related to trustee and member agency activities.

(4) Capital Assets

The following is a summary of capital assets at June 30, 2016 with changes therein:

	2015	Additions	Deletions	2016
Furniture,Fixtures and Equipment	$ 436,911	$ 25,521	$ (14,712)	$ 447,720
Leasehold Improvements	3,026,973	388,611	(525)	3,415,059
	3,463,884	414,132	(15,237)	3,862,779
Less accumulated depreciation	(2,534,641)	(133,911)	15,237	(2,653,315)
Net Capital Assets	$ 929,243	$ 280,221	$ -	$ 1,209,464

(5) Due to Participants/Trustee Activities

Since 1978, the District has acted as trustee for certain member agencies in the financing, construction and operation of a water pipeline system and related facilities necessary to improve water quality and provide capacity to accommodate new development in the southeastern portion of the District's service area. The original 1979 pipeline project consisted of the construction of a 26-mile pipeline, which was augmented in 1989 with the construction of a 3-mile parallel pipeline and flow control facility. Together these projects, known as the Allen-McColloch Pipeline (AMP) and the Flow Augmentation Project (FAP), were funded through tax-exempt bonds originally issued by WFC and cash participation by some participating agencies.

In 1995, Metropolitan acquired the AMP and FAP pipelines and related facilities. At the same time, all participating agencies agreed upon a Revised Percentage of Investment (RPOI) formula for sharing of revenue from Metropolitan and other participants for capacity swaps until the final payment of all outstanding debt or liabilities in 2016, or sooner.

As trustee, the District records current year transactions to receive payments from the financing member agencies, and to make payments to member agencies which paid cash. For the year ended June 30, 2016, the District received the final payment of $4,823 from certain AMP member agencies, and disbursed $4,746 by the RPOI formula. As of June 30, 2016, the balance of $4,823 included in "Due to Participants" is to be disbursed to the AMP member agencies in the first quarter of the following fiscal year.

(6) Special Projects Revenue and Expenses, Receivables, and Unearned Revenue

The District receives revenues from member agencies, as well as grants from federal and state agencies, to the benefit of the District's ratepayers for a variety of programs and projects, including water conservation education, water use efficiency, and desalinization feasibility studies. As stipulated in executed grant agreements, the District is reimbursed by the granting agency for eligible grant project expenses which are first incurred by the District. For eligible District-incurred grant expenses not reimbursed by the end of the District's fiscal year, the District accrues revenue for unreimbursed grant funds due the District. As of June 30 2016, the District accrued $1,514,690 of grants receivable (part of Restricted Accounts Receivable Other). The District recognized $28,674,255 in contributions from Metropolitan and member agencies, federal and state grant revenue, and corresponding expenses, for the year ended June 30, 2016.

As of June 30, 2016, the District reported $109,305 of Unearned Revenue, related to Grant and Special Projects Revenue received during year, but not yet spent.

(7) District Retirement Plan – Defined Contribution Plan

On January 1, 1997, the Districts' Board of Directors adopted a defined contribution, private Money Purchase Pension Plan (Plan). Employee contributions were made to the Plan until the District joined the California Public Employees Retirement System (CalPERS). Effective, March 1, 2003, District employees became members of CalPERS and employee contributions to the Plan were frozen. Effective January 2014 and approved December 2014, Resolution No.1999 amends the District's Money Purchase Pension Plan and implementation of provision of Internal Revenue Code section 414(h)(2) to tax defer employee retirement contributions. The amendment permits the funding of both employer and employee "excess compensation" contributions on behalf of the General Manager.

Currently, Board members participate in the 401A Plan. This plan was amended as of January 1, 2015 due to a possible issue with conflicting State and Federal requirements regarding the District making contributions to the Director's retirement plans and whether these contributions would be considered compensation to the Directors subject to State Government Code limits. The District stopped making contributions and the Directors contribute their own 7.5% to their plan. The Directors committed to refund all contributions previously made by the District with interest of which, all current MWDOC Directors have refunded the payments to MWDOC. Participants become vested in the District's Plan 20% per year of service until they become fully vested after five (5) years of service. A summary of this plan's contribution and District payroll information follows:

	July 1, 2015 to June 30, 2016
Participants' contributions	$ 22,866
Participants' contributions as a percent of covered payroll	7.5%

(8) Retiree Medical Plan – Other-Post-Employment Benefits

(a) Plan Description:

Effective October 1, 2011, the District established a single employer Post-Retirement Healthcare Plan (Plan), and has contributed to a Section 115 Irrevocable Exclusive Benefit Trust for the pre-funding of post-employment health care costs. Currently, the District provides health insurance for its retired employees and their dependent spouses (if married and covered on the District's plan at time of retirement), or survivors in accordance with Board resolutions. Medical coverage is provided for retired employees who are age 55 or over and who have a minimum of 10 consecutive years of full-time service with the District. The District pays 100% of the premium for the lowest cost single retiree plan plus 90% of the difference to the plan actually selected. Plus 80% of the combined retiree and spouse's medical premium until age 65. If a retiree in receipt of these benefits dies before reaching age 65, the surviving spouse will continue to receive coverage that the retiree would have been entitled to until age 65 only. When a retiree reaches age 65 and/or is eligible for Medicare, the District reimburses the retiree up to $1,800 per calendar year for the cost of Supplemental Medical Insurance and Medicare Prescription Drug (Part D) Insurance for the lifetime of the retiree only. Retirees who complete at least 25 consecutive years of full-time service receive District-paid dental and vision benefits along with the above-mentioned medical coverage and post-age 65 coverage includes Medicare Part B premium reimbursements until the time of the retiree and spouse's death. Employees hired on or after July 1, 2012 are ineligible for District-paid retiree health benefits.

Plan benefits and contribution requirements of Plan members and the District are established, and may be amended, by the District's Board of Directors.

The following parties are responsible for administration of the Plan:

- Public Agency Retirement Services (PARS) serves as Trust Administrator and Consultant,
- US Bank serves as Trustee, and
- HighMark Capital Management serves as Investment Manager.

PARS issues monthly account reports to the District and HighMark publishes quarterly performance reports.

(b) Funding Policy:

The contribution requirements of Plan members and the District are established, and may be amended, by the District's Board of Directors. Currently, contributions are not required from Plan members. The District is currently funding the OPEB obligation on a pre-funding basis. For the year ended 2016, the District made a total contribution of $155,570 of which, $48,237 were actual health care costs for its retirees and their covered dependents.

(c) Annual OPEB Cost and Net OPEB Obligation:

The District's annual OPEB cost (expense) is calculated based on the Annual Required Contribution of the employer (ARC), an amount actuarially determined in accordance with GASB Statement 45. The most recent GASB 45 actuarial valuation is dated July 1, 2014. The ARC represents a level of funding that, if paid on an on-going basis, is projected to cover normal costs each year and to amortize any unfunded liabilities of the Plan over a period not-to-exceed 30 years. The remaining unfunded actuarially accrued liability is being amortized over 30 year level dollar, open period, using the projected unit credit cost method. The plan is assumed to be closed to new entrants.

The following table shows the components of the District's annual OPEB costs for FY 2015-16, the amount actually contributed to the Plan and changes in the District's net OPEB Asset.

Annual Required Contributions (ARC)	$ 130,117
Interest on Net OPEB Obligation (Asset)	(5,568)
Adjustment to ARC	6,742
Annual OPEB Cost	131,291
Contribution made	(155,570)
(Increase)/Decrease in Net OPEB Obligation (Asset)	(24,279)
Net OPEB (Asset) at June 30, 2015	(92,806)
Net OPEB (Asset) at June 30, 2016	$ (117,085)

(d) Three-Year Trend Information:

For fiscal year 2016, the District's annual OPEB cost (expense) of $131,291 was equal to the ARC including adjustments. Information on the annual OPEB cost, Percentage of Annual OPEB Cost Contributed, and Net OPEB Obligation (Asset) are presented below:

Fiscal Year Ended	Annual OPEB Cost	Actual Contribution (Net of Adjustments)	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation (Asset)
6/30/2014	$ 204,985	$ 273,982	133.66%	$ (37,041)
6/30/2015	130,586	186,351	142.70%	(92,806)
6/30/2016	131,291	155,570	118.49%	(117,085)

(e) Funded Status and Funding Progress:

As of July 1, 2014, the most recent actuarial valuation date, the plan was 64.14% percent funded. The actuarial accrued liability for benefits was $1,740,686, and the actuarial value of assets was $1,116,390, resulting in an Unfunded Actuarial Accrued Liability (UAAL) of $624,296. The covered payroll (annual payroll of active employees covered by the plan) was $2,673,190 and the ratio of the UAAL to the covered payroll was 23.35%.

Actuarial valuations of an on-going plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trends. Amounts determined regarding the funded status of the Plan and the annual required contributions of the District are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

(f) Actuarial Methods and Assumptions:

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and the plan members at that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets consistent with the long-term perspective of the calculations.

In the July 1, 2014 actuarial valuation report, the projected unit credit cost method was used. The actuarial assumptions included a 6.00% investment rate of return (net of administrative expenses), a trend rate for the fiscal year beginning 2014 of 5.00% to 8.00% for healthcare costs, and 4.00% for dental and vision costs, and an inflation rate of 6.00%. The District's unfunded actuarial accrued liability in 2013 was to be accelerated to be fully funded within 10 years, however subsequent the year-end, the District approved full funding in fiscal year 2016-17.

(9) Risk Management

The District is a member of the Association of California Water Agencies Joint Powers Insurance Authority (JPIA) (Insurance Authority). The Insurance Authority is a risk-pooling self-insurance authority, created under provisions of California Government Code Sections 6500 et. seq. The purpose of the Authority is to arrange and administer programs of insurance for the pooling of self-insured losses and to purchase excess insurance coverage for participating member agencies.

The Insurance Authority bills the District a deposit premium at the beginning of each year, which is placed in a reserve fund to cover the self-insurance portion of any claim. Settlements and/or expenses related to claims during the year are then charged to the reserve. If the balance of the reserve at the end of the year is deemed too low in relation to the amount of outstanding claims, the District is billed for additional premiums. When the claims are fully settled, any amounts remaining in the reserve are refunded to the District.

At June 30, 2016, the District participated in the Authority's insurance programs as follows:

Property Loss - The Insurance Authority has pooled self-insurance up to $100,000 per occurrence and has purchased excess insurance coverage up to $150 million. The District has a $1,000 deductible for buildings, personal property and fixed equipment.

General, Auto and Public Officials Liability - The Insurance Authority has pooled self-insurance up to $2 million per occurrence, and has purchased excess insurance coverage up to $60 million.

Crime Policy/Fidelity Bond - The Insurance Authority has pooled self-insurance up to $100,000 per occurrence and has purchased excess insurance coverage up to $2 million. The District has a $1,000 deductible.

The District pays annual premiums to the Insurance Authority for all coverages. There were no instances in the past three years when a settlement exceeded the District's coverage.

Workers' Compensation – This Plan is administered through Special District Risk Management Authority (SDRMA). The Insurance Authority is self-insured up to the statutory limit per occurrence. Employer's liability is insured up to a $5 million limit per occurrence. SDRMA maintains a Self-Insured Retention that is periodically adjusted based on market conditions.

The District pays annual premiums for all coverages. There were no instances in the past three years when a settlement exceeded the District's coverage and the District did not file any claims against any of the policies.

(10) Cost-Sharing Defined Benefit Plan

(a) General Information about the Pension Plan

Plan Descriptions – Effective March 1, 2013, all qualified permanent and probationary employees are eligible to participate in the District's employee pension plan, a cost-sharing multiple employer defined benefit pension plan administered by the California Public Employees Retirement System (CalPERS). The CalPERS Plan (Plan) consists of a miscellaneous pool and a safety pool (referred to as "risk pools"), which are comprised of individual employer miscellaneous and safety rate plans, respectively. The risk pools are included within the Public Employees' Retirement Funds C (PERF C). Benefit provisions under the Plans are established and may be amended by State statute and the District's resolution. CalPERS issues publicly available reports that include a full description of the pension plans regarding benefit provisions, assumptions, membership information, and related financial information can be found on the CalPERS website at: http://www.calpers.ca.gov.

Benefits Provided – CalPERS provides retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

The Plans' provisions and benefits in effect at June 30, 2016, are summarized as follows:

	Miscellaneous	
Hire Date	Prior to January 1, 2013	On or after January 1, 2013
Formula	2.0% @55	2.0% @62
Benefit vesting schedule	5 years of service	5 years of service
Benefit payments	monthly for life	monthly for life
Retirement age	50-63	52-67
Monthly benefits, as a % of annual salary	1.426% to 2.418%	1.0% to 2.5%
Required employee contribution rates	7%	6.250%
Required employer contribution rates	10.514%	6.237%
Pensionable Compensation Cap*	No Cap	$136,440

*Will increase to reflect changes in the Consumer Price Index

Contributions – Section 20814(c) of the California Public Employees' Retirement law requires that the employer contribution rates for all public employers are determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in rate. Funding contributions for Plans are determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The District is required to contribute the difference between the actuarially determined rate and the contribution rates of employees.

Contributions recognized by the pension plan from the employer for the year ended June 30, 2016 were $220,517. The District also contributed 3% of the employee's contribution, or $61,206, on behalf of employees during the year. The District is phasing out contributions paid on behalf of employees by 1% per year, until completely eliminated.

(b) Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions

As of June 30, 2016, the District's reported net pension liabilities for its proportionate share of the net pension liability of the Plan is as follows:

	Proportionate Share of Net Pension Liability
Miscellaneous	$ 1,376,955

The District's net pension liability was measured as the proportionate share of the net pension liability of the collective cost-sharing plan. The District's net pension liability was measured as of June 30, 2015, and the total pension liability for the Plan was used to calculate the net pension liability determined by an actuarial valuation as of June 30, 2014 rolled forward to June 30, 2015 using standard update procedures. The District's proportion of the net pension liability was based on a projection of the District's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined. The District's proportionate share of the net pension liability for the Plan as of June 30, 2014 and 2015 were as follows:

	Miscellaneous
Proportion - June 30, 2014	0.02186%
Proportion - June 30, 2015	0.02006%
Change - Increase (Decrease)	-0.00180%

At the year ended June 30, 2016, the District's recognized pension expense/(credit) of $(74,857). At June 30, 2016, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
District contributions subsequent to the measurement date	$ 220,517	$ -
Differences between actual and expected experience	22,083	-
Changes in assumptions	-	208,927
Differences between District contributions and proportionate share of contributions (2014)	-	6,241
Differences between District contributions and proportionate share of contributions (2015)	210,947	-
Net difference between projected and actual earnings on pension plan investments	-	104,738
Total	$ 453,547	$ 319,906

The amount of $220,517 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2017. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year ended June 30,	
2017	$ (21,043)
2018	(20,350)
2019	(19,298)
2020	(26,185)
	$ (86,876)

Actuarial Assumptions – The total pension liabilities in the June 30, 2014 actuarial valuation were determined using the following actuarial assumptions.

	Miscellaneous
Valuation Date	June 30, 2014
Measurement Date	June 30, 2015
Actuarial Cost Method	Entry-Age Normal Cost Method
Actuarial Assumptions:	
Discount Rate	7.65%
Inflation	2.75%
Projected Salary Increase	Varies by Entry Age Service
Investment Rate of Return	7.5% [(2)]
Mortality	Derived using CalPERS' Membership Data for all funds

[(2)] Net of pension plan investment and administrative expenses; includes inflation.

The probabilities of mortality are based on the 2010 CalPERS Experience Study for the period from 1997 to 2007. Pre-retirement and Post-retirement mortality rates include 5 years of projected mortality improvement using Scale AA published by the Society of Actuaries. Further details of the Experience Study can be found on the CalPERS website at: http://www.calpers.ca.gov/index.jsp?bc=/about/forms-pubs/calpers-reports/actuarial- reports.xml

Change of Assumption – GASB 68 states that the long-term expected rate of return should be determined net of pension plan investment expense without a reduction for pension plan administrative expense. The discount rate was changed from 7.5% to 7.65% as of June 30, 2015 measurement date to correct the adjustment which previously reduced the discount rate for administrative expense.

Discount Rate – The discount rate used to measure the total pension liability was 7.65% for the Plan. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that the District's contributions will be made at rates equal to the difference between actuarially determined contributions rates and the employee rate. Based on those assumptions, each pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

In determining the long-term expected 7.65% rate of return on pension plan investments, CalPERS used a building-block method in which best-estimate ranges of expected future real rates of return are developed for each major asset class. Using historical returns of all the funds' asset classes, expected compound (geometric) returns were calculated over the short- term (first 10 years) and the long-term (11-60 years) using a building block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for the fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest one quarter of one percent. The target allocation and best estimates of arithmetic real rates of return for each major asset class are the same for the Plan. These geometric rates of return are net of administrative expenses and are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return Years 1-10	Long-term Expecte Real Rate of Return Years 11 +
Global Equity	51%	5.25%	5.71%
Global Debt Securities	19%	0.99%	2.43%
Inflation Assets	6%	0.45%	3.36%
Private Equity	10%	6.83%	6.95%
Real Estate	10%	4.50%	5.13%
Infrastructure and Forestland	2%	4.50%	5.09%
Liquidity	2%	(0.55%)	(1.05%)
Total	100%		

Sensitivity of the District's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate – The following presents the District's proportionate share of the net pension liability, calculated using the discount rate, as well as what the District's proportionate share of net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate.

	1% Decrease (6.65%)	Discount Rate (7.65%)	1% Increase (8.65%)
District's proportionate share of the net pension liability	$ 2,248,308	$ 1,376,955	$ 660,362

Pension Plan Fiduciary Net Position – Detailed information about the pension plan's fiduciary net position is available in the separately issued CalPERS financial reports.

(11) Commitments and Contingencies

The District is involved in various litigation from time to time arising from the normal course of business. In the opinion of management and legal counsel, the District is not involved in any litigation that is expected to have a material adverse effect on the overall financial position of the District at June 30, 2016.

Required Supplementary Information

(Unaudited)

Other Post-Employment Benefit Plan
Schedule of Funding Progress

Retiree Healthcare Plan

Actuarial Valuation Date (1)	Actuarial Accrued Liability (a)	Actuarial Value of Plan Assets (AVA) (b)	Unfunded Actuarial Accrued Liability (UAAL) (a)-(b)	Funded Ratio ((b)/(a)	Annual Covered Payroll (C)	UAAL as a % of Payroll Percentage of Covered Payroll [(a)-(b)/(c)]
7/1/2008	$ 1,428,095	$ -	$ 1,428,095	0.00%	$ 2,707,871	52.74%
7/1/2011	1,610,754	-	1,610,754	0.00%	2,734,534	58.90%
7/1/2014	1,740,686	1,116,390	624,296	64.14%	2,673,190	23.35%

Municipal Water District of Orange County
Required Supplementary Information (Unaudited)
For the Year Ended June 30, 2016

Cost Sharing Retirement Plan
Schedule of the District's Proportionate Share of the Net Pension Liability
Last Ten Years*

	2016	2015
Proportion of the net pension liability	0.02006%	0.02186%
Proportionate share of the net pension liability	$ 1,376,955	$ 1,360,017
Covered - employee payroll	$ 2,640,576	$ 2,601,571
Proportionate Share of the net pensions liability as a percentage of covered-employee payroll	52.15%	52.28%
Plan fiduciary net position as a percentage of the total pension liability	78.40%	79.82%

Notes to Schedule:
Changes in Assumptions - The discount rate changed from 7.5% as of the June 30, 2014 measurement date to 7.65% as of the June 30, 2015 measurement date.

* Fiscal year 2015 was the first year of implementation, therefore only two years are shown

Municipal Water District of Orange County
Required Supplementary Information (Unaudited)
For the Year Ended June 30, 2016

Cost Sharing Retirement Plan
Schedule of Contributions
Last Ten Years*

	2016	2015
Actuarially determined contributions	$ 220,517	$ 288,065
Contributions in relation to the actuarially determined contribution	(220,517)	(288,065)
Contribution deficiency (excess)	$ -	$ -
Covered-employee payroll	$ 2,848,942	$ 2,640,576
Contributions as a percentage of covered-employee payroll	7.74%	10.91%

* Fiscal year 2015 was the first year of implementation, therefore only two years are shown

ACTION ITEM
November 16, 2016

TO: Board of Directors

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

Robert J. Hunter, General Manager

Staff Contacts: Cathleen Harris, Administrative Services Manager

SUBJECT: **ADOPT RESOLUTION APPROVING AMENDMENT NO. 1 TO THE DISTRICT'S MONEY PURCHASE PENSION PLAN**

STAFF RECOMMENDATION

It is recommended that the Board of Directors Adopt Resolution approving Amendment No. 1 to the District's Money Purchase Pension Plan, as presented.

COMMITTEE RECOMMENDATION

Committee concurred with staff recommendation.

DETAILED REPORT

At the October 19th Board Meeting, the MWDOC Board authorized a 4% salary increase to be paid in the form of deferred compensation to the extent possible under our programs and; the contribution be made by the District on behalf of the General Manager based on his performance.

Staff coordinated with Legal Counsel to develop the appropriate language to reflect the Board's action at the October Board Meeting. In addition, after reviewing Section 6.1 and 6.3 of the Pension Plan, it was determined that additional amendments would be appropriate to allow for future contributions at the Board's discretion and to reflect current practice consistent with PERS, as follows:

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

- Revision to Section 6.1(a), amend the language to allow for flexibility in calculating the appropriate Employer Contribution amount made by the District on behalf of the General Manager under the California Public Employees' Pension Reform Act of 2013.
- Addition of Section 6.1(b), in accordance with the Board's action to make the contribution on behalf of the General Manager in an amount of 4%.
- Addition of Section 6.1 (c), to allow for future contributions by the Board on behalf of the General Manager. Proposed language is included in the amendment to allow the Board to authorize discretionary contributions, subject to limitations in accordance with the Plan and applicable laws.
- Revision to Section 6.3 (b), to reflect that the General Manager's Contribution (Employee Contribution) to CalPERS is consistent with the CalPERS required contribution amount and in accordance with the applicable statutes.

RESOLUTION NO. _____

RESOLUTION APPROVING AMENDMENT NO. 1 TO THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY MONEY PURCHASE PENSION PLAN

WHEREAS, the Municipal Water District of Orange County ("District") previously established a qualified retirement plan known as the Municipal Water District of Orange County Money Purchase Pension Plan (the "Pension Plan") for the benefit of certain employees, and subsequently amended and restated the Pension Plan effective January 1, 2016; and

WHEREAS, it is necessary at this time to amend the Pension Plan for the purpose of providing for additional employer contributions to be made for Employer's General Manager in accordance with his employment agreement; and

WHEREAS, it is further necessary to amend the Pension Plan to provide for flexibility in calculating the appropriate contribution ~~d~~rate under the California Public Employees' Pension Reform Act of 2013; and

WHEREAS, Best, Best & Krieger LLP ("BBK") has prepared an Amendment No. 1 to the Pension Plan, effective October 19, 2016, for review by the Board of Directors.

NOW, **THEREFORE**, be it resolved, determined and ordered by the Board of Directors of the Municipal Water District of Orange County as follows:

Section 1. That the above recitals are true and correct.

Section 2. That the Board of Directors hereby approves Amendment No. 1 to the Pension Plan heretofore considered and discussed.

Section 3. That the District hereby authorizes General Manager, or his or her designee, to duly execute Amendment No. 1 on behalf of the District.

APPROVED, SIGNED AND ADOPTED on this _____ day of _____, 2016 by the following roll call vote:

AYES:

NOES:

ABSENT:

ABSTAINED:

_____
Maribeth Goldsby, District Secretary
Municipal Water District of Orange County

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
MONEY PURCHASE PENSION PLAN

AMENDMENT NO. 1

R E C I T A L S

A. Municipal Water District of Orange County ("Employer"), maintains the MUNICIPAL WATER DISTRICT OF ORANGE COUNTY MONEY PURCHASE PENSION PLAN (the "Plan"), amended and restated effective January 1, 2016, for the benefit of certain Employees and their Beneficiaries.

B. The Employer desires to amend the Plan for the purpose of providing for additional employer contributions to be made for Employer's General Manager in accordance with his employment agreement.

C. Section 12.1 of the Plan provides that the Employer reserves the right to amend the Plan at any time.

A M E N D M E N T

NOW, THEREFORE, effective October 19, 2016, Employer hereby amends the Plan, as follows:

1. Section 6.1 is amended in its entirety to read as follows:

"6.1 Employer Contributions.

(a) Effective January 1, 2014, the Employer shall annually pay into the Trust, on behalf of the General Manager in accordance with the terms of a separate employment agreement between the General Manager and Employer, an amount equal to the amount that would otherwise be contributed by the Employer on behalf of the General Manager to ~~the~~ CalPERS but for the limit on pensionable compensation set forth in California Government Code Section 7522.10(c) and subject to any regulations or opinions issued by the CalPERS Board of Administration and/or California Attorney General's Office.

(b) Effective October 19, 2016, the Employer shall make an additional contribution ~~in the amount of a 4% salary increase~~ on behalf of the General Manager in accordance with the terms of a separate employment agreement between the General Manager and Employer, in an amount equal to a percentage of Compensation below the pensionable compensation limit established by California Government Code Section 7522.10(c), but not to exceed ~~$10,160.~~ an amount equivalent to a 4% increase in the General Manager's salary as set forth in said employment agreement.

(c) The Employer may make additional discretionary contributions on behalf of the General Manager, subject to the limitations set forth in the Plan and under applicable law."

2. Paragraph (b) of Section 6.3 is amended in its entirety as follows:

"(b) Employee Pick-Up Contributions. The General Manager may irrevocably elect to make annual contributions to the Plan in an amount equivalent to what would be the General Manager's required contribution to CalPERS but for the limit on pensionable compensation set forth in California Government Code Section 7522.10(c). Such contribution shall be treated as an Employer Contribution for purposes of Code Section 414(h)(2). Once the preceding election has been made, the General Manager shall not be permitted to revoke such election."

IN WITNESS WHEREOF, the Employer has caused this amendment to be executed on_____, 2016.

EMPLOYER:

By:_____

APPROVED AS TO FORM AND CONTENT:
BEST BEST & KRIEGER LLP

By:_____
Attorneys for Employer

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

ACTION ITEM
November 16, 2016

TO: Board of Directors

FROM: **Planning and Operations Committee**
(Directors Dick, Finnegan and Hinman)

Robert Hunter
General Manager

Staff Contact: Jonathan Volzke

SUBJECT: **Vendor Selection for Production of CHOICE Whiteboard Videos**

STAFF RECOMMENDATION

Staff recommends the Board of Directors approve Spotlight Video as the CHOICE whiteboard vendor

COMMITTEE RECOMMENDATION

Committee will review this item on November 16, 2016 and make a recommendation to the Board.

DETAILED REPORT

The 2016-17 CHOICE Communications Program is a two-pronged offering: An "OC Water Magazine" that would tell the story of how OC gets it water and highlight participating water agencies and a series of three (3) "whiteboard" animated videos that would (1) Show where OC gets its water, (2) demonstrate how water is recycled and used and (3) The California Water Fix and the importance of the project to Orange County.

The CHOICE programs were developed after discussions with public-affairs representatives and general managers from member agencies, as well as a desire to provide outreach communications tools during a public relations "quiet period" after an extended period of intense drought outreach.

Requests for proposals were sent to three qualified vendors on October 14: Spotlight Videos, Whiteboard Geeks and Wizmotions Videos and posted on the District's website.

Budgeted (Y/N): Y	Budgeted amount: 119,098	Core	Choice X
Action item amount: $28,750	Line item:		
Fiscal Impact (explain if unbudgeted):			

Proposals were received from Spotlight Video, which is based in Orange County, and Whiteboard Geeks, which is based in Chesterfield, VA. The complete proposals were sent to public affairs representatives from four member agencies participating in the whiteboard video CHOICE program: El Toro Water District, Santa Margarita Water District, South Coast Water District and Yorba Linda Water District. They were also reviewed by MWDOC public affairs staff.

The two offered stark differences: While Whiteboard Geeks was seen by reviewers as the "Cadillac" of animation producers, the cost was also significantly higher than that of Spotlight: Whiteboard Geeks proposed $99,000 for the three videos, compared to $28,725 for all three videos by Spotlight.

The concurrence is that Spotlight Video will perform the work at a better price, and the Orange County location will be advantageous for meetings and editing.

The company's website, with samples of its work, is at http://www.spotlight-video.net/spotlight-whiteboard.html

The anticipated CHOICE budget presented to participating agencies was $119,098 for the whiteboard videos, so selecting Spotlight Video would represent a significant savings to member agencies.

Agencies participating in the whiteboard CHOICE program are: City of Brea
City of Buena Park, East Orange County Water District, El Toro Water District, City of Fountain Valley, City of Garden Grove, City of Huntington Beach, City of La Habra, City of Newport Beach, City of Orange, City of San Clemente, Santa Margarita Water District, City of Seal Beach, Serrano Water District. South Coast Water District, Trabuco Canyon Water District, City of Tustin and Yorba Linda Water District.

The agencies can post the videos on their website and other social-media channels, as well as use them in community presentations. Each video will be branded with the agency's logo and MWDOC's logo.

MWDOC will write the video scripts, with assistance from participating agencies and the vendor.

Attachment A
PROPOSAL COVER SHEET

All blanks in the Cover Sheet must be completed, and the Cover Sheet must be signed by a representative of Respondent with legal authority to bind the Respondent to all quotes submitted herein.

Respondent Business/Organization: SPOTLIGHT VIDEO LLC (dba of Baseball Prospect Video)

Mailing Address: 22611 Revere Rd.
Lake Forest, CA 92630

City, State, Zip Code: _____

Physical Address (If Different): _____

City, State, Zip Code: _____

Contact Person: Kimberly Porrazzo

Title: Co-owner

Telephone Number: (_____) 949-887-8314

Fax Number: (_____)_____

E-mail Address: kimberly@spotlight-video.net

CERTIFICATION OF PROPOSAL: On behalf of respondent, the undersigned certifies that all information submitted herein will be honored by Respondent for a minimum period lasting until June 12, 2010. The undersigned certifies that he or she is legally authorized to so bind respondent.

Kimberly Porrazzo
Digitally signed by Kimberly Porrazzo
DN: cn=Kimberly Porrazzo, o, ou, email=kimberlyporrazzo@cox.net, c=US
Date: 2016.10.28 08:23:19 -08'00'

Signature

10-26-16
Date

Kimberly Porrazzo
Printed/Typed Name

General Information

Tax/Legal Status of Business:

[ ] Corporation [ ] Sole Proprietorship [x] Partnership LLC
[ ] Public [ ] Not for Profit [ ] Other _____

Date business established: January 21, 2014

State Controller ID Number (If available): 026-9499-0

Federal Taxpayer ID Number: 46-4524071

----- Please turn in this Proposal Cover Sheet -----

A. SPOTLIGHT VIDEO TEAM

This is the group assigned to the MWDOC project:

Kimberly Porrazzo / Editorial Director, Spotlight Video

[Will serve as project manager]
Skills: interviewing, writing, editing, video scripting, storyboarding, project management, deadline-oriented

Kimberly is co-owner of Spotlight Video, a video and web content agency created nearly three years ago. The company produces web videos for clients that include the Roman Catholic Diocese of Orange and FivePoint, the leading regional land developer. As former chief content officer for Churm Media, a regional media company, she was instrumental in creating the company's video and digital offerings including the only daily business videocast in Orange County. When Churm Media was acquired by Freedom Communications, she served as editor-in-chief for the Special Interest Magazine Group of the *Orange County Register*. In her role, she oversaw a portfolio of glossy magazines that focused on business, lifestyle, family and golf. She developed the Family section of the *Orange County Register* newspaper, as well as created and managed the *Orange County Catholic* newspaper, the largest Catholic weekly paper in the country. Her digital expertise earned her recognition from the O.C. Press Club and her work has been honored by the Western Publisher's Assoc., the Parenting Publications Assoc., and the U.S. Small Business Administration. In 2014, with the desire to merge her storytelling skills with digital video, Porrazzo launched Spotlight Video.

Anthony Porrazzo / Producer-Director, Spotlight Video

[Will serve as production manager]
Skills: visual storytelling, storyboarding, videography, editing, After Effects, sound correction, color correction, deadline-oriented

Anthony is a graduate of Cal State Fullerton where he earned his B.A. in Radio/TV/Film. He is an award-winning videographer and editor, having been lauded by the Orange County Press Club with two first place awards in his first year with Spotlight Video. He also was recognized by the National Catholic Press Association for his work in video. His background is a marriage of baseball and video production. His first big league opportunity in Major League Baseball was with the San Francisco Giants, where he was part of the World Series-winning baseball operations team. He currently edits highlight footage at the professional level for the Los Angeles Angels of Anaheim. He now works behind the camera and at the editing bay for Spotlight as its producer and director.

Nick Porrazzo / Assistant Web Editor, Spotlight Video

[Will serve as production assistant]
Skills: "Big Screen" production perspective, set management, assets management, production coordination

Nick is most known for his role in the Academy Award-nominated film "Moneyball," starring Brad Pitt. He was cast in the principal role of Jeremy Giambi after being spotted by a scout from the San Diego Padres who suggested he audition for the movie. He went on to appear in "Wild Card" (with Jason Statham) and "Think Like a Man 2" where he was the stand-in for lead actor Jerry Ferrara. He has also had several background roles in T.V. shows including "CSI" and "NCIS" and "Brooklyn Nine-Nine." Nick brings major motion picture "in-front-of-the-camera"

perspective to the work of Spotlight Video, working with talent, assisting in video camera work and on set. He works as assistant web editor where he manages website content for our clients and oversees social media.

Schedule of hours/percentage for each team member, per video*

Kimberly Porrazzo / story production, storyboarding, video production, project mgmt.	35 hrs estimate per video	100%
Anthony Porrazzo / storyboarding, video production and editing	30 hrs estimate per video	100%
Nick Porrazzo / on-set consulting, production assistant	20 hrs estimate per video	50%
Bill Hunt / Cartoonist / Illustrator (subcontractor)	10 hrs estimate per video	25%
Terry Moore / Voiceover artist (subcontractor)	5 hrs estimate per video	12.5%

* This will be adjusted based on need as the project evolves to assure delivery of final project to client's satisfaction

B. SPOTLIGHT VIDEO REFERENCES

Spotlight Video enjoys a growing list of clients that have come to appreciate its ability to tell their stories in thoughtfully produced videos, while respecting budget constraints. Our team takes pride in our pre-production work during which we collaborate with clients on their vision for the final product and then work in measured steps to achieve that, all within budget and by established deadlines.

We work with Canon HD equipment, studio quality audio equipment, and Final Cut Pro editing software.

Our clients include:

- The Roman Catholic Diocese of Orange / news feature videos
- Southern California News Group Custom Content (formerly OC Register) / sports profile videos
- FivePoint / feature videos
- Human Options / campaign promotion videos
- Bracken's Kitchen / social media-ready videos
- Berkshire Hathaway Home Services / property videos

Cost Control
We have successfully worked with clients to control costs and work within an established budget. As a "web video" production company we are, at the outset, priced more affordably than broadcast video companies. In addition, we work with clients to streamline expenses where possible, without sacrificing quality. Using a client's archive of photos and videos has helped contain costs in the case of FivePoint, one of our largest clients. Providing voiceovers instead of hiring voiceover artists is another. We have provided narration for many of our clients.

Quality of Work
As indicated by the comments from our clients (below), we have delivered quality work to the satisfaction of all. Beyond that, our video production work has received honors from the Orange County Press Club and from the National Catholic Press Association, including two Best Video awards.

Ability to Meet Deadlines
Most of our video projects for clients have been tied to media placement, which comes with firm deadlines. For example, FivePoint has a campaign that runs in the *Orange County Register* every two weeks. The videos we produce as a part of the companion digital campaign MUST be delivered on time so as to be posted online as the newspaper is delivered. We have not missed a target deadline.

The following five clients provided a written reference for this proposal and are available to answer questions from the selection panel.

FIVEPOINT | ALISO VIEJO, CA

Background: Spotlight was awarded a 22-video contract by FivePoint to produce videos that tell the story of the city of Irvine. The campaign, titled "Irvine Inspired" has several components that include bi-weekly print stories in the *Orange County Register* as well as a website www.irvineinspired.com, on which the videos Spotlight produces are posted. Note: Spotlight also created and continues to manage the website.

"FivePoint, the largest master-planned, mixed-used land developer in California, has been working with Spotlight Video since March 2016 on several key initiatives related to telling our considerable story of impact both externally to the public as well as internally to our 200 associates throughout the state. Spotlight was retained because of their reputation as widely-recognized and respected content developers across all platforms, but most notably video. In the eight months we have engaged Spotlight, we have been thrilled with their ability to understand our story and tell it in a compelling fashion. They know how to work with high-profile individuals and their organization and planning as well as execution and finished work on time is second to none. This a company that understands the critical importance of collaborating with a client and following through. I would recommend Spotlight to any entity in needs of skilled storytellers and top professionals at their craft."

Steve Churm, Chief Content Officer | FivePoint / 949.349.1034 (o) 714.914.0611 (m)
steve.churm@fivepoint.com

SOUTHERN CA NEWS GROUP | SANTA ANA, CA (FORMERLY OC REGISTER CUSTOM CONTENT)

Background: Spotlight Video has for two years been the producer of weekly videos for the Roman Catholic Diocese of Orange, a client of the *Orange County Register's* custom content group. The videos feature outstanding athletes of the Trinity League.

"I'm writing to offer a reference for Anthony Porrazzo and Spotlight Video for your project. I've worked with Anthony on an ongoing series of videos for the high school sports section of the Orange County Catholic, the official weekly newspaper of the Diocese of Orange. In my position as managing editor for SCNG Custom Content, a division of Southern California News Group, parent of The Orange County Register, I've collaborated with Anthony on our featured athlete of the week profiles, which includes an on-camera interview with high school student-athletes. Anthony has been a huge asset in making this series possible. He has been with the project since it launched in August 2014 and helped develop the format of the interviews, working well with the other members of the shoot team and communicating with the schools and athletes. He has been a thorough professional in all parts of the process, has never missed a scheduled shoot or a deadline and always delivers a polished product."

Caitlin Adams, Managing Editor | Southern California News Group / 714.796.2432

Bracken's Kitchen | Fountain Valley, CA

"It gives me great pleasure to write this brief letter of recommendation for Kimberly Porrazzo and her team at Spotlight Video. I have known Kimberly for more than 10 years now and have always admired the work she does. Regardless of her job or focus she has always proven to deliver high quality results in a positive and professional manner. Recently we had the pleasure

of working with her team for a video they produced about Bracken's Kitchen, for another client. True to form Kimberly and her team did an excellent job, not only telling the story of Bracken's Kitchen on video, but they did it very professionally with real care and consideration for all those involved. The end product was exceptional. In fact it was so well done that we called upon them to create a unique, made for internet, video. That too was exceptional and a piece that we have gotten a lot of mileage out of. If you are considering video to tell your story, please do yourself a favor and trust Kimberly and her team to deliver."

Bill Bracken, Founder and President | Bracken's Kitchen / bill@brackenskitchen.com

Berkshire Hathaway Home Services | Mission Viejo, CA

"As a Realtor with Berkshire Hathaway Home Services, Calif. Properties, I wanted a way to promote my listings beyond the usual property flyers. I've now had Anthony Porrazzo do several professional videos of new listings for me and they are fabulous. He's a perfectionist and takes the time to ensure he gets the best angles & lighting possible. He has a great sense of composition, which shows in the final product. Coupled with excellent editing & audio overlay, his work is superior. I won't hesitate to recommend him or use him in the future."

Brenda Flick, realtor | BHHS Calif. Properties Mission Viejo Office / 949.770.6562

Human Options | Tustin, CA

"We have greatly enjoyed working with Spotlight Video. From generating video concept ideas and delivering a storyboard that captured all our key messages, to seamless video production, they have provided a full service experience that is top notch. Their camera operators provided a comprehensive shot list, worked closely with talent to coach on line delivery and ensured we got the best shots, including plenty of b-roll footage. Not only is the team highly skilled and professional, but they have been an absolute pleasure to work with. They have been true partners and brought our program to life through video."

Melissa Walker, Fund Development Manager |Human Options / 949.737.5242 x317

C. EXAMPLES OF WORK

Spotlight Video Promo
This whiteboard video was produced as a promotional tool for Spotlight Video.

http://www.spotlight-video.net/spotlight-whiteboard.html

FivePoint's Irvine Inspired Campaign
The inspirational 6-month campaign showcases all that is good in Irvine. From the schools to the open space to the diversity, the campaign promotes life in Irvine. Spotlight Video was awarded a 22-video contract to support the print campaign with digital media. Our task is to bring to life the stories that appear in the *Orange Country Register* in a compelling video format. In this video, we worked with the UC Irvine Communications Department to obtain drone video footage of the campus, which helped keep costs contained.

http://www.irvineinspired.com/ndash-ucis-bright-future.html

Haas Avocado Test
We bid on a project for Hass Avocados and liked our demo so much we decided to include it here. The goal was to show the product in a playful and fun way (no audio). We went through more than 20 avocados. We didn't win the bid, but we had some great guacamole that afternoon! Our favorite shot is the one in which an avocado rolls into frame and then settles in just the right spot.

http://www.spotlight-video.net/product-demos.html

Roman Catholic Diocese of Orange
As part of our video production contract with the Roman Catholic Diocese of Orange, Spotlight was tapped to cover the biggest football rivalry in the Trinity League, the game between Servite and Mater Dei. This video won recognition by the Orange County Press Club and the National Catholic Press Association for Best Sports Video.

http://occatholic.com/it-was-mater-dei-over-servite-in-football-rivalry/

Bracken's Kitchen
Also as part of our work with the Roman Catholic Diocese of Orange, we produce feature videos that spotlight the good work people do. In this case, we went into an ally in Santa Ana to document the work Bill Bracken does to feed the hungry and homeless. Bill was so pleased with our video that he asked us to edit it to create a social media video that he now uses on his website and social media platforms.

Bracken's Kitchen Feature Video (second video on page)
http://www.spotlight-video.net/news-features--interviews.html

Bracken's Kitchen Social Media Version
http://www.spotlight-video.net/brackens-kitchen.html

D. SCHEDULE

Spotlight Video manages its contracts and protects its resources so as to assure our clients receive our full attention and so that our team can produce their best work.

If we are awarded this contract, we will not actively solicit new business during the period in which we are contracted.

We will make our team available to MWDOC for all required meetings and phone calls.

We are a virtual company based in South Orange County, so in-person meetings with your staff are preferred by our team. We will, however, communicate in your preferred manner.

E. BUDGET

Budget is presented per video.

SPOTLIGHT VIDEO

TEAM MEMBER	HOURS	RATE	TOTAL
Project Manager	35 hrs	$75/hr	$2,625
Production Manager	30 hrs	$50/hr	$1,500
Production Assistant	20 hrs	$40/hr	$ 800

SUBTOTAL $4,925

SUBCONTRACTORS

ARTIST TYPE	PER-VIDEO RATE	TOTAL
Cartoonist	$1,200	$1,200
Voiceover artist	$ 300	$ 300

SUBTOTAL $1,500

PER-VIDEO PRODUCTION TOTAL $6,425

INDIVIDUAL AGENCY INTRO/OUTRO FEE

CREATION OF INTRO/OUTR	PER-AGENCY RATE	TOTAL
Creation of intro/outro for 21 agencies	$150 each	$3,150
Editing the intro/outro into each video for each agency, rendering and delivery	$100 each	$2,100

SUBTOTAL $5,250

Cost containment
After creating the intro/outro for the first video, we'll be able to just place the intro/outro in the next two videos. There won't be a "creation" fee, just the editing fee. That will save $2,100 for videos #2 and #3.

SUMMARY	**PRODUCTION**	**INTRO/OUTRO**	**TOTAL**
Video #1	**$6,425**	**$5,250**	**$11,675**
Video #2	**$6,425**	**$2,100**	**$ 8,525**
Video #3	**$6,425**	**$2,100**	**$ 8,525**
		TOTAL COST	**$28,725**

F. CONFLICT OF INTEREST

There are no personal or organizational conflicts of interest associated with Spotlight Video accepting this contract.

G. CONTRACT

Spotlight Video has reviewed and, if awarded the contract, will accept the terms of the contract.

Thank you for your consideration.

The Spotlight Video team

Spotlight Video
Spotlight-video.net
Kimberly@spotlight-video.net
949.887.8314

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

ACTION ITEM
November 16, 2016

TO: Board of Directors

FROM: **Planning and Operations Committee**
(Directors Dick, Finnegan and Hinman)

Robert Hunter
General Manager

Staff Contact: Jonathan Volzke

SUBJECT: **Vendor Selection for Production of CHOICE OC Water Magazine**

STAFF RECOMMENDATION

Staff recommends the Board of Directors approve the OC Register as the vendor for the OC Water Magazine CHOICE program

COMMITTEE RECOMMENDATION

Committee will review this item on November 14, 2016 and make a recommendation to the Board.

DETAILED REPORT

The 2016-17 CHOICE Communications Program is a two-pronged offering: An “OC Water Magazine” that would tell the story of how OC gets it water and highlight participating water agencies and a series of three (3) “whiteboard” animated videos.

The CHOICE programs were developed after discussions with public-affairs representatives and general managers from member agencies, as well as a desire to provide outreach communications tools during a public relations “quiet period” after an extended period of intense drought outreach.

The magazine will be a professionally written and photographed glossy piece that agencies could reprint and distribute at events or in other outreach efforts. In addition to stories about OC water and key OC projects, the California Water Fix and its importance to the region also be featured.

Budgeted (Y/N): Y	Budgeted amount: $38,000	Core	Choice X
Action item amount: $38,000	Line item:		
Fiscal Impact (explain if unbudgeted):			

Requests for proposals were sent to four vendors with publishing experience on October 14: Communications LAB, OC Register, Picket Fence Media and South Coast Magazine.

Proposals were received from Communications LAB, headquartered in Orange, which has worked on projects for several water agencies, and the Orange County Register. The proposals were sent to public affairs staff from four agencies participating in the magazine CHOICE program: El Toro Water District, Santa Margarita Water District, South Coast Water District and Yorba Linda Water District. They were also reviewed by MWDOC public affairs staff.

The anticipated CHOICE budget presented to participating agencies totaled $38,000 for the magazine. Both respondents were aware of that budget.

Communications LAB proposed two cost structures: A retainer rate totaling $22,694 or an hourly rate totaling $33,825

The Orange County Register proposal assumes the full budget of $38,000 and cites similar projects completed for public- and private-sector clients.

The consensus of the reviewers was to award the contract to the OC Register, based on the organization's track record of publishing like materials, previous MWDOC work with the Register special content team and the library of photographs and graphics at the Register's disposal.

Agencies participating in the 2016-17 CHOICE OC Water Magazine are: City of Brea City of Buena Park, East Orange County Water District, El Toro Water District, City of Fountain Valley, City of Garden Grove, City of Huntington Beach, City of La Habra, Irvine Ranch Water District, City of Newport Beach, City of Orange, Orange County Water District, City of San Clemente, Santa Margarita Water District, City of Seal Beach, Serrano Water District. South Coast Water District, Trabuco Canyon Water District, City of Tustin and Yorba Linda Water District.

The individual cost for the magazine -- $2,000 each, was kept low to spur participation. All agencies, including the three cities, had the opportunity to participate in the magazine. The program will be amended if any decides to join before the publication is finished.

The initial story list will be developed with input from participating agencies; MWDOC will serve as editor on the project.

Municipal Water District of Orange County

REQUEST FOR PROPOSALS

For

Professional Services

For

Creation of an OC Water Magazine

October 28, 2016

Respondent Business/Organization: SCNG Custom Content division of Southern California News Group

Mailing Address: 625 N Grand Ave

City, State, Zip Code: Santa Ana, CA 92701

Physical Address (If Different): N/A

City, State, Zip Code: N/A

Contact Person: Heidi Lawrence

Title: SCNG Custom Content Manager

Telephone Number: (714)796-7818

Fax Number: (714)796-2238

E-mail Address:hlawrence@scng.com

CERTIFICATION OF PROPOSAL: On behalf of respondent, the undersigned certifies that all information submitted herein will be honored by Respondent for a minimum period lasting until June 12, 2017. The undersigned certifies that he or she is legally authorized to so bind respondent.

Signature

10-28-16

Date

Heidi Lawrence

Printed/Typed Name

General Information

Tax/Legal Status of Business:

[x] Corporation [ ] Sole Proprietorship [ ] Partnership

[x] Public [ ] Not for Profit [ ] Other _____

Date business established: 040116

State Controller ID Number (If available):

Federal Taxpayer ID Number: 91-1947496

A. **TEAM**: Descriptions of specific experience and capabilities of designated project manager and key team members that are directly relevant to the scope of work.

Kedric Francis- Editorial Director:

Kedric Francis has been editorial director of SCNG Custom Content since 2015, where he has edited and written major projects, including the award-winning magazine UCI@50. Prior to being appointed to his present position, he has been a fixture on the Southern California media landscape since the mid-1990s. A widely read and known columnist, Francis was executive editor of Coast Magazine and co-founding editor of OC Register Magazine. The latter won the 2014 Maggie Award for Best New Publication, and was a finalist for Best City and Metropolitan Magazine in 2014 and Best Regional Magazine in 2015. He was also founding editor of Montage magazine for the resort group, also a Best New Publication honoree. Before joining Southern California News Group, Francis was the founding and long-time editor of Riviera, Modern Luxury's city magazine that helped set the standard for the expansion of luxury magazines in the mid-2000s.

Heidi Lawrence- SCNG CC Manager:

With twenty years of sales management experience and a deep familiarity in developing advertising plans, Heidi works with existing and new clients to help them disseminate their messages effectively. Throughout her career, Heidi has an exceptional track record of maintaining strong customer relationships by providing exceptional levels of service. She excels in planning and organization, and has served as a trusted advisor for brands such FivePoint, Renovate America and Bank of America.

Caitlin Adams- Managing Editor/Copy Editor:

A Southern California native, Adams developed a passion for publishing at the University of California, Santa Barbara. Today, she manages content for several key SCNG Custom Content projects, including the Orange County Catholic weekly newspaper. Published in cooperation with the Diocese of Orange, the newspaper is now the largest weekly Catholic publication in America. She also oversees content development for an all-Spanish edition of the Orange County Catholic. Adams joined SCNG in 2012 following five years at Churm Media where she managed multiple projects including a daily business video cast, the OC METRO Minute as well as content in OC Family and OC Menus.

John Cheresh- Creative Director:

An award-winning multidisciplinary designer and creative director with nearly 10 years of professional experience. Although his skill set is extensive, his greatest expertise lies in editorial design. Before joining SCNG Custom Content, he was an art director at Churm Media, a Newport Beach-based niche content and publishing company. Prior to that, he was an associate designer at Entrepreneur Media, publisher of Entrepreneur magazine, a national brand with a circulation of over 600,000. He holds a bachelor's degree in graphic design.

B.REFERENCES: Description of the project team's past record of performance on similar projects for which your firm has provided services.

University of California- 50th Anniversary Issue; a 56 page magazine on the past, present, and future of UCI.

Cathy Lawhon-Senior Director, Media Relations & Publications 949-824-1151

100 Theory Suite 200 Irvine CA 92697

Auto show Guide-The International Auto Show Guide for Orange and Riverside Counties- a 54 page magazine promoting the show and featured vehicles.

Contact-John Sackirson: Orange County Automobile Dealers Association 949-428-5050

3737 Birch St, Suite 200 Newport Beach, CA 92600

FivePoint- Explore Beacon Park- a 30page magazine on the opening of Beacon Park, a new community in the Great Park.

Contact- Steve Churm: Chief Communications Officer 949-349-1034

25 Enterprise Suite 300 Aliso Viejo CA 92656

Diocese of Orange- Weekly Catholic Newspaper- a 28 Page newspaper produced weekly for the Diocese of Orange delivered to 110k Orange County Register's subscribers

Contact- Ryan Lilyengren: Director of Communications 714-305-5413

13280 Chapman Ave Garden Grove, CA 92840

Renovate America- A weekly Series running in The Orange County Register and The Press Enterprise- a 78 series run that features homeowners and contractors that experienced success with the HERO program.

Contact- Kelly Sandoval: Communications Director 858-605-5350

16620 W Bernardo Dr San Diego CA 92127

C. **EXAMPLES OF WORK**: Samples- See Attached

D. **SCHEDULE**: Assurance of the firm's ability to staff and complete all work, considering the firm's current and planned workload and the schedule provided.

SCNG Custom Content assures it has staff and capacity to complete the work in the RFP. As a division of SCNG, we can call on the resources and staff of OC Register and others in the company to assist if any workload or scheduling issues occur.

SCNG requests weekly conference calls and bi-weekly in-person meetings either at our offices or MWDOC's.

E. **DETAILED BUDGET AND SUPPORTING DOCUMENTATION**: The Consultant shall provide a detailed breakdown of the estimated hours that each project team member will contribute for the individual tasks depicted in the scope of work. The Consultant shall also separately identify costs of all sub-contractors and other direct reimbursable costs to the project such as reproduction, mileage, etc. The Consultant shall recommend areas where the scope of work can be reduced, adjusted, modified, or approached differently to keep the project costs reasonable.

Content Development:

Editorial: Research, writing and editing

Producing the content for the proposed magazine will take an estimated 205 hours.
This includes:
Research/content: 25 hours
Research/photos and images: 10 hours
Interviews: 20 hours
Meetings with client: 15 hours
Meetings/discussions with writers: 10 hours
Freelance writing time: 30 hours
Staff writing time: 45 hours
Editing and rewrites: 15 hours
Revisions from client: 15 hours
Proofing and review: 10 hours

Creative Development

Research/Development Stage: 20 HOURS

Develop and implement the look and style of the magazine, including grids, fonts, color palette, graphics, folio, section headers, table of contents, staff box and masthead creation.

Design Stage: 60 HOURS
Flow in all feature and department copy, create and place infographics, sidebars and photography; photo selection and editing and or photo procurement from third party.

Production/Approval Stage: 8 HOURS
Assemble and organize all PDF files for press, collect, check and process all c/r artwork (display ads) for quality and adherence to guidelines, upload, review and approve all final editorial and display ad PDF's.

Copy Editing:

Multiple reviews and Final Review: 16 HOURS

Project Coordinator:

Creating Deadline Schedule: 2 HOURS
Project Management: 15 HOURS
Proofing: 5 HOURS

The Consultant shall recommend areas where the scope of work can be reduced, adjusted, modified, or approached differently to keep the project costs reasonable.
The expenditures of time and talent will be reduced because of expertise and background of the editorial team, including familiarity with history of OC water issues; past interviews of Henry Segerstrom and additional research into his role in the development of key milestones in OC water; familiarity of freelance writers with water districts and issues from previous custom content campaigns.

No reimbursable expenses are anticipated.

Additional copies of the magazine:
1500 $5965
2000 $6365
2500 $6760

F: CONFLICT OF INTEREST: None

G: Contract: We are willing to accept the agreement terms and conditions, pursuant to final review by inside counsel.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Item No. 5-4

ACTION ITEM
November 16, 2016

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Dick, Hinman, Finnegan)

Robert Hunter
General Manager

Staff Contact: Kelly Hubbard
Emergency Manager

SUBJECT: **Approve recommendations in the Emergency Operations Center (EOC) Assessment Study and Staff Actions**

STAFF RECOMMENDATION

Staff recommends the Board of Directors accept the recommendations of the WEROC EOC Assessment Report submitted by Claris Strategies and authorize staff to move forward as follows:

1. Reduce primary WEROC EOC's from two to one in accordance with the study;
2. Complete the following work at the South EOC: life safety recommendations, electrical study, and seismic assessment. Staff will utilize the FY2016/2017 budget and WEROC reserves for this work and will bring any items requiring board approval back for authorization.

COMMITTEE RECOMMENDATION

Committee will review this item on November 14, 2016 and make a recommendation to the Board.

SUMMARY

WEROC staff maintain two standalone Emergency Operations Centers (EOCs), as well as the capability to operate from the MWDOC Administrative Offices if needed. Readiness of the two EOCs includes ongoing maintenance, regular updates in operational systems (including MWDOC IT support), and equipment replacement. These ongoing costs have

Budgeted (Y/N): Partially	Budgeted amount: NA	Core _X_	Choice __
Action item amount: TBD	Line item: 7330, 7580, 7581, 7582		
Fiscal Impact (explain if unbudgeted): Items can be accomplished within the approved budget for FY 16/17 and with WEROC reserves. Any items requiring board approval will be brought back to the Board for consideration.			

continued to increase and several significant capital expenditures will be needed in the near future to keep both facilities at minimum operational standards. Staff have considered several options to move forward in a cost-effective manner while maintaining WEROC's readiness to support the water and wastewater utilities of Orange County following a major disaster.

Claris Strategies was hired to conduct an analysis of the WEROC Emergency Operations Centers and to develop a recommendation for the appropriate number of facilities to be maintained over the long run, as well as the types and locations necessary to meet the objectives of WEROC's program. This assessment was intended to provide MWDOC staff with an outside analysis of the program that can guide future decisions regarding the Emergency Operations Centers, including how to use each facility, recommended changes and improvements to the EOC facilities, as well as future investments in equipment to reflect national best practices and to ensure operational readiness.

Claris Strategies is recommending for MWDOC to consolidate from its current configuration of two primary EOC locations and one EOC-in-a-box to one primary EOC and one alternate EOC. They further recommend that the South EOC become the WEROC Primary EOC, that the MWDOC Administrative Building be utilized as an Alternative EOC (EOC-in-a-Box), and that access to the North EOC be maintained, but that the facility not be outfitted with any equipment or materials onsite.

Attached to the staff report is the WEROC Emergency Operations Center Assessment Report provided by Claris Strategies. A presentation will be provided at the Planning and Operations Committee meeting explaining Claris Strategies analysis process and outcomes.

DETAILED REPORT

Staff Recommendations for Action

Staff concur with Claris Strategies' recommendations regarding the number of facilities and the recommended status for each facility. Staff is asking the Board to accept the recommendations from the assessment and to authorize staff to move forward with the implementation of those recommendations. It is important to note that Staff do not believe that this recommendation will reduce the WEROC operating budget, but rather it allows for the proposed Primary EOC (South EOC) to be brought up to all best practices standards, and to meet the known future capital costs that will be necessary to maintain an operational facility without significant increases in the budget.

There are several steps to implement the recommendations from the evaluation. The first is to take the general actions necessary to reduce our primary facilities from two to one. This includes simple steps such as moving computers, printers, maps and resources from the North EOC to the South EOC. There will be more complex actions such as the selling or disposal (more likely) of the generator at the North EOC, canceling phone/internet services, and filling any paperwork related to the reallocation or disposal of grant funded equipment.

Additionally, staff would like to initiate some of the recommended actions outlined in the EOC Assessment to start bringing the South EOC up to national standards. Immediate actions would include:

1. Life Safety Recommendations
    a. Replace doors with “crash bar” doors for emergency evacuation purposes
    b. Install Smoke/Carbon Monoxide Detectors
    c. Wall mount fire extinguishers in each main room
    d. Determine and implement actions related to the stove and proper venting
2. Electrical Study and re-wiring for OSHA standards
3. Seismic Study to examine potential improvements to strengthen the facility to withstand shaking and still function as the primary EOC.

The life safety actions should be able to be accommodated within the currently approved WEROC budget for maintenance and equipment. Staff will use expected 2016/2017 FY cost savings from WEROC staffing vacancies and other costs savings from the reduction in facilities to conduct the seismic study and electrical work. It is also important to note that staff would like to schedule the replacement of the generator (est. $27,000), furniture (no cost est.) and AC unit (est. $8,500) in future years to even out capital expenditures overtime. However these items may be needed sooner than anticipated. Staff is exploring grant funding as a possible funding mechanism for all recommended actions.

Attachment: WEROC Emergency Operations Center Site Facility Assessment

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
WATER EMERGENCY RESPONSE ORGANIZATION OF ORANGE COUNTY

WEROC EMERGENCY OPERATIONS CENTER SITE FACILITY ASSESSMENT

NOVEMBER 4, 2016

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Claris Strategy

ACKNOWLEDGMENT

The commitment of MWDOC to resiliency and supporting its partners and the communities it serves was very apparent during our interaction with MWDOC personnel at all locations we visited. We also extend our thanks to Kelly Hubbard and Karl Seckel for their outstanding support and professionalism throughout this engagement.

Claris Strategy Team

William Lim
Brent Woodworth
Cullen Armét

TABLE OF CONTENTS

SECTION A

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Overview

As a provider of critical water resources the Municipal Water District of Orange County (MWDOC) plays a vital role in supporting the on-going needs of the community. Being well prepared to quickly and effectively respond to natural or man-made hazard events is an inherent component of community resilience and a sound business practice. Maintaining a dedicated (primary) and properly-equipped emergency operations center (EOC) that can be staffed and operational on a 24X7 basis along with an identified alternate (backup) EOC is considered an industry "best practice" for critical infrastructure providers. The commitment of MWDOC senior management in support of this practice will be a significant contribution towards building a truly resilient WEROC program and an Orange County water community.

Recommendations

It is the recommendation of our independent consulting team that MWDOC consider designating the WEROC South EOC in Mission Viejo, CA as the **primary** EOC with the MWDOC Administrative Offices in Fountain Valley, CA as the **alternate** (or backup) EOC. We also recommend that MWDOC retain access to the North EOC facility to be utilized for furniture storage and as potential space that can be used in the event of a catastrophic loss of both the South EOC and MWDOC Administrative Office facilities. We do not recommend additional investment be made in the North facility for the purpose of maintaining it as an active EOC backup facility.

EOC designated operating, maintenance and labor costs have historically been evenly split between the North and South EOCs. We recommend these funds be focused on ensuring the operational capabilities of the South (Primary) EOC.

Potential improvements include:

- Furniture and equipment upgrades
- Workspace improvements
- Structural enhancements
- Life safety modifications
- Building infrastructure improvements

The effective reallocation of funds will increase the useful life and resiliency of the South EOC and overall resilience of WEROC.

Findings and Analysis

An on-site review of each of the three potential EOC sites was conducted by the Claris Strategy team. Thirteen distinct evaluation criteria elements were identified, prioritized, ranked and scored for each of the sites. The South EOC site was selected based on several key factors outlined in this report. One of the main focus areas was the potential impact of a major earthquake on WEROC operations. Our analysis showed that when examining the likely impact of earthquakes on the Whittier Narrows, Newport-Inglewood, and San Andreas faults, the South EOC was the most likely to be operational when all seismic impacts were considered.

When examining the overall design and operational layout of each facility, the South EOC also stood out as having the best space layout and optimal configuration for a dedicated EOC facility. The space has been configured to support proactive information sharing, communications and situational awareness while addressing incident driven operational, logistical, planning, collaboration and management needs. The South EOC facility also received high marks for its ability to effectively accommodate on-going training and exercise needs.

Operational cost and return-on-investment were also key considerations when recommending the South EOC. Based on a high-level analysis of EOC costs, the South EOC had the lowest projected expenses over a twenty-year time horizon. Suggested equipment and infrastructure investment areas are outlined in this report. We believe the benefit/cost ratio of this investment will equal or exceed the national 4:1 benchmark for investment in pre-disaster resilient infrastructure and programs.

Our findings and analysis led us to select the MWDOC Administration Building as the alternate backup EOC location. The site is highly accessible and well maintained. Conference Room 101, while not actively configured as a dedicated EOC, has the space required to be reconfigured for operation as the backup EOC location. Equipment and infrastructure enhancements are also recommended and outlined in the report.

SECTION B

INTRODUCTION

1. PROJECT SCOPE

The goal of the Emergency Operations Centers (EOC) Site Facility Assessment is to have an outside expert conduct an evaluation of the current WEROC EOC facilities (two dedicated and one "EOC-in-a-Box[1]") to develop a recommendation for the optimum number, types and locations of EOC's that are necessary to meet the WEROC program's purpose. The assessment would provide staff the professional recommendation necessary for justification of changes to EOC facilities and required improvements that may be needed in the coming years.

The critical questions to be answered by the assessment are:

1. How many of the existing sites should be maintained to meet future EOC needs of the program?
2. What are the critical factors in making this decision?
    a. What are the pros and cons for maintaining more sites or fewer sites?
3. If there is a recommendation to change the number of sites, which sites are recommended to be maintained and at what capacity?

The project team evaluated the following three sites:

4. WEROC South EOC, Mission Viejo, CA
5. WEROC North EOC, Orange, CA
6. MWDOC Administration Offices, Fountain Valley, CA 92708 ("EOC-in-a-Box[1]")

2. PROJECT PROCESS

The project team used the following work plan to evaluate the three potential EOC locations:

1. **Task 1: Project Startup**
    a. Requested background materials for review
    b. Conducted Project Kickoff meeting with MWDOC staff
2. **Task 2: Discovery**
    a. Toured the sites and facilities
    b. Interviewed MWDOC/WEROC staff and facility owner staff
    c. Reviewed background materials
    d. Utilized lessons learned, best practices and local, state and federal guidelines
3. **Task 3: Analysis and Synthesis**
    a. Held a findings review meeting with MWDOC staff
    b. Developed a list of weighted evaluation criteria with MWDOC staff
    c. Analyzed the evaluation criteria
    d. Scored the evaluation criteria and developed recommendations
    e. Reviewed scoring and recommendations with MWDOC staff
4. **Task 4: Assessment and Recommendations Report**
    a. Developed a draft report
    b. Finalized report with edits from MWDOC staff

1. An EOC-in-a-Box refers to having the necessary resources and tools ready on-site for setting up an EOC but not necessarily pre-staged to be activated immediately.

3. ASSUMPTIONS

The following assumptions were made in this report:

1. Information gathered during site and facility visits are observations made as snapshots in time. Subsequent changes to the site and facility are not included in the study unless informed by MWDOC staff.
2. Cost projections included in this report are rough order of magnitude costs and are what were called for in the Scope of Work. Further analysis is required to confirm these costs if the intent is to implement.
3. All information on seismic reinforcement of the buildings were received from MWDOC staff.

SECTION C

SITE DESCRIPTIONS

1. SOUTH EOC

Location:
Mission Viejo, CA 92691
Year Constructed:
1982
Facility Size:
2,400 sq. ft.
Construction Type:
Steel columns and beams with metal panels on concrete slab

Figure 1: South EOC Exterior

The South EOC site is located in the City of Mission Viejo, California, near the 5 freeway in a predominantly single family residential neighborhood.

The site and facilities are owned, operated and maintained by the El Toro Water District (ETWD). The site was the previous location of a water treatment plant owned and operated by ETWD prior to construction of the AMP. The EOC facility served as the ETWD administrative office and Board meeting location for a number of years.

A majority of buildings on the site are no longer actively used by ETWD. ETWD still utilizes a pump station on the property and the garage space attached to the WEROC EOC space. The Air Quality Management District (AQMD) operates a small testing lab in one of the vacant buildings. The EOC building is leased at no cost to MWDOC for EOC operations.

The 2,400 square foot metal building was constructed in 1982 with materials supplied by Soule, a manufacturer of metal building systems. The building structure is comprised of steel columns and beams with metal panels on a concrete slab foundation. No records were found of seismic reinforcement of this building.

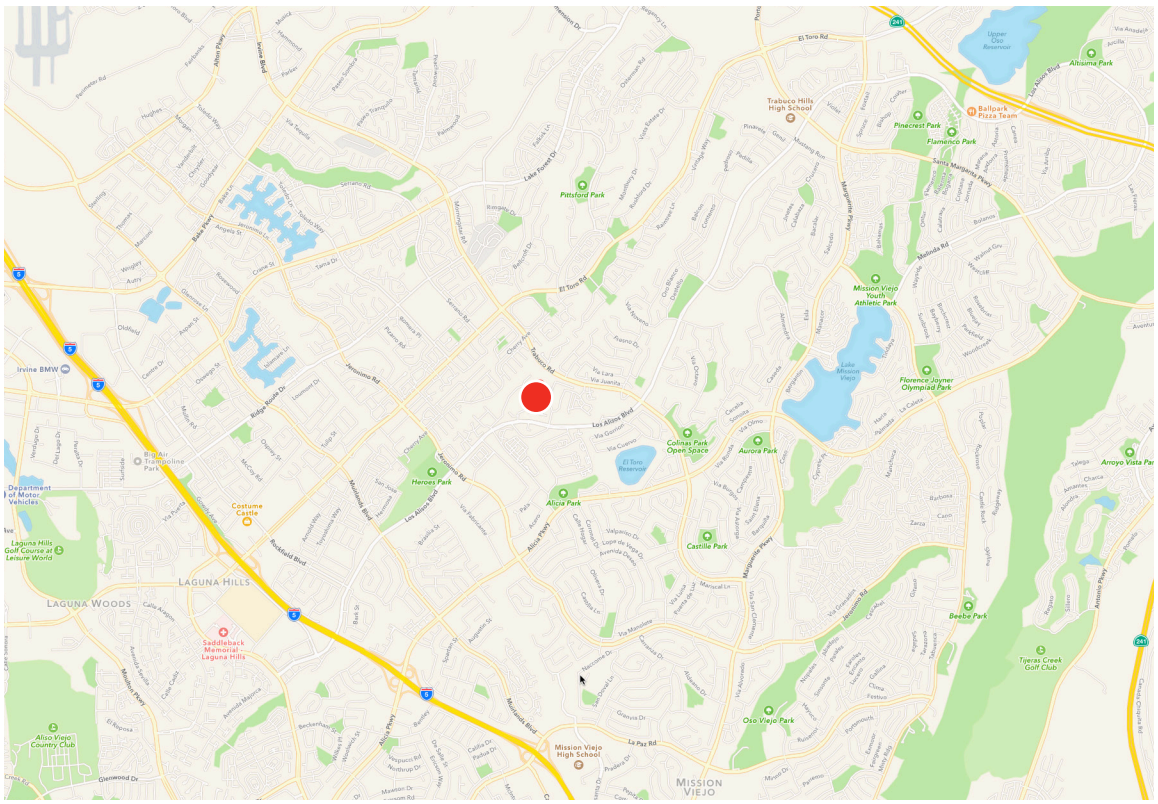


Figure 2: South EOC Location Source: Apple Maps

Figure 3: South EOC Aerial View Source: Google Earth

2. NORTH EOC

Location:
Orange, CA 92869
Year Constructed:
1988
Facility Size:
First Floor: 882 sq. ft.
Second Floor 894 sq. ft.
Total: 1,776 sq. ft.
(not including water pump room)
Construction Type:
Wood frame with stucco walls on concrete slab

Figure 4: North EOC Exterior

The North EOC site is located in the City of Orange, California. It is directly adjacent to Peters Canyon Regional Park, the Peters Canyon Reservoir and Jamboree Road. The closest major thoroughfare is the 261 toll road.

The site and facilities are owned, operated and maintained by the Metropolitan Water District of Southern California (MET). The site is adjacent to the AMP pipeline and the OC-70 flow control and pump station provided by MET to serve East Orange County Water District. A new raw water Baker Pipeline pump station by IRWD is also located nearby to pump water from Irvine Lake to the new Baker Treatment Plant in Lake Forest.

The two-story structure was originally designed and constructed as the Gerald E. Price AMP Operations Center with a garage on the ground floor and the AMP operations center on the second floor. The facility was used from 1988 to 1995 at which time MET took over operations of the AMP. A space on the ground floor is occasionally used by MET for storage but is usually empty. MET leases the second floor to MWDOC at no cost for its EOC operations.

The 1,776 square foot building (not including the water pump room) was constructed in 1988 to essential facility standards. The facility is intended to survive a major earthquake and remain operational. The building's structure is wood frame construction with stucco walls on a concrete slab. It has had seismic retrofits and additional work is scheduled for December of 2016.

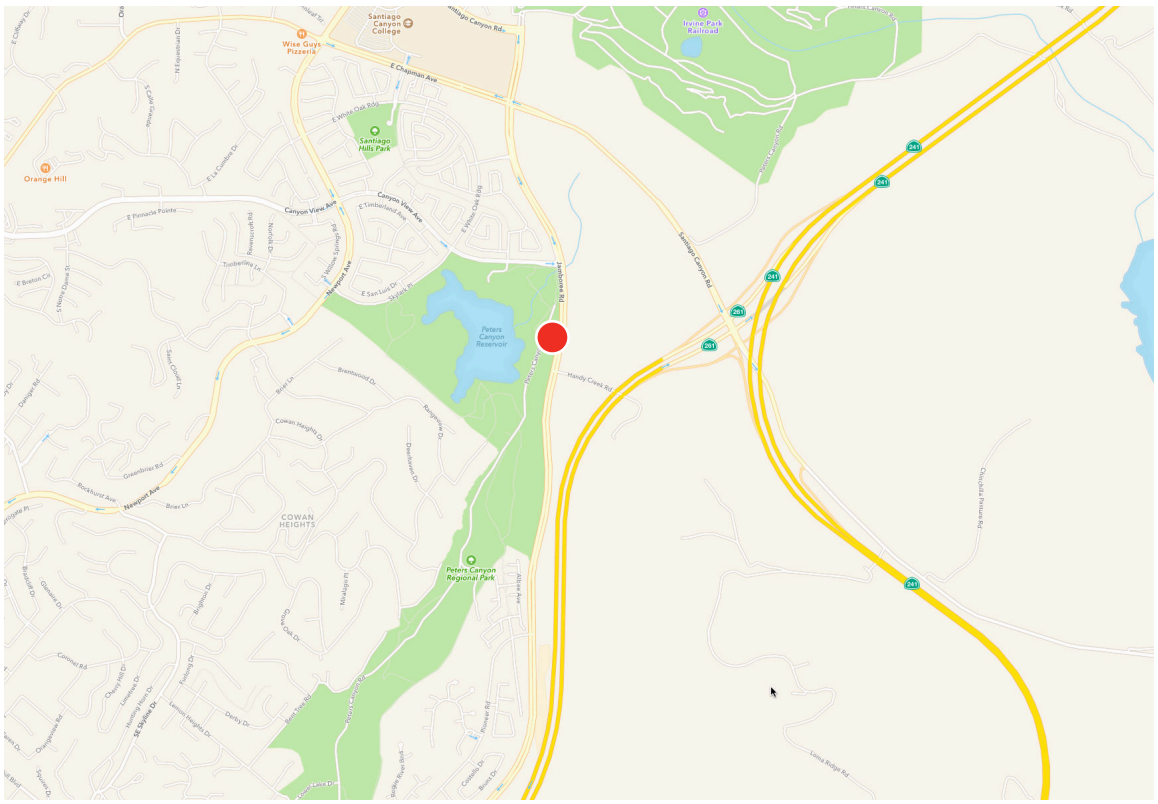


Figure 5: North EOC Location Source: Apple Maps

Figure 6: North EOC Aerial View Source: Google Earth

3. MWDOC ADMINISTRATION BUILDING

Location:
Fountain Valley, CA 92708
Year Constructed:
1966
Facility Size:
Areas available to be used for EOC Operations:
Conference Room 101, 810 sq. ft.
Conference Room 102, 247 sq. ft.
WEROC office space, 150 sq. ft.
Construction Type:
Steel columns, steel and wood trusses and masonry exterior on a concrete slab

Figure 7: MWDOC Administration Building Exterior

The MWDOC Administration Building is located in the City of Fountain Valley, California, near the 405 Freeway, the 55 Freeway and 73 toll road.

The land is owned by the Orange County Water District (OCWD) but the building is owned by MWDOC who also maintains the facility.

The Administration Building is the main office for MWDOC staff. Connected to the MWDOC Administration Building are the administrative offices for the Orange County Water District. Other buildings on the site are an OCWD Water Quality Lab to the east and the OCWD GWRS treatment plant.

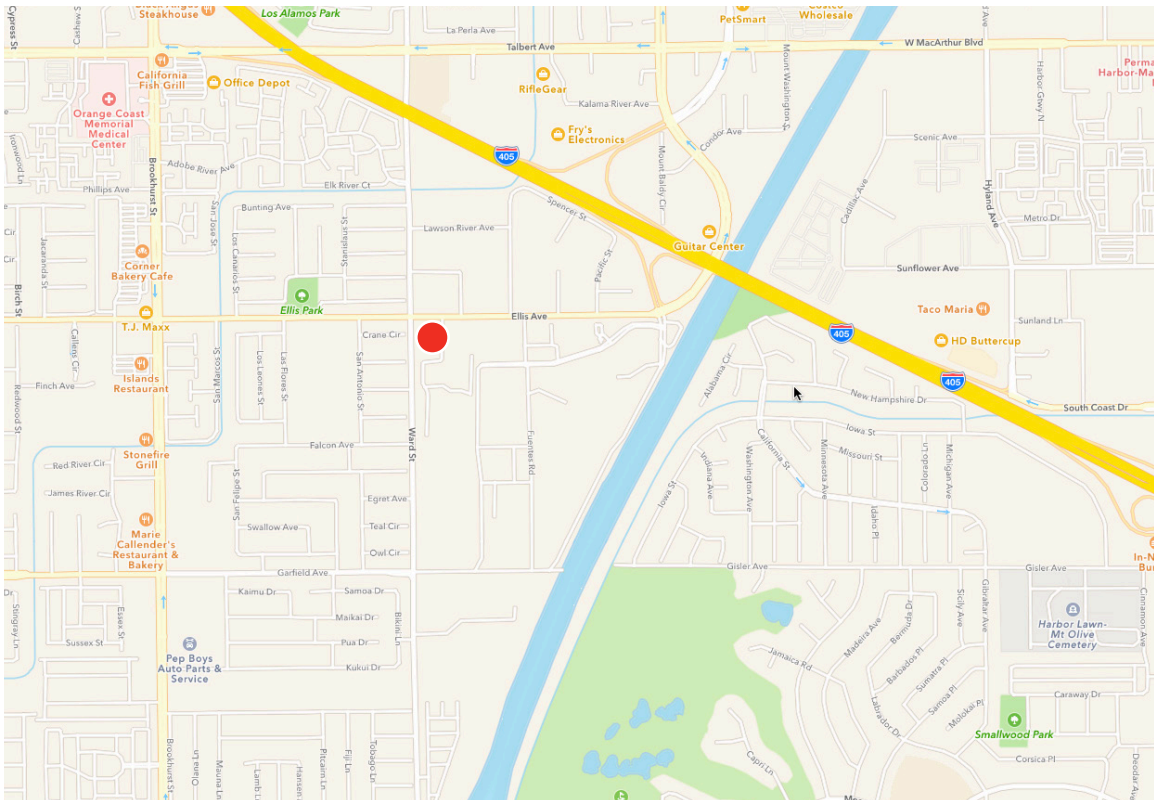


Figure 8: MWDOC Administration Building Location Source: Apple Maps

Figure 9: MWDOC Administration Building Aerial View Source: Google Earth

SECTION D

ANALYSIS

EVALUATION CRITERIA

The following criteria were identified as having importance in evaluating the suitability of the three potential locations for a WEROC Emergency Operations Center:

1. Hazards/Risks
2. Seismic Reinforcement
3. Life Safety
4. Dedicated EOC
5. Space Functionality and Future Configurability
6. Infrastructure
7. EOC Expenses
8. Accessibility
9. Security
10. Building Envelope
11. Maintenance
12. Ownership of the Facility
13. Parking

An analysis of each criterion was developed for the three potential locations and a summary is provided indicating the order of preference for each of the locations.

1. HAZARDS/RISKS

The identified hazards that are potential threats to the EOC sites are based on the Hazard Analysis chart from the WEROC Emergency Operations Plan. The following hazards, natural and man-made, have been selected for the probability of occurrence and potential damage level. Each is analyzed for its potential risk to the three sites.

1. Natural Hazards
    a. Earthquake
    b. Liquefaction
    c. Wildfire
    d. Storm/Flood
2. Man-made Hazards
    a. Terrorist

Earthquake
Using an earthquake simulation model, the following three scenarios were run on each of the three locations with shaking information published by the US Geological Survey. Ground shaking maps were generated and are included in the appendices.

1. Whittier Earthquake (Magnitude 6.8)
2. San Andreas Earthquake – Shake Out Scenario (Magnitude 7.8)
3. Newport Inglewood Earthquake (Magnitude 6.9)

Ground shaking maps are a good correlation to the possible damage a single structure might suffer during seismic events. In Table I, a brief description is given of what may happen to buildings at the different levels of ground shaking instrumental intensity.

Damage to buildings typically occurs at Intensity Level VII and above.

Table I. Ground Shaking Intensity vs. Effects

INTENSITY	EFFECTS
I	• Not felt except by a very few under especially favorable conditions
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 vehicles may rock slightly • Vibrations similar to the passing of a truck
IV	• Felt indoors by many, outdoors by few during the day • At night, some awakened • Dishes, windows, doors disturbed • Walls make cracking sound • Sensation like heavy truck striking building • Standing vehicles rocked noticeably
V	• Felt by nearly everyone • At night, many awakened • Some dishes, windows broken • Unstable objects overturned
VI	• Felt by all, many frightened • Some heavy furniture moved, a few instances 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
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, 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
X+	• Some well-built wooden structures destroyed • Masonry and frame structures destroyed • Rails bent • Bridges destroyed • Lines of sight and level are distorted • Objects thrown into the air

The following table summarizes the potential effects of the three earthquakes on the sites.

Table II. Ground Shaking Instrumental Intensity from Earthquake Scenarios

SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY		
	NORTH EOC	SOUTH EOC	MWDOC ADMIN.
Whittier (6.8)	VII	VI	VII
Newport-Inglewood (6.9)	VI	VIII	VIII
San Andreas (7.8)	VI	V	IX

Each location is exposed to the risk of earthquake damage. However, the MWDOC Administration Building has the highest risk due to the potential ground shaking intensity from a Newport-Inglewood or San Andreas earthquake (combined with the risk for liquefaction – see below).

Liquefaction

Soil liquefaction is a condition in which a saturated soil loses strength and stiffness in an earthquake, causing it to behave like a liquid. During an earthquake, a building located in a liquefaction zone may suffer significant damage by sinking, tilting or toppling over if it is not designed to mitigate the effects of liquefaction.

The liquefaction map from the 2012 Orange County MWDOC Hazard Mitigation Plan was used to identify if any of the sites were situated in a liquefaction zone. Of the three sites, the MWDOC Administration Building is the only facility located in a liquefaction zone. The high liquefaction risk at this location is compounded by the high earthquake risk.

Wildfire

Wildfires are a common hazard in California. The extended drought and rising global temperatures have significantly exacerbated this condition. Based on the Urban/Wildland Fire Threat map from the 2012 Orange County MWDOC Hazard Mitigation Plan, the North EOC site is the only location at risk from a wildfire hazard. Adding to this risk is the dry vegetation surrounding the facility and the nearly empty reservoir adjacent to the site which normally can be used as a water source for firefighting.

Storm/Flood

A prolonged storm or flashflood could present a flood risk at the North EOC location. A storm would also increase the risk of a mud slide due to soil erosion on the hillside at the south side of the facility or on the access road. A major storm's impact to the facility may also be indirect, affecting access or damaging external equipment, such as the generator. It may be problematic to get heavy equipment such as a fuel hauler into the site in very wet conditions.

The risk presented by a prolonged storm or flashflood event at the South EOC site is mitigated by the retaining wall installed at the west side of the facility. Jute netting has been placed over the hillside to control soil erosion. The generator at this site is housed inside a garage.

According to the flood map in the 2012 Orange County MWDOC Hazard Mitigation Plan, the MWDOC Administration Building is located in a high risk, 100-year flood zone. Once the Prado Dam project is completed, much of the flood risk will be mitigated.

Terrorist

In looking at the possible man-made hazards, the only hazard identified as a possible purposeful focused risk to the EOC sites is a terrorist attack. In general, emergency operation centers are not typical targets for terrorists. Many EOCs are located at remote locations, are not easily identifiable and have fairly robust security measures.

Both the North and South EOC facilities are at lower risk of attack due to the anonymous nature of these sites. Both of these sites have fencing around the entire building and, according to MWDOC staff, have very little history of trespassing or vandalism.

A higher terrorist risk is the MWDOC Administration site due to its co-location with the Orange County Water District's and the Orange County Sanitation District's treatment facilities and the greater visibility of these sites to the general population. The MWDOC Offices and the OCWD Offices and Lab are not completely fenced in. An attack on these facilities may result in damage or impacts to the MWDOC Administration Building and its operations.

The following table provides a summary of the hazards and risks for the three potential EOC locations:

Table III. Hazard Summary

HAZARDS	NORTH EOC	SOUTH EOC	MWDOC ADMIN.
Earthquake	●	●	●
Liquefaction			●
Wildfire	●		
Storm/Flashflood	●		●
Terrorist			●

● Higher Risk

Based on the identified hazards and risks, the most desirable option is the South EOC which is exposed to the fewest hazards. The least preferred option is the MWDOC Administration Building which has the highest exposure to hazards and risks.

2. SEISMIC REINFORCEMENT

In California, critical facilities such as police stations, fire stations and hospitals are considered "essential facilities" and are designed to survive and operate after major earthquakes. Many governmental emergency operation centers are constructed and/or seismically-reinforced as essential facilities.

1. **South EOC**. No information was available on any measures used to seismically reinforce the South EOC building. The manufacturer of the building, Soule, is no longer in business but, in speaking with a former employee, metal buildings of this type have historically shown good survivability in earthquakes. The steel structure is able to flex with earthquake waves and the metal panels provide sheer resistance. However, the facility was not designed as an essential facility and a major earthquake may significantly compromise EOC operations. A possible seismic upgrade would be to anchor the columns and strengthen the beam-to-column connections.

2. **North EOC.** The North EOC was designed and constructed as an essential facility. According to information provided by MWDOC, the North EOC was built to seismic standards at the time of construction and is scheduled for seismic retrofit upgrades in December of 2016. Wood frame construction of this type especially without a heavy roof has good resiliency in an earthquake. The facility has a high likelihood of surviving a significant seismic event and continue operation after an earthquake.

3. **MWDOC Administration Building.** Based on a 1995 study by Parsons Engineering and Dames and Moore, the Administration Building required seismic strengthening to bring the facility up to the 1990 Uniform Building Code. According to the MWDOC staff, all of these seismic upgrades were implemented in 1999. Since the building was not designed as an essential facility, the building may not be able to function as an EOC after a major earthquake.

The North EOC, constructed as an essential facility for the pumping operations, is the preferred option. It is the most likely structure to remain operational after a major earthquake. The Administration building is the next preferred option, having been seismically-retrofitted in 1999. The South EOC is the least preferred option. From the information available, it does not appear to have been seismically upgraded.

3. LIFE SAFETY

Life safety is a major concern for any occupiable building. Ensuring that all occupants of an EOC are safe is a critical factor in this evaluation.

1. **South EOC.** There are two fire exits for the South EOC. However, only one of the exits is clearly marked. Smoke detectors are not present in this facility and there is no sprinkler system in the EOC rooms. A fire extinguisher is visible and accessible. The cooking range does not appear to be vented and may be a fire hazard. According to MWDOC staff, the cooking range has never been used and can be disconnected without loss of EOC functionality.

2. **North EOC**. There are two clearly marked fire exits for the North EOC, an internal stair case leading to a ground floor exit door and a collapsible ladder that exits from a second floor window to the ground floor. There does not appear to be any smoke detectors or fire suppression sprinkler system installed in the North EOC office space. A fire extinguisher is visible and accessible.

   A collapsible ladder window exit may not be an effective means of escape given the function of this space. Many of the occupants, EOC volunteer staff, may not be aware or familiar with using a collapsible ladder given the turnover of personnel. In some cases, individuals may be unable or incapable of using the collapsible ladder as an emergency escape method from the 2nd floor.

3. **MWDOC Administration Building**. As observed, fire exits are clearly marked and accessible throughout this facility.

   According to MWDOC staff, the building is inspected annually by the Fire Marshall for fire life safety in accordance to building codes. The building's fire suppression systems were upgraded in 2015 to meet current building codes.

From a life safety perspective, the MWDOC Administration building is the preferred option. Designed as a commercial office space and updated to the current building codes, it provides the most up-to-date systems for fire and smoke detection, exiting and fire suppression. The next preferred option is the South EOC. The single story building with easily accessible fire exits provides a relatively safe environment in the event of fire. The North EOC is the least desirable location due to second floor location and the second fire exit via a collapsible ladder.

4. DEDICATED EOC

An important consideration when establishing an EOC is whether the facility should be dedicated to emergency operations. For critical infrastructure response organizations such as WEROC, dedicated EOCs are standard practice to ensure a quicker and more effective response and recovery from disasters. This decision is also informed by available funding, facilities and staff resources to support and maintain the EOC.

Both the South and North EOCs are dedicated facilities. These EOCs can be immediately activated without further setup, its equipment and documentation are continuously maintained and updated and its spaces are configured optimally to support EOC operations.

In comparison, the space allocated in the MWDOC Administration Building is not dedicated

for EOC use. Conference Room 101, if converted to the main EOC room, would be a shared resource for many functions during normal times of business, requiring additional setup to begin EOC operations which may take up to several hours. Furniture, computers and phones could not be configured optimally for EOC operations without an additional investment. Currently, Conference Room 101 is identified for MWDOC Business Continuity operations and so additional considerations would be required to determine how to best accommodate both concepts of operation at the same time if an event was to require both.

Because both the South and North EOCs are dedicated facilities, they are the highly preferred options. The Administration Building, in its current configuration, cannot serve as a dedicated EOC so it is the least preferred option.

5. SPACE FUNCTIONALITY AND FUTURE CONFIGURABILITY

An EOC's space configuration is important in determining if an operation center functions at a high level. A facility should also be considered for future configurability as EOC operations grow and change.

1. **South EOC**. The main EOC space is housed in a rectangular room which is optimal for configuring furniture for communication and coordination. The room appears to be of sufficient size to meet WEROC's current and future needs. Tables are arranged in a Finance-Logistics-Planning or pod configuration which is in line with EOCs that operate using NIMS, SEMS and ICS. There is ample white board space for recording and sharing information. Printers, fax machines and copiers are easily accessible.

   The spaces adjacent to the EOC main room and front entry provides more than sufficient space for EOC use. The enclosed office space currently used as the EOC's radio room appears to be oversized for this function. There may be an opportunity to reconfigure these spaces to provide better support for the EOC.

   The storage room provides sufficient storage for the EOC for extra chairs, Meals Ready to Eat (MREs), water and other supplies. Additional bookshelves and storage space are available throughout the EOC. More storage is located at the south garage space.

2. **North EOC**. The main EOC space, arranged in an L-shape, is too narrow in width to accommodate furniture in a full configuration to accommodate the necessary number of EOC responders. Ideally, the main EOC space should be a rectangle to configure furniture optimally for communication and coordination. Tables are arranged in a Finance-Logistics-Planning or pod configuration which is in line with EOCs that operate using NIMS, SEMS and ICS. There is ample white board space for information recording and sharing. Printers, fax machines and copiers are easily accessible.

   The main EOC space seems somewhat cramped and does not appear to be able to house twenty occupants comfortably (the maximum number of occupants during a

full EOC activation briefing session). Expansion of the facility will require the EOC main space to be relocated to the ground floor and other support functions located on the second floor (MET has approved WEROC use of this space). Ideally, all EOC functions should be located on a single floor.

The radio room with glass partitions is the only enclosed space on the floor other than the bathroom. This minimizes the capability for smaller group meetings in an acoustically-isolated space.

There appears to be sufficient storage in the EOC space. Locked metal cabinets are located on the second floor for EOC documentation and other materials. Additional storage is provided along the south side of the EOC main space. An additional storage cabinet and storage space are located on the ground floor.

3. **MWDOC Administration Building**. Currently, the MWDOC administrative offices serve as an EOC-in-a-box for WEROC operations. Specifically, Conference Room 101, Conference Room 102, and the WEROC manager's office can be used as EOC space for low-level activations. This configuration however is not ideal by spreading out functions and responding staff throughout the building.

   As a primary EOC, Conference Room 101 would be used as the main EOC space. With setup of additional tables and reconfiguration, the room is capable of holding approximately forty responders. However, since this is a shared space, the room cannot be permanently setup in an optimal pod configuration. To accommodate the necessary infrastructure, the Conference Room 101 will need to be renovated prior to using it as a primary EOC. The adjacent areas should be wired for electrical and computer access. EOC support functions would not necessarily be optimum.

   Documentation, equipment and supplies are stored in offices and workstations. Additional space will be required near Conference Room 101 for storage of equipment and supplies including laptops, monitors, tables, chairs, water and Meals Ready to Eat (MREs).

For space functionality and future configurability, the South EOC is the preferred option. It has the optimum amount of space for WEROC operations, has a large main EOC room and is flexible as WEROC operations change. The next preferred option is the North EOC. Although it is somewhat cramped, there are dedicated spaces for EOC operations. Additionally, a vacant space on the first floor may be used for future expansion. The least preferred option is the Administration Building. A shared conference room is not ideal for the main EOC space and there is very limited space for EOC support functions and for future WEROC expansion.

6. INFRASTRUCTURE

As a critical facility, an emergency operation center should have building infrastructure systems such as water, sewer, power, communications, and heating/air conditioning that remain operational after a major disaster. Many EOCs have redundant building systems as a backup in case the primary system fails in a disaster.

1. **South EOC**. This building was not built as an essential facility for EOC operations so there are no redundant systems for heating, ventilation, air conditioning, water supply and sewage. There is a backup generator to provide the EOC with redundant power.

   The backup generator, maintained by the El Toro Water District, is mounted on a trailer and housed at the south end of the building. To hook up the generator, it requires three persons to wheel the generator to the north end of the building where the transfer switch is located. This generator has the ability to provide redundant power for the EOC for 6-8 hours on a full load. No additional gasoline is stored on site, however a gas station is located nearby for additional fuel and ETWD can assist if requested.

   MWDOC staff has been informed that the current generator may be undersized to support the current and potential future electrical load. The generator was purchased prior to the installation of current technologies (e.g. laptops, projectors, TVs, etc.). A study will be necessary to analyze the electrical system and the required generator capacity.

   Cooling to the EOC is provided by an older air conditioning unit located at ground level at the west side of the building. This unit may be vulnerable to flooding as it sits in a storm water drainage area. Operationally, when the AC unit turns off and on, a power surge is sent through the electrical system which could be problematic when operating on a generator. The unit may require replacement in the near future.

   The EOC is equipped with telephone landlines. A separate radio room provides connectivity to MWD, the Orange County EOC, the North EOC, the MWDOC Offices, all water agencies and Orange County's Control One (911 services).

2. **North EOC**. This building is designed as an essential facility for the MET pumping station but there are no redundant systems for EOC operations for heating, ventilation, air conditioning, water supply and sewage. There is a backup generator for redundant power.

   The backup generator is mounted on an anchored trailer at the northeast corner of the building and is directly connected to a transfer switch. This generator has the ability to provide redundant power for WEROC's EOC for 10-12 hours. Diesel fuel is stored on site (limited), a gas station is located near-by and additional fuel could be coordinated through WEROC Member Agencies.

   Staff has been informed that the current generator may be undersized to support the current and potential future electrical load. The generator was purchased prior to the installation of current technologies (laptops, projectors, TVs, etc.). A study will be necessary to analyze the electrical system and needed generator capacity.

   Heat and cooling to the EOC are provided by two heat exchangers. During a

moderately warm day, the units were not able to provide enough cooling to the main EOC room during the site visit. A separate box unit in the radio room was functioning well. MET provides annual maintenance and upkeep of the AC units at no cost.

The EOC is equipped with telephone landlines and Internet via U-verse data lines. A separate radio room provides connectivity to MWD, the Orange County EOC, the South EOC, the MWDOC Offices, all water agencies and Orange County's Control One (911 services). Water to the facility comes off of the AMP; if the AMP is down, the water to the facility is out.

3. **MWDOC Administration Building**. The Administration Building was not constructed as an essential facility for EOC operations so there are no redundant systems for heating, ventilation, air conditioning, water supply and sewage. There currently is no backup generator or transfer switch. This is partially mitigated by the site being serviced by two separate electrical substations. The generator and transfer switch will need to be added if the facility is used as a primary EOC.

   The current electrical system may not be capable of supporting additional electrical load from adding additional technology to Conference Room 101 for EOC functionality. As part of a future tenant improvement project for the building, a study of the electrical and lighting systems may be needed.

   The HVAC systems in building were recently upgraded including the boiler and chiller. HVAC systems should be sufficient to meet current EOC requirements.

   The facility is equipped with Voice Over Internet Protocol (VOIP) and three landlines (fax machines are connected to landlines). The VOIP communications system is comprised of servers, a Voice Gateway and Power over Ethernet switches that provide power to the IP phones through the network. The radios in the WEROC Office provides connectivity to MWD, the Orange County EOC, the South EOC, the North EOC, all water agencies and Orange County's Control One (911 services).

From the perspective of building infrastructure, each site has its strengths and weaknesses but none are optimally configured for redundancy, so all sites are considered equal as options. The MWDOC Administration Building's building systems are continuously upgraded, are well-maintained and fully operational. However, its electrical system may require an upgrade for EOC operations and it does not have a backup generator. The South EOC and North EOC both have generators for backup electrical power but each has possible issues with electrical wiring and air conditioning systems.

7. EOC EXPENSES

Historical EOC Expenses
To compare expenses for the three possible EOC locations, the EOC expenses specific to North and South EOCs were examined for the past five years for the period from 2011 – 2016. Any expense that was not specific to the North and South EOC locations (e.g. cell phone, radio repeater maintenance, etc.) was excluded, so the expenses noted below are **NOT** the total expenses at each site or reflective of overall WEROC program budget.

The following table summarizes the line item expenses for the North and South EOCs. A line item for labor costs to maintain each EOC is also included.

Table IV. Historical EOC Expense Summary

EOC EXPENSES	NORTH EOC	SOUTH EOC
Regular O&M Expenses		
Radios	$14,124	$14,237
Generator	$6,559	$0
EOC Maintenance	$2,655	$2,585
Utilities (phone, Internet)	$17,088	$14,736
Computers & Peripherals	$3,925	$3,925
Office Supplies	$2,173	$2,173
Labor*	$38,311	$34,518
Total EOC Expenses from 2011 - 2016	$84,835	$72,174
Average Annual EOC Expense	$16,967	$14,435

* Labor costs identified are estimated costs

Projected EOC Expense
Based on the historical expenses, a projected estimate of EOC expenses was developed on the premise that the facility would function as a primary EOC. A twenty-year time horizon was used for the period of 2016 – 2036.

The following assumptions for the projected expenses were used:

1. An annual inflation rate of 2.68% was applied based on the average annual rate of inflation from 1996 – 2016 (US Consumer Price Index).
2. To simplify the analysis, Time Value of Money was not applied. Using a present value calculation would not materially change the comparative results.

3. All projected capital costs are rough order of magnitude estimates.
4. Projected capital costs for the MWDOC Administration Building include:
    a. Renovating Conference Room 101 to accommodate the necessary infrastructure for an EOC ($250 per square foot x 810 square feet = $202,500 as an estimate)
    b. Providing a backup generator and transfer switch
    c. Adding additional technology (i.e. ceiling mounted projectors and screens)
5. Regular EOC operating and maintenance costs for the MWDOC Administration Building are assumed to be the same as for the North EOC beginning in Year 2

Table V. Projected EOC Expenses

PROJECTED EOC EXPENSES	NORTH EOC	SOUTH EOC	MWDOC ADMIN.
Regular EOC Expenses	$453,186	$385,548	$435,764
Replace Backup Generator	$27,000	$27,000	
Replace AC Unit (Yr. 5)		$8,000	
Replace Roof (Yr. 8)		$30,000	
EOC Space Improvements			$202,500
Technology Improvements			$18,000
Backup Generator			$27,000
Total Projected Expenses	$480,186	$450,548	$683,264

A more detailed cost chart is located in the appendices.

In comparing the projected EOC expenses, the South EOC is the lowest cost option, the North EOC is the second lowest cost option and the MWDOC Administration Building is the highest cost option.

8. ACCESSIBILITY

The ability of EOC responders to quickly access an EOC, activate it and begin operating is critical for responding to an emergency. For this analysis, accessibility is defined by the following characteristics:

1. **Site and Facility Access**. The ability for EOC responders to access the EOC facility using main arteries including freeways, highways and surface streets and the ease for EOC responders to access the facility on the EOC site.
2. **Access for Persons with Disabilities**. The ability for an EOC responder with disabilities to access the site and to be able to work on the site and within the facility. Staff is of the opinion that this is not a legal requirement for these facilities at this time.

Site and Facility Access
Travel Distance
The map in Figure 10 indicates the residential locations for twenty MWDOC staff using residential zip codes and the locations of the three EOC sites.

The average travel distances from home to the three potential EOC locations were calculated. Based on these calculations, there are no significant differences in average travel distances between the three locations.

TABLE VI. Travel Distance for MWDOC Staff to EOC Sites

FACILITY	AVERAGE TRAVEL DISTANCE (MILES)
South EOC	19.29
North EOC	19.30
MWDOC Administration Building	19.68

During business hours, MWDOC staff are typically located at the MWDOC Administration Building.

Table VII indicates the travel distance and travel time from the Administration Building to the potential EOC locations.

TABLE VII. Travel Distance from MWDOC Administration Building to EOCs

FACILITY	TRAVEL DISTANCE (MILES)	TRAVEL TIME (MINUTES)
South EOC	19	24
North EOC	17	24
MWDOC Administration Building	0	0

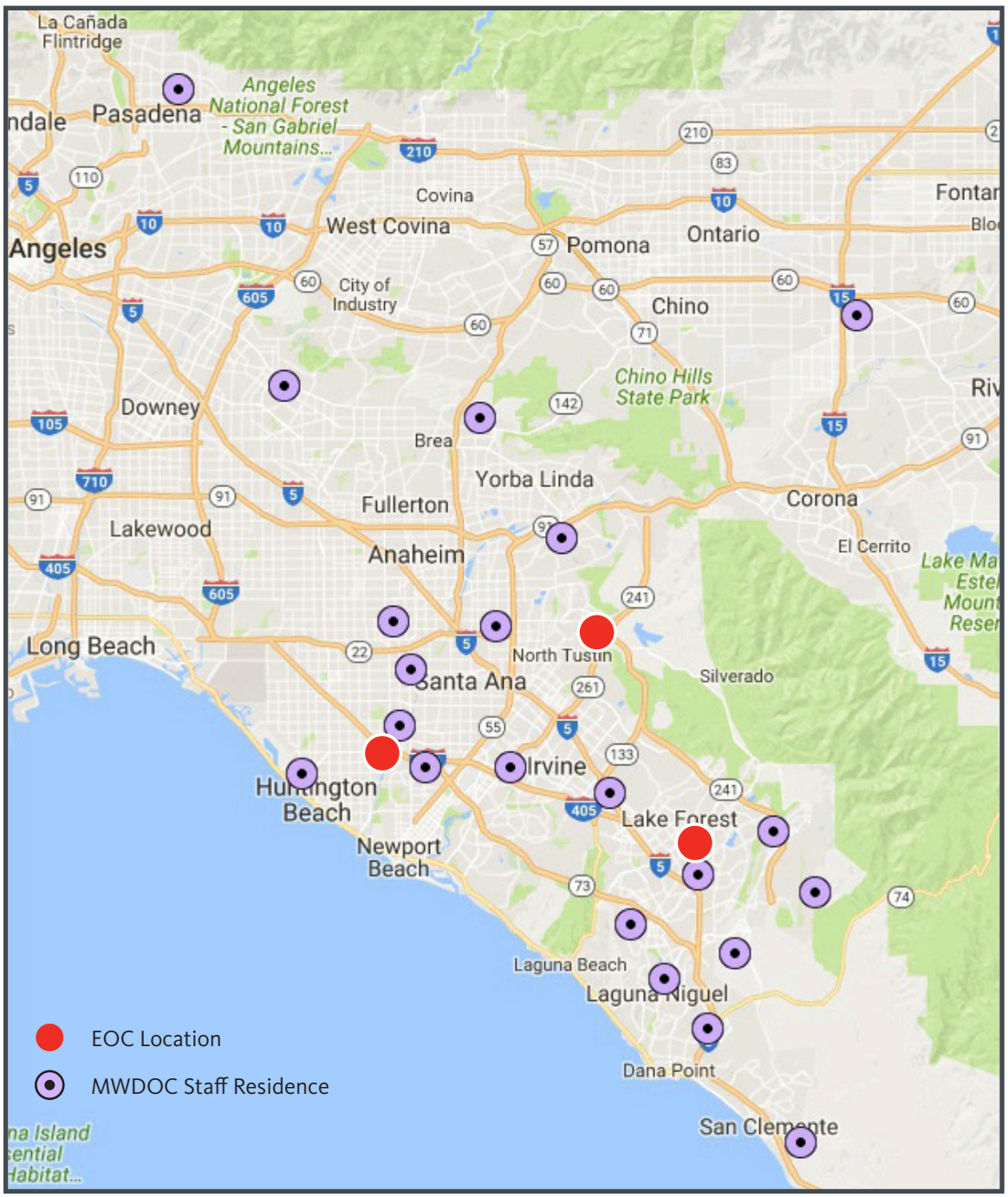


Figure 10: Residential Locations of MWDOC Staff Source: Batchgeo.com

Using this measure, the preferred location is the MWDOC Administration Building which will allow staff to immediately activate the EOC when necessary during business hours. This is followed by the South and North EOC locations because there are no discernible differences in travel distances and times between these two options.

Road Access
All three potential EOC locations are accessible via major arteries and/or surface streets.

1. **South EOC.** This site is located between the 5 freeway and the 241 toll road. It is also accessible using surface streets and from additional arteries including the 133 and 71 toll road.

2. **North EOC.** This site is located near the 261 toll road which runs north and south, connecting to major transportation routes (5 and 91 freeways). Should any major arteries be compromised, the site is also accessible using surface streets.

3. **MWDOC Administration Building.** The Administration Building is located adjacent to the 405 Freeway and is near the 55 Freeway and 73 toll road. Similar to the other locations, the Administration Building is also accessible using surface streets.

The North EOC is perhaps the least accessible of the three options due its more remote location and having only one major artery nearby. Additionally, the gravel access road may be compromised by a heavy storm event.

Access for Persons with Disabilities
As a special use facility that does not have daily staffing on site, an emergency operation center may be excluded from certain American with Disabilities Act (ADA) requirements. MWDOC staff have researched this in the past and have had an informal review from ACWA JPIA Safety staff to confirm this assessment. However, accessibility for all staff is still a concern and consideration.

1. **South EOC**. The South EOC site is accessible along a paved, level road to a security gate. A keypad at the gate is used to enter the secured area without having to exit your vehicle. Parking is available on a paved, level area adjacent to the building housing the EOC. There is no marked handicap parking stall. The facility is a single-story structure and all rooms appear to be wheelchair accessible.

2. **North EOC**. Accessing the North EOC site for a person who is physically impaired is particularly challenging due to steep, unpaved incline leading from the street to the front gate. To unlock the gate, a person is required to exit the vehicle, unlock a padlock and swing the gate open. A small paved parking area is available for a few cars but much of the parking area is unpaved and uneven.

   Access to the EOC on the second floor is by a set of narrow stairs with no wheelchair lift or elevator access. Rooms within the EOC are not entirely wheelchair accessible. In the event of a fire and if the entrance is compromised, the only escape option is through a second story window and collapsible ladder.

3. **MWDOC Administration Building.** As a commercial office facility, the Administration building site and facility is fully ADA-compliant. Access to the site is

through a security gate and guard booth (typically the gate is open and the booth is unmanned). Handicap parking stalls are adjacent to the main entry. All rooms within the facility are wheelchair accessible.

From the perspective of a person with disabilities, the best location is the MWDOC Administration Building which is ADA-compliant and the least desirable location is the North EOC due to its difficult access and exiting requirements.

9. SECURITY

As a critical facility, an emergency operation center is typically located on a secure site. An EOC can also use an isolated location, a nondescript building and the absence of signage as an additional layer of security.

1. **South EOC.** The site is located off the main road and not visible to pedestrians or other traffic. The front gate is high enough to prevent someone from easily jumping over and also requires a key code to open. The site is secured by a chain link fence with barbed wire, however the client referenced multiple cases of neighborhood youth accessing the site and having to be evicted. Inspections should be made to ensure the integrity of the fencing around the perimeter.

   The building is secured by a key lock on the ground floor entry and is accessed only by El Toro Water District and MWDOC staff. Multiple visits per week by El Toro Water District staff provide a minimal level of security to check for break-ins at the EOC.

   There currently are no other security systems or components such as CCTV cameras, motion detectors or badging access on the premises. Installing video equipment would be helpful to prevent break-in or robbery of the EOC facility equipment.

2. **North EOC.** The site is surrounded by a high-income housing community, decreasing the risk of trespassing vagrants or other criminal elements. The site is not visible from the road and signage for the facility is not clearly visible. The entrance is blocked by a low front gate that could be easily breached by a pedestrian and walking trails in the area provide open access. There is a lack of consistent fencing around the property's entire perimeter. Fencing does completely surround the actual buildings and includes barbed wire. There currently are no other security systems or components such as CCTV cameras, motion detectors or badging access on the premises. The facility's isolated location provides an additional level of security.

   The EOC is secured by a key lock on the ground floor entry and is accessed only by MWDOC staff. MET staff only have access to their pump station and the garage area. The building is completely surrounded by a chain link fence with barbed wire. Roof access is secured by a lock ladder system.

3. **MWDOC Administration Building**. Vehicular access to the site is secured by a guard booth at the main gate. However, this booth is unmanned and the gate remains open during business hours. There is no security fencing around the Administration Building site, allowing a pedestrian to walk directly to the building.

   The building is secured by key card for MWDOC personnel. The security system is administered and maintained by Orange County Water District staff. This system may be upgraded in the near future. There are CCTV cameras within the parking lot, the front desk of the Administration Building, in the Joint Board Room and in the OCWD employee area. However, there are no other security systems or components on the MWDOC side of the building.

In general, all of these locations provide only a moderate to minimum level of security. The MWDOC Administration building location is the preferred option based on the presence of MWDOC staff on the site during business hours, OCWD staff on site 24 hours/ 7 days a week, an access control system and security monitoring by OCWD personnel. The South EOC with its perimeter fencing, more secure gate access and the frequent presence of El Toro staff is the next preferred option. The least preferred option is the North EOC site due to the lack of the presence of personnel on the site and the lack of security monitoring systems.

10. BUILDING ENVELOPE

The building envelope or exterior condition of the building is important to consider as an indicator of regular care and maintenance of the facility and the need for future repairs or upgrades. The comments below are a snapshot in time and are not intended as future predictions of damage or deterioration of the buildings.

1. **South EOC**. The facility uses a steel post and beam construction built on a concrete slab foundation. Its exterior is clad with metal panels. The low-pitched roof also is constructed of metal panels and has external drain pipes for roof drainage. The roof appears to be in good condition given its age but may require replacement within the next ten years.

   The building envelope appears to be well maintained. Although there is some rust on the external beams, there does not appear to be any major areas of disrepair in the building envelope that may cause leaks or damage to the interior of the facility. Although sections of the roof were replaced at some point, there doesn't appear to be any leaks in the building.

2. **North EOC.** The facility is built with a wood frame construction on a concrete slab foundation. Its exterior is sheathed with a stucco finish and is accented with a clay tile trim along its roof line. Concrete block is used to frame the equipment door on the first floor. The building has a flat roof and external drain pipes are used for roof drainage.

The building envelope appears to be well maintained. There does not appear to be any major cracks or areas of disrepair in the building envelope that may cause leaks or damage to the interior of the facility.

3. **MWDOC Administration Building**. The MWDOC facility's structure is comprised of steel columns, steel and wood trusses and concrete masonry exterior walls built on top of a concrete footing system. The mansard roof is comprised of a plywood sheathing diaphragm.

   From a visual walk-through, the building envelope appears to be well maintained. There does not appear to be any major areas of disrepair in the building envelope that may cause leaks or damage to the interior of the facility.

From observations of the exterior building condition, the Administration Building is the preferred option. As an owned and occupied facility, it has a high level of upkeep and is regularly upgraded. The North EOC is the next preferred option because it is a newer building and is regularly upgraded by MWD. The least preferred option, the South EOC, is an older building that will need repair work in the future.

11. MAINTENANCE

Maintenance of an EOC is an important factor to ensure that the facility is fully functional when an emergency arises.

1. **South EOC.** Maintenance for the facility is provided by El Toro Water District facilities staff. The site and the facilities appear to be well-maintained and issues are resolved quickly to the satisfaction of MWDOC staff.

   El Toro Water District staff visit the site three to four times a week and MWDOC staff may request unscheduled maintenance visits. ETWD staff are quick to respond to service requests and are very helpful in providing solutions.

2. **North EOC**. Maintenance for the facility is provided by MET staff. MET staff regularly schedule maintenance visits, primarily for monthly pest control and annual AC service. MWDOC staff may request unscheduled maintenance visits. According to MWDOC staff, nonscheduled maintenance often takes time to schedule with MET and often MWDOC staff rely on local water utility staff to assist with small projects when needed. This may lead to repairs such as missing ceiling tiles and cleaning of the garage area as having lower priorities. WEROC's EOC spaces do not appear to have as high a priority as the pumping station maintenance for MET maintenance staff.

3. **MWDOC Administration Building**. Maintenance for the facility is provided by personnel hired by MWDOC and OCWD Maintenance Staff. The building appears to be well-maintained and many of the building systems have been recently upgraded. Additional upgrades to the building systems are being considered as part

of the interior renovations, such as upgrades to the IT Server room fire suppression system which are critical to business continuity.

The Administration Building is the best maintained facility and is the preferred option. The South EOC is the next preferred option. The site is well-maintained and El Toro Water District staff is very responsive in requests for service. The North EOC is the least preferred option due to the irregular maintenance of the site and facility.

12. OWNERSHIP OF THE FACILITY

In general, for most government functions, property ownership is preferred as opposed to leasing because government functions tend to stay at one location for many years. This is true for EOCs which typically occupy a location for twenty years or more.

1. **South EOC**. The site and building is owned by the El Toro Water District and is leased to MWDOC at no cost. There are no current plans by El Toro to repurpose or tear down the building, but the Water District could choose to demolish the structures on the site and construct a new facility in the future.

2. **North EOC**. The site and building is owned by MET to house its pumping station. MET leases the unoccupied office space on the second floor to MWDOC at no cost. MET does not currently plan to reoccupy the office space and the building will remain as a pumping station for the foreseeable future.

3. **MWDOC Administration Building**. The Administration Building is owned and occupied by MWDOC and the site is owned by the Orange County Water District. There are no plans by MWDOC to move from this location.

From a property ownership perspective, the preferred option is to locate the EOC at the MWDOC-owned Administration Building. The North EOC site is the next preferred option because there is almost no risk of MET reoccupying the office space used by WEROC. The least preferred option is the South EOC due to the small risk of the El Toro Water District demolishing the building and replacing it with a new facility on the site.

13. PARKING

Ample and accessible parking space is important to allow for safe and efficient ingress and egress of an EOC facility.

1. **South EOC**. Parking is available in a paved parking area adjacent to the EOC facility. The parking area appears to be well-maintained and sufficient space is available for EOC staff. There are no clear markings for parking spaces which may cause confusion during an EOC activation.

2. **North EOC**. Parking at this location is limited to nine spaces on the paved parking area adjacent to the building. Additional space is available on an unpaved gravel area to accommodate EOC staff. The parking lot does not appear to be regularly maintained.

3. **MWDOC Administration Building.** This location has paved, marked parking areas adjacent to the building. Additional parking spaces are located nearby. Handicap parking spaces are clearly marked near the building entrance. During visits to the Administration Building, parking spaces appear to be available to accommodate EOC staff for an activation. The parking areas are well-maintained.

The MWDOC Administration Building is the preferred option with its ample parking, clearly-marked handicap spaces, and well-maintained parking areas. The South EOC is the next preferred option with its sufficient and well-maintained parking area. The North EOC is least preferred due to its limited paved parking and uneven, gravel parking area.

SECTION E

EVALUATION CRITERIA SCORING

1. PRIORITIZATION

The evaluation criteria used for assessing the three potential EOC sites were prioritized by MWDOC staff and the Claris Strategy team. The criteria were discussed in detail and were prioritized and placed into three categories:

- Critical
- Important
- Less important

Table VIII summarizes the priorities of the evaluation criteria.

Table VIII. Evaluation Criteria Prioritization

PRIORITIZATION	EVALUATION CRITERIA
Critical	1. Hazards/Risks
	2. Seismic Reinforcement
	3. Life Safety
	4. Dedicated EOC
	5. Space Functionality and Future Configurability
	6. Infrastructure
	7. Cost
Important	8. Accessibility
	9. Security
	10. Building Envelope
	11. Maintenance
Less Important	12. Ownership of Facility
	13. Parking

2. SCORING

For the purpose of scoring the evaluation criteria, the prioritization categories were given a numerical weighting:

- Critical = 3
- Important = 2
- Less Important = 1

The Claris Strategy team assessed each of the evaluation criteria and ranked them according to our analysis. The highest ranked or most preferred location was scored a 3, the second ranked or next preferred option was scored a 2 and the lowest ranked or least preferred option was scored a 1. If two or more sites were tied as an option, they were given the same numerical score.

The numerical ranking of the three possible sites was then multiplied by the weight of the category to generate a score for the each of the evaluation criteria.

For example, in the Hazards/Risks criterion, the South EOC as the most preferred option would have a rank of 3. This is multiplied by the weight of 3 to have a score of 9. The MWDOC Administration Building has a ranking of 1. Multiplied by the weight of 3, it has a score of 3. The North EOC has a ranking of 2, multiplied by the weight of 3, it has a score of 6 for the Hazards/Risks criterion.

The scores for the evaluation criteria for the three sites were totaled for the final scoring. Using this methodology, the South EOC site had the highest total score, followed by the MWDOC Administration Building and the North EOC site.

Table IX. Evaluation Criteria Scoring

EVALUATION CRITERIA	WEIGHT	CRITERIA RANKING PER SITE		
		SOUTH EOC	MWDOC ADMIN.	NORTH EOC
1. Hazards/Risks	3	3	1	2
	Score	9	3	6
2. Seismic Reinforcement	3	1	2	3
	Score	3	6	9
3. Life Safety	3	2	3	1
	Score	6	9	3
4. Dedicated EOC	3	3	1	3
	Score	9	3	9
5. Space Functionality and Future Configurability	3	3	1	2
	Score	9	3	6
6. Infrastructure	3	2	2	2
	Score	6	6	6
7. EOC Expenses	3	3	1	2
	Score	9	3	6
8. Accessibility	2	2	3	1
	Score	4	6	2
9. Security	2	2	3	1
	Score	4	6	2
10. Building Envelope	2	1	3	2
	Score	2	6	4
11. Maintenance	2	2	3	1
	Score	4	6	2
12. Ownership of Facility	1	1	3	2
	Score	1	3	2
13. Parking	1	2	3	1
	Score	2	3	1
TOTAL SCORE		**68**	63	58

SECTION F

RECOMMENDATIONS

In our examination of the Municipal Water District of Orange County's Water Emergency Response Organization of Orange County EOC facilities, our team has found a robust and active program, a high level of planning and preparedness and good EOC support facilities.

The questions to be answered are:

1. How many of the existing sites should be maintained to meet future EOC needs of the program?
2. What are the critical factors in making this decision?
3. What are the pros and cons for maintaining more sites or fewer sites?
4. If there is a recommendation to change the number of sites, which sites are recommended to be maintained and at what capacity?

1. HOW MANY EOCS?

Collectively, the current three EOC facilities can more than adequately meet the needs of the WEROC program today and in the future. Based on our team's analysis of the EOC sites, our recommendation is for MWDOC to consolidate from its current configuration of two primary EOC locations and one EOC-in-a-box to one primary EOC and one alternate EOC. Our recommendation is based on the following reasons.

a. **Best Practices**. FEMA and SEMS guidelines recommend that public agencies have one primary EOC and one alternate EOC[1,2,3]. In our experience, public agencies of MWDOC's size (and larger) typically have only one primary EOC and may or may not have an alternate EOC. To our knowledge, we are not aware of any government agency of equivalent size that has more than one primary EOC and one alternate EOC.

   There are advantages in having more than one primary EOC. If one EOC were to become inoperable, a second fully configured EOC would immediately be available without any delay in response. However, in reviewing WEROC's Emergency Operations Plan and Continuity of Operations Plans, we did not discern any time requirement (response time or recovery time objectives) for this added level of assurance.

   For some public agencies and private sector companies, factors such as geographical distance, separation by time zone and/or distinct, unique operational functions may require an organization to operate more than one primary EOC. This, however, is not the case with MWDOC given the relatively compact geographical service area and single purpose function of supporting Member Agency water distribution operations.

1. FEMA IS-775: EOC Management and Operations, https://training.fema.gov/is/courseoverview.aspx?code=IS-775
2. FEMA Emergency Operations Center Assessment Checklist, https://www.fema.gov/emergency-operations-center-assessment-checklist#2
3. SEMS Guidelines, California Emergency Management Agency, November 2009, Planning and Developing SEMS, pg. 2

b. **Optimal Use of Resources.** Most organizations have limited resources to implement their emergency management program and WEROC is not unique in this. In our findings and analysis, the WEROC program can optimize its capabilities by operating a single, dedicated EOC instead of two primary EOCs.

EOC-specific operating, maintenance and labor costs (as identified in Table V), almost evenly split between the North and South EOCs, can be focused on a single primary EOC. Any potential savings in reducing the number of primary EOCs from two to one should be used to increase the capability of EOC operations in accordance with best practices at the selected site.

Potential improvements that can enhance operations are:

- Desktop computers which are minimally supplied at the North and South EOCs can be consolidated at one facility so that they are available to all EOC responders
- Equipment can be upgraded at more optimal intervals
- Infrastructure, space layout and furniture can be enhanced to provide a more effective and responsive work environment
- New technologies can be looked at, such as satellite phones, cable TV and large scale drawing plotters, to support communications and coordination
- Labor can be redirected to other important program goals such as training, tools and outreach

A single primary EOC and an alternate EOC, properly equipped and operational, will be able to meet the needs of the WEROC program for today and the foreseeable future.

2. WHICH SITES?

Recommended Primary EOC Site

Based on our analysis and scoring of the three potential EOC locations using the evaluation criteria, <u>we recommend that MWDOC uses the South EOC site as its primary EOC location</u> for the following reasons:

a. **Fewest natural and man-made hazards**. The most significant risk to this site is an earthquake on the Newport-Inglewood fault. The other locations are at risk of three or more hazards. To mitigate the moderate earthquake risk, MWDOC should consider having a structural engineer examine the seismic stability of the structure and the cost of a retrofit.
b. **Dedicated EOC**. The South EOC is well designed to accommodate the needs of WEROC as the primary emergency operations center. Equipment, furniture, space layout and infrastructure are optimally configured to function as an EOC. Operating as the dedicated WEROC EOC, the South facility will be immediately available for use when an emergency activation occurs.
c. **Best space configuration for current and future use**. Our team collectively agreed on our tour of the three sites that the South EOC was the most suited for

WEROC's EOC operations. From both an analytical and intuitive level, the South EOC's physical layout, ample space and space configuration provides the necessary flexibility and expandability to meet current and future program needs.

d. **Lowest projected EOC expenses**. Based on our high-level analysis of EOC costs, the South EOC has the lowest projected expenses over a twenty-year time horizon. Although there are future replacement costs for a roof and an A/C unit, this is offset by lower operating and maintenance costs.

The MWDOC Administration Building scored as the second most preferred option. This location has advantages in its accessibility for EOC responders during business hours and with a facility that has a high level of safety and security, superior building infrastructure and regular maintenance. The challenges of this location include a high risk of earthquake damage, liquefaction considerations and flood zone issues. In addition, the Administrative Building is not configured to serve as a dedicated EOC and the costs associated with upgrading the facility to be usable as an EOC preclude selecting it as a primary EOC site.

The North EOC has some of the attributes expected to be present in an EOC facility including dedicated space, a MET essential facility and lower projected expenses. However, it has significant weaknesses with regard to life safety, a high number of hazards and risks, and a cramped space that will require significant capital investment to upgrade. These considerations combine to make the North EOC a less desirable choice.

Recommended Alternate EOC Site

An alternate EOC is activated only if the primary EOC is no longer operable. As an backup facility, requirements are similar to a primary EOC but some criteria are not necessary or have changed in importance. An alternate EOC does not require the full functionality of a dedicated EOC. It may be located in a multi-use space, equipment may be placed in storage and set up when required, and the room may not be as fully equipped or as optimally configured (in a pod configuration) as a dedicated EOC. Based on WEROC's needs, a dedicated alternate EOC is not required and as a temporary, short-term alternative, space functionality is less important in a backup facility.

Our recommendation is to use the MWDOC Administration Building as the alternate EOC facility. The Conference Room 101 can act as an adequate EOC space with a minimal investment in technology. Since it is not meant to be a primary EOC, a major space upgrade investment is not required. However, there are some smaller enhancements identified in the next section that should be considered. The two independent sources of electrical power from separate substations help mitigate the risk of a power outage. A backup generator may not be necessary.

As an added advantage, the Administration Building can be used for low-level EOC activations since most of the necessary technology, space and staff are all available at this location.

Two risks exist in choosing the South EOC as a primary location and the Administration Building as the alternate. There is a small risk that both the South EOC and MWDOC Administration Building may be unusable if a major earthquake occurs along the Newport-Inglewood fault. Secondly, there is a small risk that the El Toro Water District may, at some time in the future, make a decision to re-purpose the South EOC site for its own use. To mitigate

these risks, we recommend that MWDOC retain access to the North facility. We recommend the North facility be utilized for storage with existing furniture and wall fixtures remaining in place. Items such as radios, computers, generator, TV's, etc. can be repurposed to the Primary EOC. If an earthquake does occur that disables both the South EOC and Administration Building, the North facility will be available as a meeting space. In the unlikely event the El Toro Water District decides to re-purpose the South EOC facility, MWDOC will have the option to convert the North location back to EOC operations.

3. EOC FACILITY EQUIPMENT AND INFRASTRUCTURE

Should MWDOC decide to implement the recommendations, the following items should be considered as upgrades and enhancements to the current equipment and facilities.

Primary EOC
In addition to the current equipment and infrastructure at the South EOC, we recommend that the following items for consideration:

- 5 – 10 ergonomic workstations equipped with laptop, monitor, keyboard, mice, telephone and chairs
- 5 – 10 additional ergonomic workstations with chairs (a minimum 15 workstations in total)
- An electrical analysis of wiring and generator capacity
- A seismic study of the building and reinforcement of the building if necessary
- A fire life safety study of the facility including fire sprinklers, smoke detectors, and fire rated doors
- Cable/Satellite TV connection
- Security cameras
- E size color plotter (optional)
- Satellite phone with data and satellite antenna (optional)

Alternate EOC
The following list of equipment and infrastructure is recommended for the alternate EOC located at the MWDOC Administration Building:

- Conference table for 10 – 15 EOC responders (existing)
- Additional seating for 15 (existing)
- Radio equipment and roof top antenna (existing)
- Internet connectivity (existing, but may need enhancement)
- Cable/Satellite TV connection (existing)
- Dedicated printer/copier (located in Conference Room 101)
- Dedicated fax machine with Plain Old Telephone Service (POTS line. existing)
- 4 Dedicated laptops (one per EOC section stored near Conference Room 101)
- Wi-Fi router (existing, but may need enhancement)
- Additional projectors and screens
- Rolling or additional wall-mounted white boards
- Backup generator and transfer switch (optional)
- Satellite phone with data and satellite antenna (optional)

SECTION G

APPENDICES

1. Earthquake Analysis
2. Cost Analysis
3. Accessibility Analysis

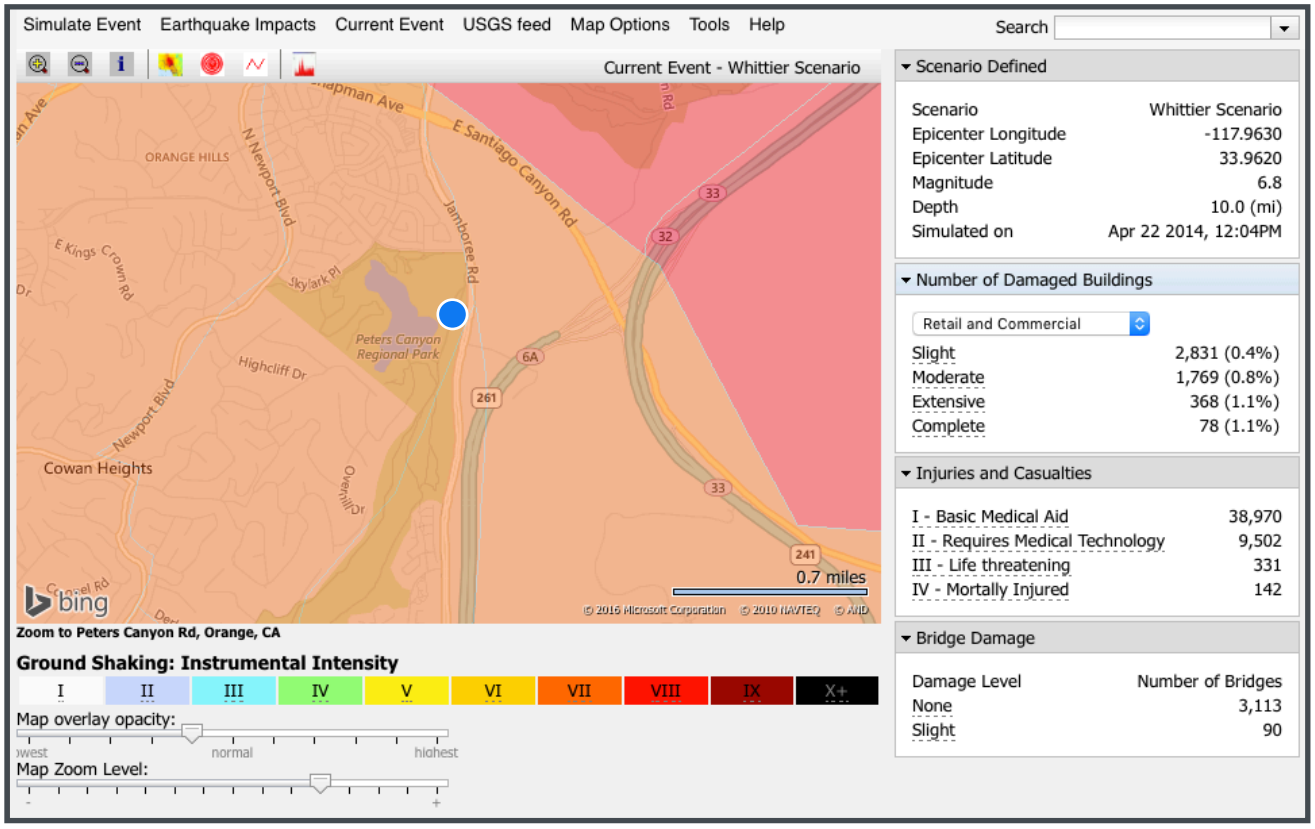
1. EARTHQUAKE ANALYSIS

Using an earthquake simulation model, the following three scenarios were run on each of the three locations with shaking information published by the US Geological Survey. The following ground shaking maps were generated.

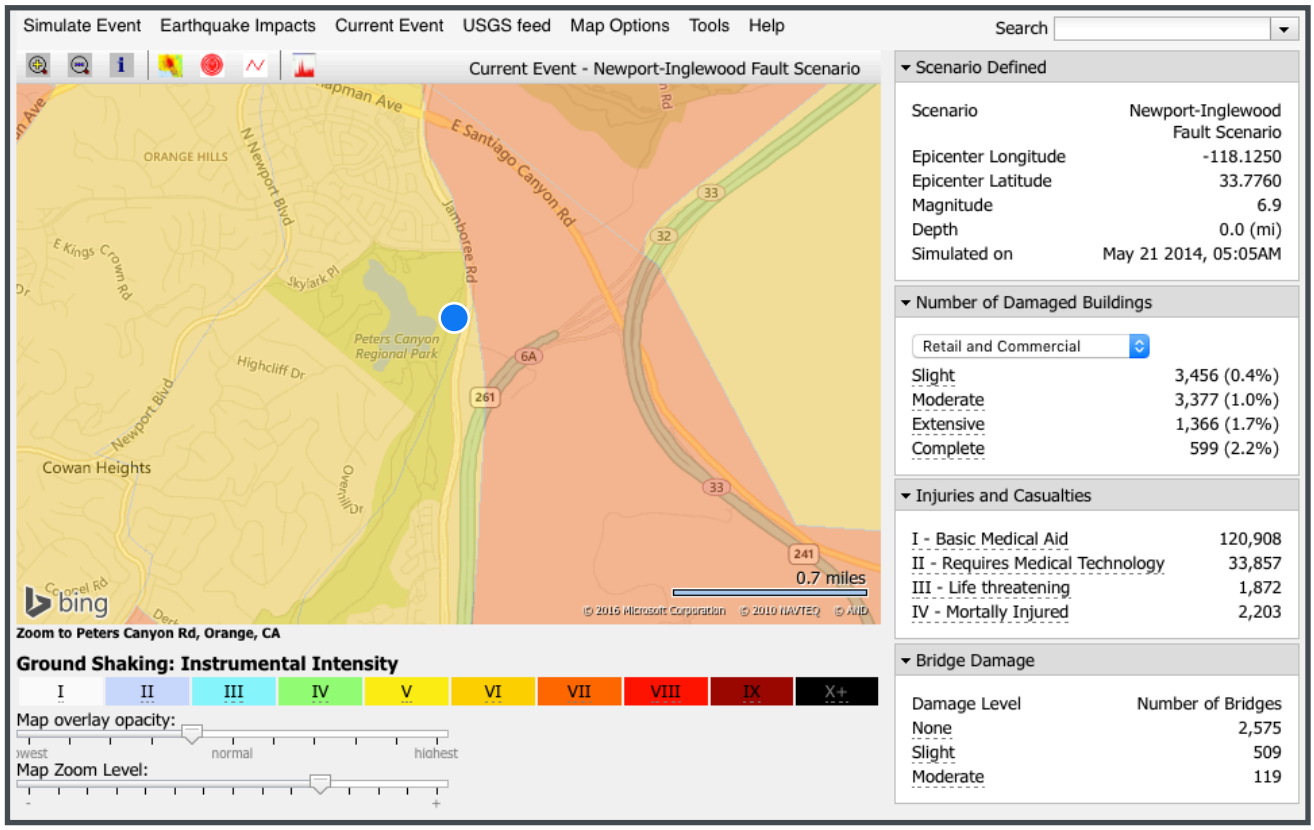
1. Whittier Earthquake (Magnitude 6.8)
2. Newport Inglewood Earthquake (Magnitude 6.9)
3. San Andreas Earthquake – Shake Out Scenario (Magnitude 7.8)

NORTH EOC SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY
Whittier (6.8)	VII
Newport-Inglewood (6.9)	VI
San Andreas (7.8)	VI

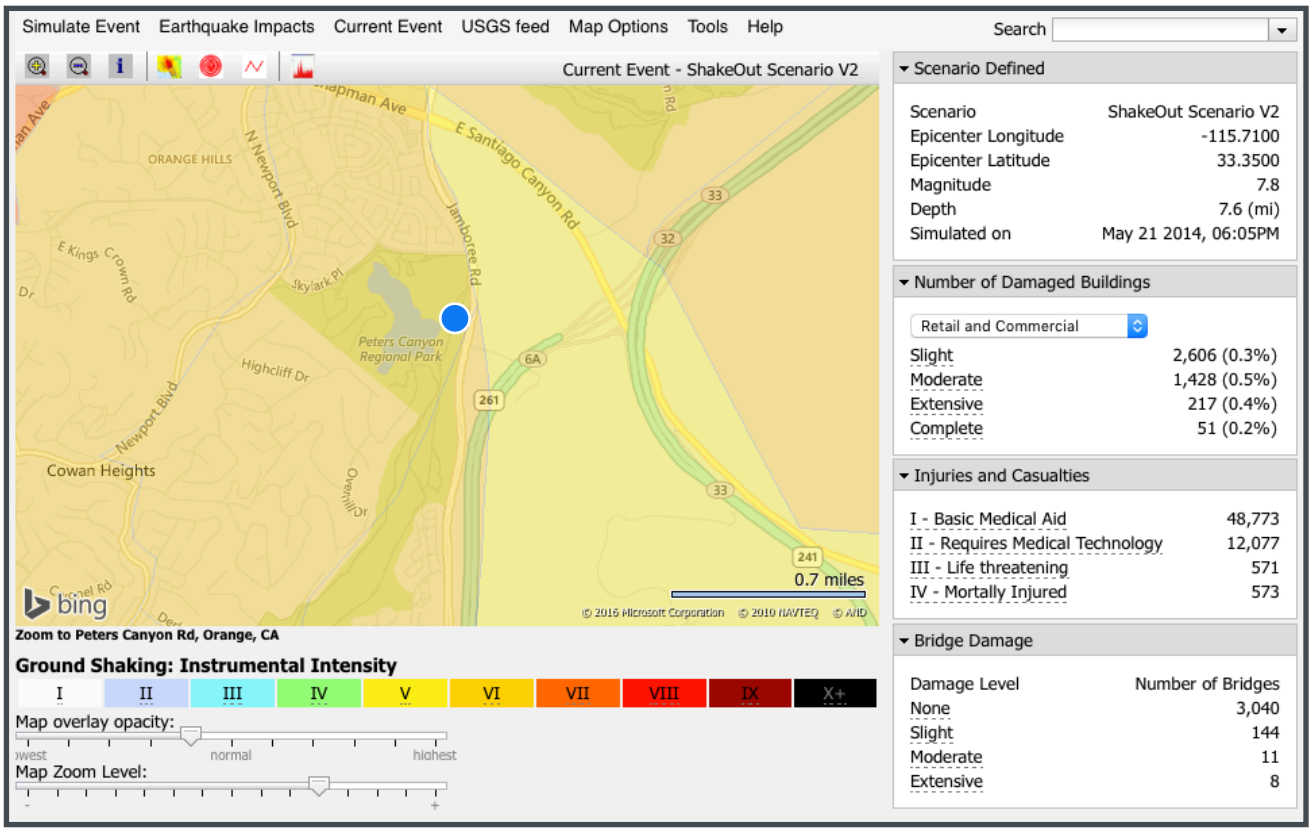
NORTH EOC - WHITTIER EARTHQUAKE



NORTH EOC - NEWPORT-INGLEWOOD EARTHQUAKE



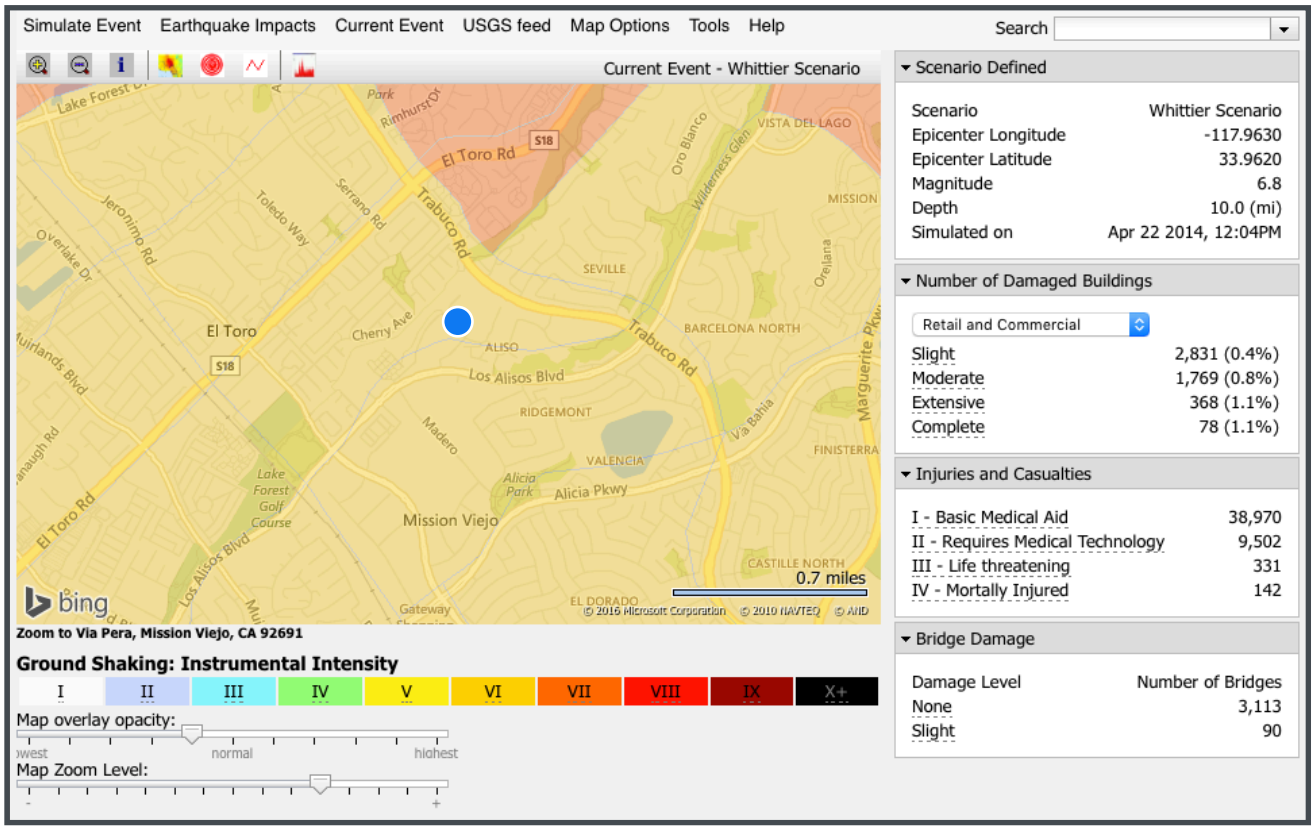
NORTH EOC - SAN ANDREAS EARTHQUAKE



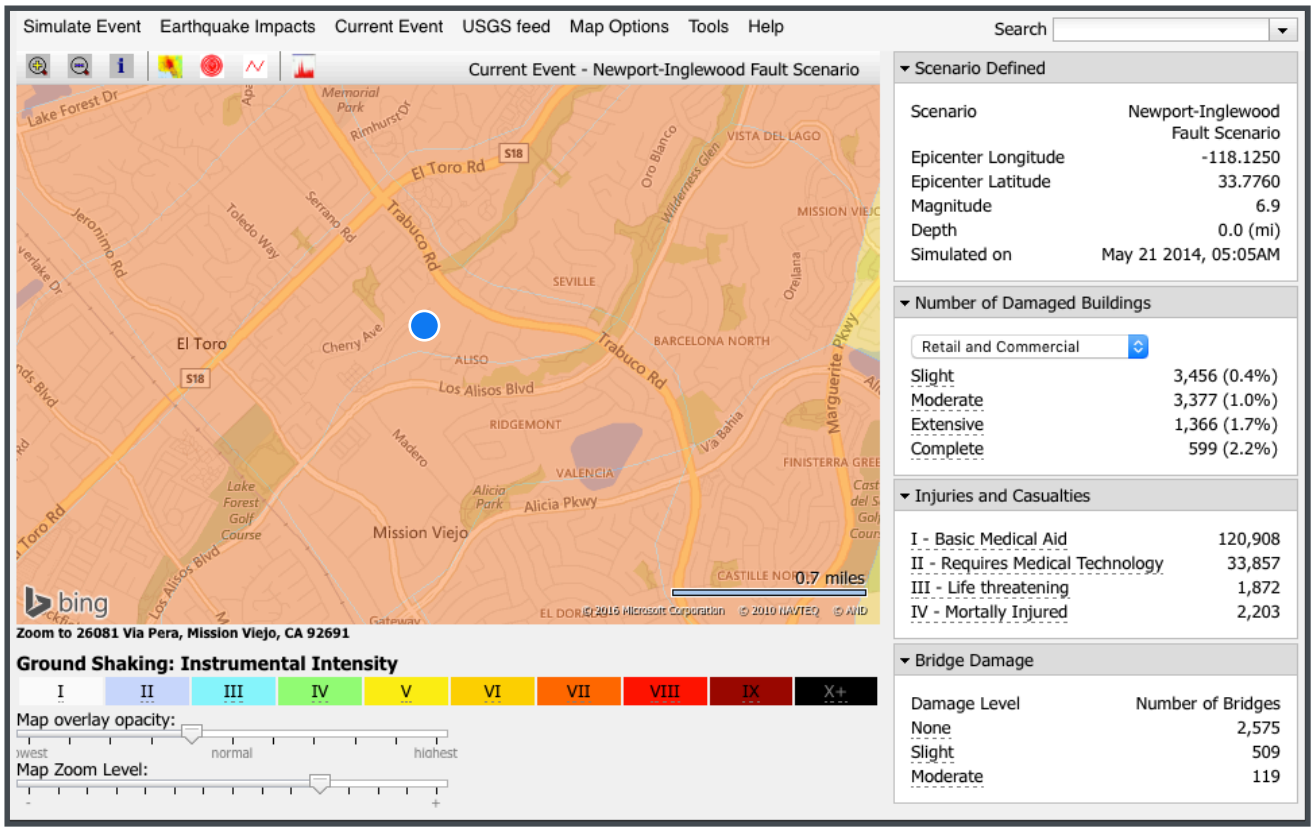
1. EARTHQUAKE ANALYSIS

SOUTH EOC SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY
Whittier (6.8)	VI
Newport-Inglewood (6.9)	VIII
San Andreas (7.8)	V

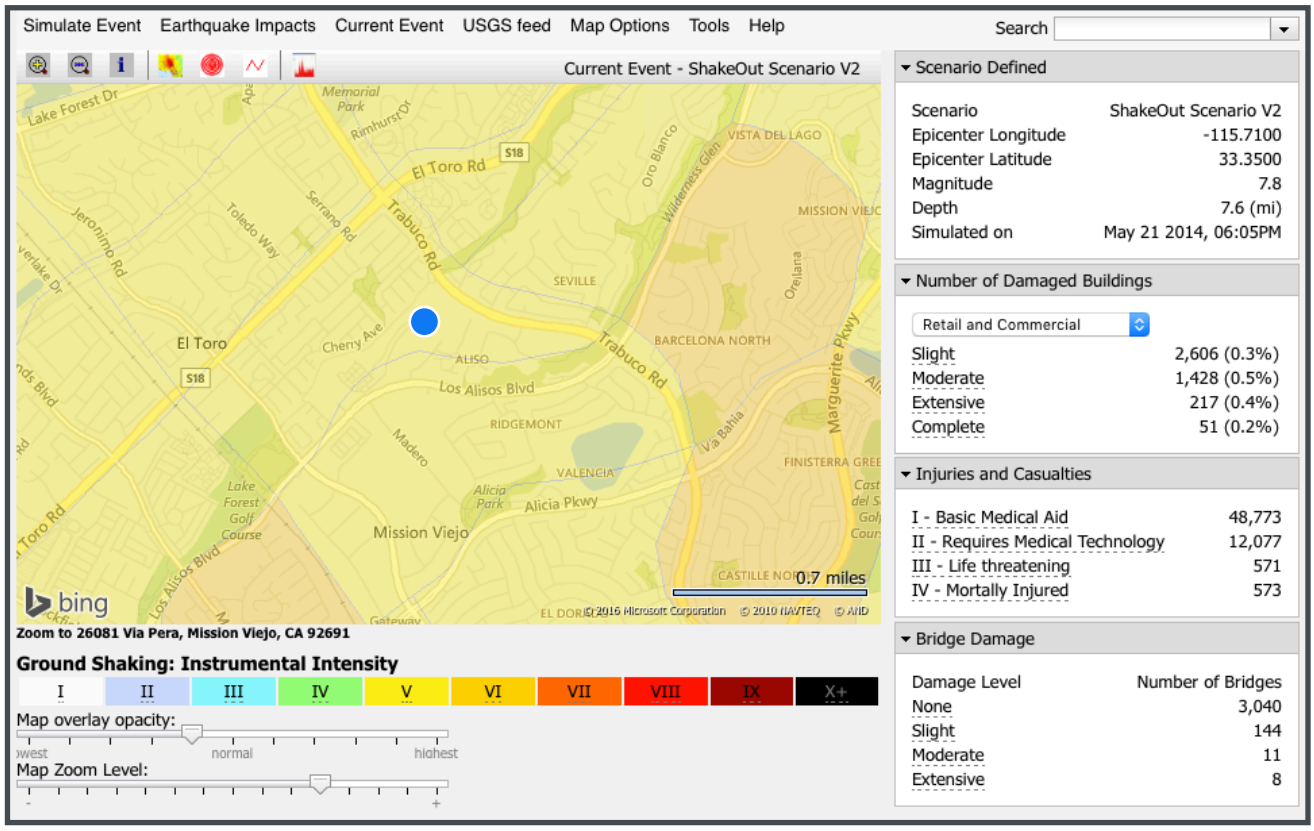
SOUTH EOC - WHITTIER EARTHQUAKE



SOUTH EOC - NEWPORT-INGLEWOOD EARTHQUAKE



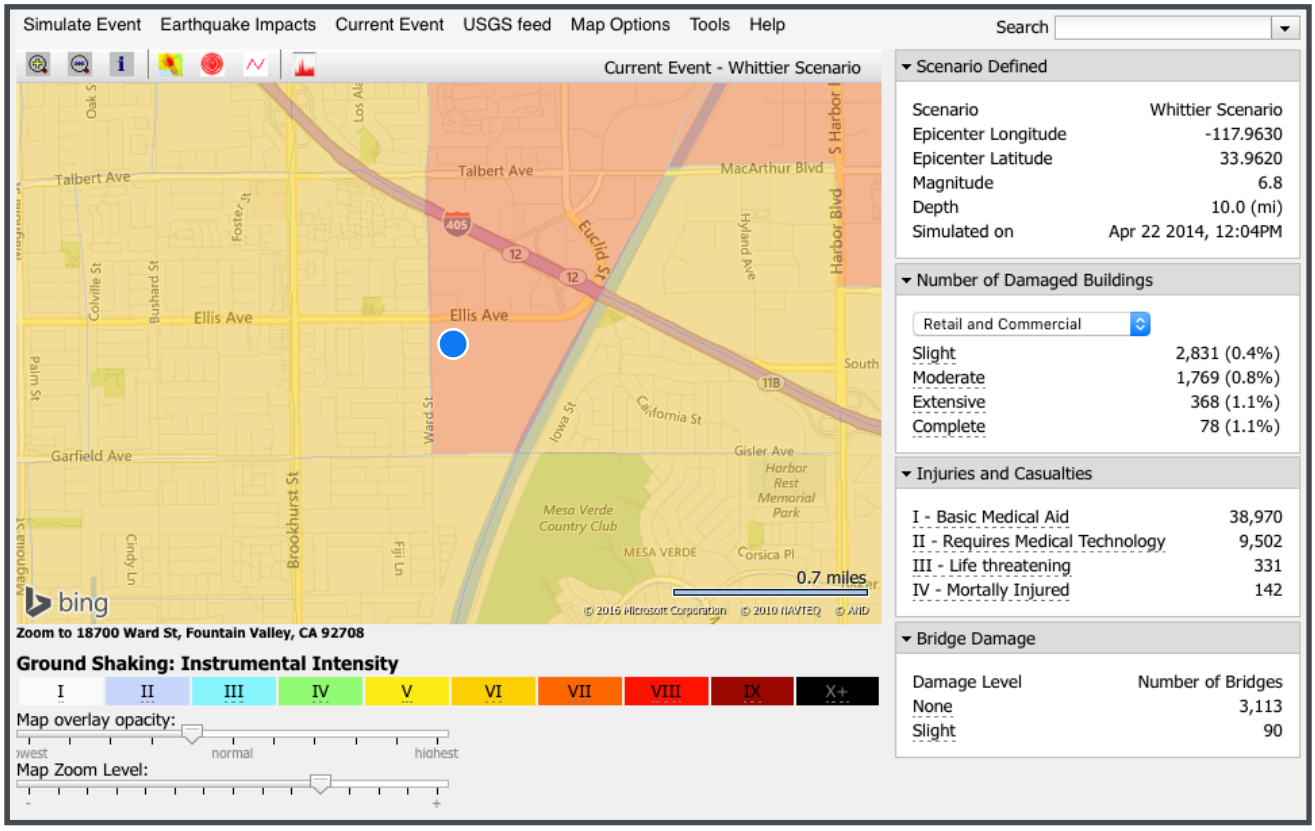
SOUTH EOC - SAN ANDREAS EARTHQUAKE



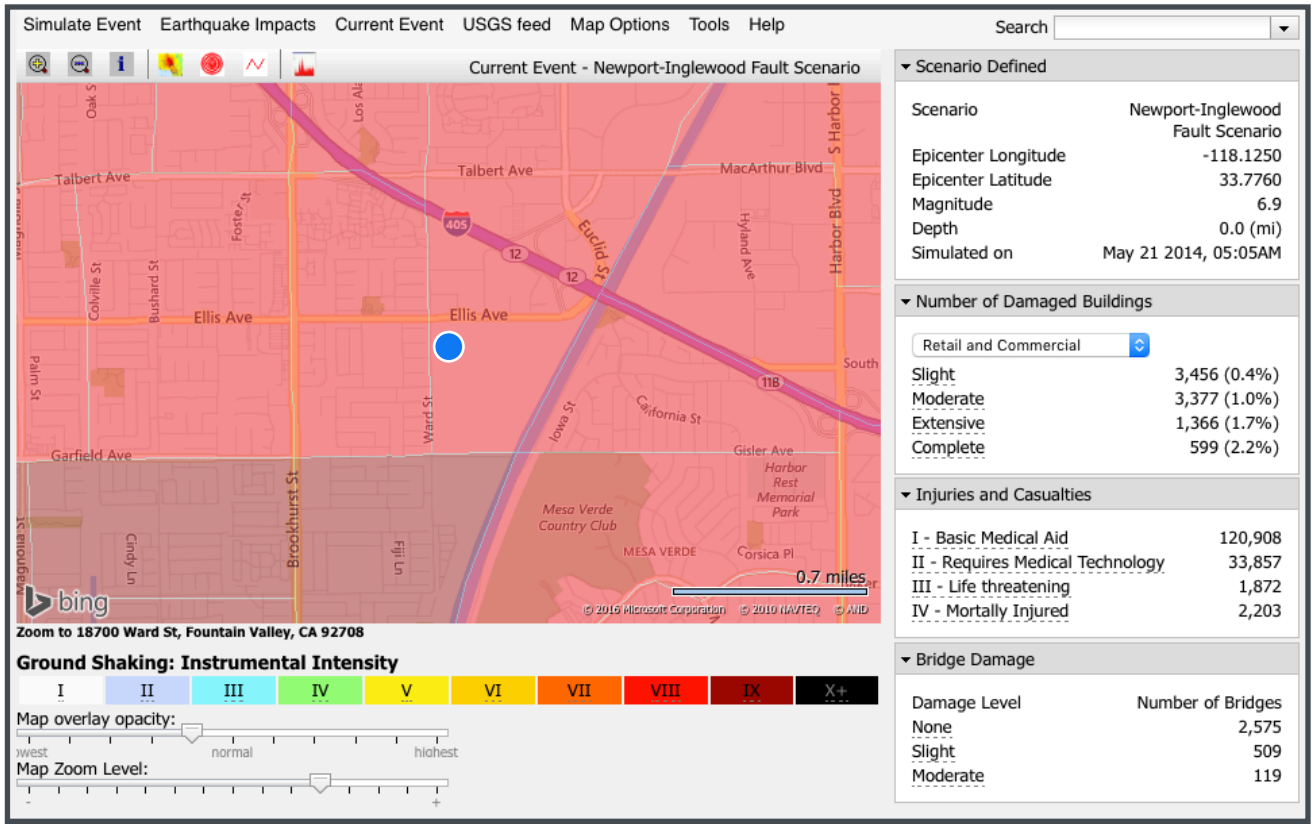
1. EARTHQUAKE ANALYSIS

MWDOC ADMINISTRATION BUILDING SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY
Whittier (6.8)	VII
Newport-Inglewood (6.9)	VIII
San Andreas (7.8)	IX

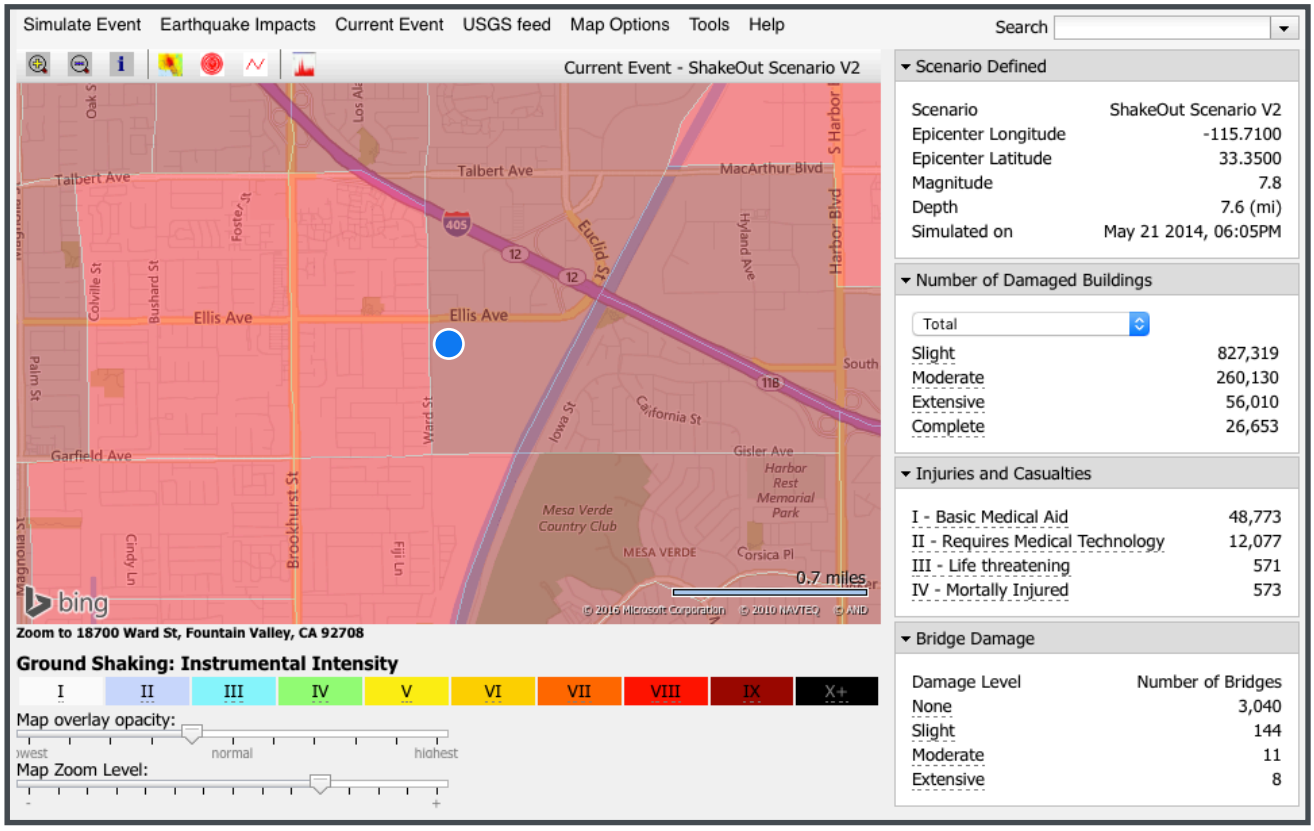
MWDOC ADMINISTRATION BUILDING - WHITTIER EARTHQUAKE



MWDOC ADMINISTRATION BUILDING EOC - NEWPORT-INGLEWOOD EARTHQUAKE



MWDOC ADMINISTRATION BUILDING EOC - SAN ANDREAS EARTHQUAKE



2. COST ANALYSIS

Historical Expenses (2011 - 2016)

EOC expenses specific to North and South EOCs were examined for the past five years for the period from 2011 – 2016. Any expense that was not specific to the North and South EOC locations (e.g. cell phone, radio repeater maintenance, etc.) is excluded, so the expenses noted below are **NOT** the total expenses at each site or reflective of overall WEROC program budget.

North EOC	
Regular Operating & Maintenance Expenses	
Radios	$14,124
Generator	$6,559
EOC Maintenance	$2,655
Utilities	$17,088
Computers & Peripherals	$3,925
Office Supplies	$2,173
Labor	$38,311
Total Expenses over 5 years:	**$84,835**
Avg. Cost per Year	**$16,967**
Irregular O&M Expenses	
Stair Repair	$2,624

*The labor costs identified are estimated costs

Projected Expenses (2016 - 2036)

Inflation Rate	2.68%							
		2016	2017	2018	2019	2020	2021	2022
	Total Cost	0	1	2	3	4	5	6
North EOC								
Regular O&M Expenses and Labor	$453,186	$16,967	$17,422	$17,889	$18,368	$18,860	$19,366	$19,885
Generator Replacement	$27,000							
Total Expenses	$480,186	$16,967	$17,422	$17,889	$18,368	$18,860	$19,366	$19,885
South EOC								
Regular O&M Expenses and Labor	$385,548	$14,435	$14,822	$15,219	$15,627	$16,045	$16,475	$16,917
Roof Replacement	$30,000							
A/C Unit Replacement	$8,000						$8,000	
Generator Replacement	$27,000							
Total Expenses	$450,548	$14,435	$14,822	$15,219	$15,627	$16,045	$24,475	$16,917
MWDOC Administration Building								
EOC Space Improvements	$202,500	$202,500						
EOC Technology Improvements	$18,000	$18,000						
Backup Generator Purchase	$27,000	$27,000						
Regular O&M Expenses and Labor	$435,764			$17,889	$18,368	$18,860	$19,366	$19,885
Total Expenses	$683,264							

*All projected capital costs are rough order of magnitude costs

Historical Expenses (2011 - 2016)

South EOC	
Regular Operating & Maintenance Expenses	
Radios	$14,237
Generator	$0
EOC Maintenance	$2,585
Utilities	$14,736
Computers & Peripherals	$3,925
Office Supplies	$2,173
Labor	$34,518
Total Expenses over 5 years:	**$72,174**
Avg. Cost per Year	**$14,435**
Irregular O&M Expenses	
Repair of audio system	$330
Automated External Defibrilator	$2,066

*The labor costs identified are estimated costs

2023 7	2024 8	2025 9	2026 10	2027 11	2028 12	2029 13	2030 14	2031 15	2032 16	2033 17	2034 18	2035 19	2036 20
$20,418	$20,965	$21,527	$22,104	$22,696	$23,304 $27,000	$23,929	$24,570	$25,229	$25,905	$26,599	$27,312	$28,044	$28,795
$20,418	$20,965	$21,527	$22,104	$22,696	$50,304	$23,929	$24,570	$25,229	$25,905	$26,599	$27,312	$28,044	$28,795
$17,370	$17,836 $30,000	$18,314	$18,805	$19,309	$19,826	$20,358	$20,903	$21,463	$22,039	$22,629	$23,236	$23,858	$24,498
$27,000													
$17,370	$47,836	$18,314	$18,805	$19,309	$19,826	$20,358	$20,903	$21,463	$22,039	$22,629	$23,236	$23,858	$24,498
$20,418	$20,965	$21,527	$22,104	$22,696	$23,304	$23,929	$24,570	$25,229	$25,905	$26,599	$27,312	$28,044	$28,795

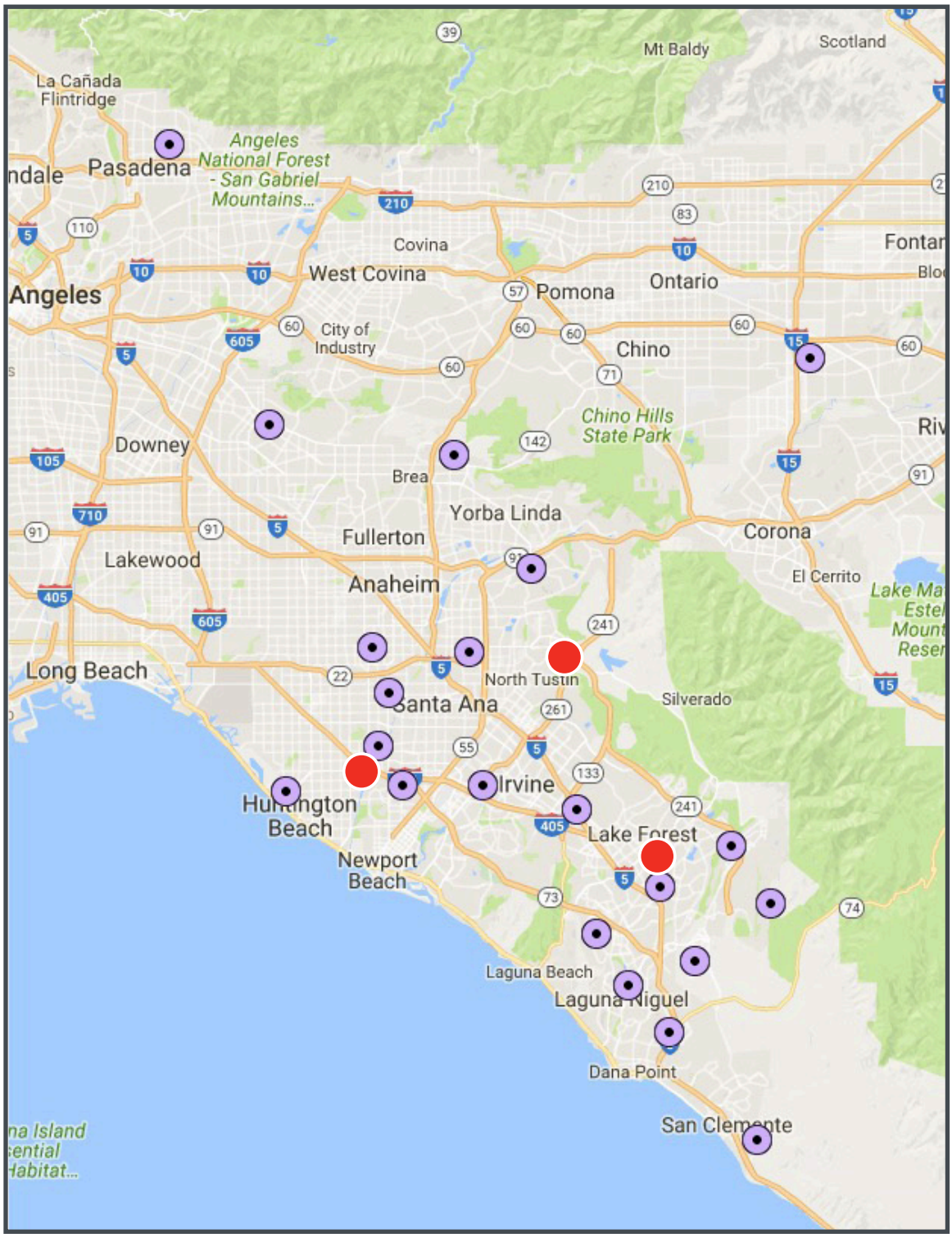
3. ACCESSIBILITY ANALYSIS

Average Travel Distances for MWDOC Staff

The average travel distances for twenty MWDOC staff from their residences to the three potential EOC locations were calculated. Zip codes were used for the location of the residences.

City	Zip Code	County	MWDOC Admin. (mi.)	North EOC (mi.)	South EOC (mi.)
Glendora	91741	North	42.6	40.6	48.4
Eastvale	91752	North	43.2	32.4	40.8
Brea	92821	North	25.1	23	30.9
Whittier	90605	North	29.2	29.1	37
East Anaheim (2)	92807	North	19.4	9.8	21.6
Garden Grove	92703	Mid	7.6	14.9	22.8
Santa Ana (2)	92840	Mid	7.6	14.9	23
Orange (3)	92866	Mid	13.9	10.8	19.7
Huntington Beach (3)	92648	Mid	5.2	21.9	25.2
Fountain Valley (4)	92728	Mid	1	16.7	20
Costa Mesa (3)	92626	South	3.2	14	17.3
North Irvine	92618	South	13.8	11.8	5.9
South Irvine (2)	92614	South	7.4	9	13.4
Aliso Viejo (2)	92656	South	17.1	19.4	6
Mission Viejo (2)	92691	South	19	17.4	2.6
Rancho Santa Marguerita	92688	South	25.7	19.7	5.2
Ladera Ranch	92694	South	23.5	22.5	8.4
Coto De Caza	92679	South	28.6	27.9	14.9
San Juan Capistrano (2)	92693	South	24.2	23.9	11.1
Laguna Niguel (2)	92677	South	21.3	22.1	9.3
San Clemente	92672	South	34.7	3.5	21.6
		Averages	**19.68**	**19.30**	**19.29**

ACCESSIBILITY MAP - TRAVEL DISTANCES FOR MWDOC STAFF



Source: Batchgeo.com

EOC Location

MWDOC Staff Residence

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Item No. 5-5

ACTION ITEM
November 16, 2016

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Dick, Hinman, Finnegan)

Robert Hunter
General Manager

Staff Contact: J. Berg
Director of Water Use Efficiency

SUBJECT: **Execution and Implementation of Water Use Efficiency Program Grant Agreements**

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to sign grant agreements and for staff to implement:

1. The US Bureau of Reclamation Agreement for implementation of the Comprehensive Landscape Water Use Efficiency Program - Phase II, and

2. The South Orange County Integrated Regional Water Management Implementation Grant for Strategic Turfgrass Removal and Design Assistance Program.

COMMITTEE RECOMMENDATION

Committee will review this item on November 14, 2016 and make a recommendation to the Board.

SUMMARY

MWDOC has been awarded two new grants for continuation of landscape water saving and technical assistance programs. The first award from the Bureau of Reclamation through the Water and Energy Efficiency Grant Program is $299,934 for Phase II implementation of the Comprehensive Landscape Water Use Efficiency Program. The second award from the Department of Water Resources through the South Orange County Integrated Resources Planning Area (Proposition 84) is $1,099,995 for implementation of the Strategic Turfgrass Removal and Design Assistance Program.

Budgeted (Y/N): N/A	Budgeted amount: N/A	Core __	Choice _X_
Action item amount: N/A	Line item: N/A		
Fiscal Impact (explain if unbudgeted): Fiscal impact to MWDOC is limited to staff time to administer these programs. No direct financial contributions from MWDOC are required. Combined, these grants will provide for reimbursement of MWDOC staff time totaling $__,___.			

DETAILED REPORT

MWDOC has been awarded two grants for continuation of landscape water saving and technical assistance programs. Both grants will help to foster the transformation of water intensive landscapes to California Friendly landscapes throughout Orange County.

Comprehensive Landscape Water Use Efficiency Program (CLWUEP)
The US Bureau of Reclamation awarded MWDOC $299,934 for implementation of Phase II of the Comprehensive Landscape Water Use Efficiency Program. The CLWUEP provides rebate incentive funding for potable to recycled water conversions, turfgrass removal, high efficiency sprinkler nozzles, smart irrigation timers and spray-to-drip irrigation system conversions. Grant funds will provide for MWDOC staff time reimbursement totaling $12,735. Matching funds required for this grant total $972,450, which will be provided via Metropolitan's Conservation Credits Program. Water savings are projected to be 1,151 acre feet per year or 13,084 acre feet over the lifetime of the devices/activities. CLWUEP will be implemented throughout the MWDOC service area. A copy of this agreement is provided as Exhibit A.

Strategic Turfgrass Removal and Design Assistance Program (STRDAP)
The California Department of Water Resources awarded MWDOC $1,099,995 for implementation of the Strategic Turfgrass Removal and Design Assistance Program. The STRDAP provides rebate incentive funding for turf removal and landscape design assistance. Grant funds will provide for MWDOC staff time reimbursement totaling $24,265. Matching funds required for this grant total $790,332 which will be provided via Metropolitan's Conservation Credits Program. Water Savings are projected to be 252 acre feet per year or 2,512 acre feet over the lifetime of the devices/activities. STRDAP will be implemented in south county as this funding is provided through the South Orange County Integrated Resources Planning Area. A copy of this agreement is provided as Exhibit B.

Staff will apply both these grants to existing locally and regionally administered rebate programs, thereby streamlining grant administration and minimizing staff time to implement the programs. Additionally, staff is in the process of completing the Grants Compliance Check Lists for each of these grants to ensure compliance with granting agencies.

Staff recommends the Board of Directors authorize the General Manager to sign grant agreements and for staff to implement:

1. The US Bureau of Reclamation Agreement for implementation of the Comprehensive Landscape Water Use Efficiency Program - Phase II, and

2. The South Orange County Integrated Regional Water Management Implementation Grant for Strategic Turfgrass Removal and Design Assistance Program.

7-2279 (02-2016)
Bureau of Reclamation

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT

1A. AGREEMENT NUMBER	1B. MOD NUMBER	2. TYPE OF AGREEMENT	3. CLASS OF RECIPIENT
R16AP00111		☒ GRANT ☐ COOPERATIVE AGREEMENT	Special District Government

4. ISSUING OFFICE

Bureau of Reclamation
Financial Assistance Services 84-27850
P.O. Box 25007
Denver Colorado 80225

5. RECIPIENT

Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708-0895

EIN #:	95-2650400	County:	Orange
DUNS #:	087380721	Congressional District:	CA-048

6. GRANTS MANAGEMENT SPECIALIST

Janeen Koza
Bureau of Reclamation
Financial Assistance Operations 84-27852
P.O. Box 25007
Denver Colorado 80225
303-445-3446
jkoza@usbr.gov

7. RECIPIENT PROJECT MANAGER

Joseph M. Berg, Director of Water Use Efficiency
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708-0895
714-593-5008
jberg@mwdoc.com

8. GRANTS OFFICER TECHNICAL REPRESENTATIVE

Deb Whitney, Water Conservation Specialist
Bureau of Reclamation, Southern California Area Office
27708 Jefferson Avenue, Suite 202,
Temecula, CA 92590
951-695-5310
dwhitney@usbr.gov

9A. INITIAL AGREEMENT EFFECTIVE DATE:

See block 17.a below

9B. MODIFICATION EFFECTIVE DATE:

10. COMPLETION DATE

September 30, 2018

11A. PROGRAM STATUTORY AUTHORITY

Section 9504(a) of the Secure Water Act, Subtitle F of Title IX of the Omnibus Public Land Management Act of 2009, Public Law 111-11 (42 United States Code 10364)

11B. CFDA Number

15.507

12. FUNDING INFORMATION	RECIPIENT/OTHER	RECLAMATION
Total Estimated Amount of Agreement	$972,450	$299,934
This Obligation	$972,450	$298,934
Previous Obligation	$0	$0
Total Obligation	$972,450	$298,934
Cost-Share %	76%	24%

13. REQUISITION NUMBER

0020107921

14A. ACCOUNTING AND APPROPRIATION DATA

Fund: 16XR0680A1
WBS: RY.30180006.MWOCA00

14B. TREASURY ACCOUNT FUNDING SYMBOL

14X0680

15. PROJECT TITLE

Comprehensive Landscape Water Use Efficiency Program (CLWUE) Phase II

16a. Acceptance of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the above-named recipient

BY: _____

DATE: _____

17a. Award of this Assistance Agreement in accordance with the terms and conditions contained herein is hereby made on behalf of the United States of America, Department of the Interior, Bureau of Reclamation

BY: _____

DATE: _____

16b. NAME, TITLE, AND TELEPHONE NUMBER OF SIGNER

☐ Additional signatures are attached

17b. NAME OF GRANTS OFFICER

Wilson Orvis
303-445-2444

TABLE OF CONTENTS

Grant Agreement
Between
Bureau of Reclamation
And
Municipal Water District of Orange County
For
Comprehensive Landscape Water Use Efficiency Program (CLWUE) Phase II

I. OVERVIEW AND SCHEDULE

1. AUTHORITY

This Grant Agreement (Agreement) is entered into between the United States of America, acting through the Department of the Interior, Bureau of Reclamation, hereinafter referred to as "Reclamation," and **MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**, hereinafter referred to as the "Recipient" or "Grantee," pursuant to the **Section 9504(a) of the SECURE WATER ACT**, Subtitle F of Title IX of the **OMNIBUS PUBLIC LAND MANAGEMENT ACT OF 2009**, Public Law 111-11 (42 United States Code 10364) (the "Act"). The following section, provided in full text, authorizes Reclamation to award this financial assistance agreement:

SEC. 9504. WATER MANAGEMENT IMPROVEMENT.

(a) AUTHORIZATION OF GRANTS AND COOPERATIVE AGREEMENTS.—

(1) AUTHORITY OF SECRETARY.—The Secretary may provide any grant to, or enter into an agreement with, any eligible applicant to assist the eligible applicant in planning, designing, or constructing any improvement—

(A) to conserve water;

(B) to increase water use efficiency;

(C) to facilitate water markets;

(D) to enhance water management, including increasing the use of renewable energy in the management and delivery of water;

(E) to accelerate the adoption and use of advanced water treatment technologies to increase water supply;

(F) to prevent the decline of species that the United States Fish and Wildlife Service and National Marine Fisheries Service have proposed for listing under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) (or candidate species that are being considered by those agencies for such listing but are not yet the subject of a proposed rule);

(G) to accelerate the recovery of threatened species, endangered species, and designated critical habitats that are adversely affected by Federal reclamation projects or are subject to a recovery plan or conservation plan under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) under which the Commissioner of Reclamation has implementation responsibilities; or

(H) to carry out any other activity—

(i) to address any climate-related impact to the water supply of the United States that increases ecological resiliency to the impacts of climate change; or

(ii) to prevent any water-related crisis or conflict at any watershed that has a nexus to a Federal reclamation project located in a service area.

2. PUBLIC PURPOSE OF SUPPORT OR STIMULATION

The Nation faces an increasing set of water resource challenges. Aging infrastructure, rapid population growth, depletion of groundwater resources, impaired water quality associated with particular land uses and land covers, water needed for human and environmental uses, and climate variability and change all play a role in determining the amount of fresh water available at any given place and time. Water shortages and water-use conflicts have become more commonplace in many areas of the United States, even in normal water years. As competition for water resources grows—for crop irrigation, growing cities and communities, energy production, and the environment—the need for information and tools to aid water resource managers also grows. Water issues and challenges are increasing across the Nation, but particularly in the West, due to prolonged drought.

The proposed project achieves the following public purposes of the Secure Water Act :

- ***(A) to conserve water and (D) to enhance water management* :** The best management practices implemented by this project will increase the uniformity, efficiency, and management of irrigation systems with an expected resultant total water savings of more than 1,151 acre-feet per year or 13,084 acre-feet over the life of the improvements. This is in line with the objectives outlined in MWDOC's Water Use Efficiency Master Plan, result in efficiency of water management and promoting activities that support water supply sustainability.

3. BACKGROUND AND OBJECTIVES

Water conservation and efficiency are crucial to most Western States' plans to ensure that water is available to meet demands into the future. WaterSMART Grants are an important part of the Department's implementation of the President's June 2013 Climate Action Plan and the November 1, 2013, Executive Order, *Preparing the United States for the Impacts of Climate Change*. Through near-term improvements, projects carried out as WaterSMART Grants can

increase water management flexibility, making our water supply more resilient and thereby helping to prepare for the impacts of climate change.

WaterSMART: Water and Energy Efficiency Grants allow States, Indian tribes, irrigation districts, water districts, and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with the Bureau of Reclamation (Reclamation) on projects that seek to conserve and use water more efficiently, increase the use of renewable energy and improve energy efficiency, benefit endangered and threatened species, facilitate water markets, or carry out other activities to address climate-related impacts on water or prevent any water-related crisis or conflict.

The Municipal Water District of Orange County, California, will continue implementing a comprehensive landscape improvement program targeting residential and commercial properties throughout Orange County. The project includes: providing rebates to remove over 9 acres of non-functional turf grass and replacing it with California-friendly landscape; upgrading 928 irrigation timers to smart water application irrigation controllers; and converting 127,000 high volume conventional spray irrigation heads to low-precipitation-rate irrigation equipment (rotating nozzles and drip). The project is expected to result in annual water savings of 1,151 acre-feet, which will be retained in regional storage reservoirs and the groundwater basin for future use.

4. PERIOD OF PERFORMANCE AND FUNDS AVAILABILITY

This Agreement becomes effective on the date shown in Block 17a of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. The Agreement shall remain in effect until the date shown in Block 10 of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. The period of performance for this Agreement may only be modified through written modification of the Agreement by a Reclamation Grants Officer (GO).

No legal liability on the part of the Government for any payment may arise until funds are made available, in writing, to the Recipient by the Grants Officer. The total estimated amount of federal funding for this agreement is **$299,934.00** of which the initial amount of federal funds available is limited to **$298,934.00** as indicated by “this obligation” within Block 12 of Form 7-2279, United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. Subject to the availability of Congressional appropriations, subsequent funds will be made available for payment through written modifications to this agreement by a Reclamation Grants Officer.

5. SCOPE OF WORK AND MILESTONES

The objective of the CLWUE Program Phase II is to emphasize MWDOC’s suite of existing rebate programs to develop a California Friendly water efficient landscape conversion Program including implementation of recycled water use for dedicated irrigation meters, irrigation device improvements, management approaches, and turf replacement. The proposed program will foster a resilient Comprehensive Landscape Water Use Efficiency Program, designed to continue the

paradigm shift from turf intensive landscapes utilizing potable water supplies and antiquated irrigation equipment to California Friendly landscapes, which emphasize plantings with water needs similar to our natural average precipitation of 12 inches per year, efficient irrigation technology, and renewable water supplies. To do so, the project will encourage conversion of up to 100 dedicated irrigation meters from utilizing a potable source to an alternative sustainable source (rainwater capture, storm-water runoff, recycled water), the removal of over 9 acres of non-functional turfgrass; the upgrade of approximately 928 antiquated irrigation timers to smart water application irrigation controllers (weather-based irrigation timers and soil); and the conversion of up to 127,000 high volume conventional spray irrigation heads to low-precipitation-rate irrigation equipment (rotating nozzles and drip). These Best Management Practices (BMPs) will result in water savings, a reduction of dry-weather runoff, pollution prevention, and reduced maintenance costs. More than 2,500 BMPs implemented at approximately 1,300 unique commercial and residential sites with existing landscape are targeted for comprehensive improvements through this program.

The rebate amounts identified in the budget are subject to change with approval by the Recipient. Reclamation approval, through a formal modification to this Agreement, is required if any proposed changes to the scope (including but not limited to the rebate structure or percentage of non-federal cost-share) could result in change to the amount of water conserved (for this Agreement, it is estimated that the program will result in 1151 acre-feet of water conserved annually).

To encompass a holistic approach to landscape improvements, the CLWUE Program Phase II focuses on a variety of efficient landscape water use BMPs:

> **Sustainable Water Source Conversion:** As noted in the Irrigation Association Landscape
> Irrigation BMP 2.0, selecting a sustainable water source is a component of responsible irrigation management. In many cases, a source alternative to municipally supplied potable water can be utilized for irrigation purposes. Alternative developed water sources can include, for example, on-site collection, rainwater capture, treated storm-water runoff, or recycled water (IA, 2014). Converting a dedicated meter point of connection to a source alternative to potable water, will result in long-term sustainable water savings. Regardless of water source, as part of this CLWUE Phase II program will dictate that the site must utilize irrigation water efficiently and without contributing to dry-weather runoff. Eligible properties will be large landscape commercial and public space sites (for example areas greater than one acre, homeowner association public areas and street medians).
>
> **Turfgrass Removal:** Living, non-functional, irrigated turfgrass which, on average, requires more than four feet of supplementary irrigation water each year, will be removed and replaced by low-water-using California Friendly plantings or living groundcovers, which require less than half the water needed by turfgrass. If the new plantings require irrigation, they will be irrigated with low-precipitation-rate equipment and will be adequately mulched to retain soil moisture.

Smart Timers: This program will also advance the use of smart water application technologies, such as smart irrigation controllers (smart timers). Smart timers are irrigation controller devices that regulate irrigation water use automatically by adjusting to site conditions via either real time weather data or soil moisture conditions. Weather based irrigation controllers (WBIC) determine how much irrigation to apply based on factors such as temperature and humidity, with weather data supplied as either signal-based or on site sensor-based. Soil moisture irrigation controllers offer the opportunity to optimize irrigation based on measured plant demand in the irrigated system.

High-Efficiency Sprinklers & Drip: Stationary or fixed spray irrigation nozzles are the most common irrigation heads installed for ornamental beds and small turfgrass areas. They apply more irrigation than any other typical domestic irrigation nozzle or head, with an average precipitation rate of 1.5 inches per hour (in/hr) or 60 to 180 gallons per hour (GPH), and they also apply water at a rate faster than the infiltration rate of local soils, causing runoff. In addition to the high application rate, stationary spray heads have poor uniformity rates, with an average distribution uniformity of 0.41. As a result, irrigation with these types of heads is often over-designed (i.e., too many heads are installed per area) and/or over-scheduled (i.e., the irrigation system is set to run too long/beyond the plant water needs), resulting in excessive irrigation water use and runoff.

Low-precipitation-rate irrigation, such as multi-trajectory/multi-stream (rotating) nozzles, in-stem volume control, and drip emitter tubing, can all yield an increase in distribution uniformity, leading to an increase in water use efficiency and a reduction in runoff. Rotating nozzles have shown a 45 percent increase in distribution uniformity compared to stationary spray heads. Furthermore, the precipitation rate of rotating nozzles ranges from 0.4 to 0.6 in/hr.

Drip irrigation in bedded areas results in more efficient water application because it targets the root zone of the plants and irrigates 50 percent or less of the area, yet still results in a significant increase in system efficiency. Typically, drip irrigation does not wet the entire root zone; therefore, the application rate concept does not apply. These emitters have various emission rates ranging from 0.3 to 2 GPH, but most commonly flow at 1 GPH or less.

The CLWUE Program Phase II will continue to utilize a rebate program platform to incentivize the implementation of the fore mentioned landscape BMPs. Program participation begins with the submission of an on-line application (paper application available by request) to MWDOC by a residential property owner, commercial property owner/manager, or designated contractor (Participant). For databasing and BMP implementation verification purposes, the Participant will be required, depending on the Device to be installed, to include the following information as applicable: conversion area measurement; existing irrigation equipment; new irrigation equipment; site plan; meter/account information; water source (including modification if applicable); landscape material (including modification if applicable); and site photographs depicting conversion area and existing irrigation equipment. Additionally, upon implementation of the BMPs, MWDOC may perform an onsite installation confirmation inspection.

This Program will include seven tasks, as described below:

Task 1 - Program Administration
As part of the Program reporting, MWDOC will supply a data table by task with the actual hours per reporting period and related salary and fringe benefit rates for each staff personnel.

Task 2 - Marketing and Promotion
MWDOC will design and produce marketing and promotional material that will be distributed to property owners. Promotional pieces will encourage property owners to participate in the Program by logging onto the MWDOC Water Use Efficiency micro-site. The Program webpages contain information regarding Program rules and regulations, access to the Program application, and information about rebate levels through the Program. This micro-site is utilized as a clearinghouse for rebate program information, application portal, and technical resources. Marketing will primarily consist of bill inserts, water bill messages, newsletter articles, and posts on water agency websites.

Task 3 – Site Inspections
All sites (100%) will be provided with installation verification to determine eligibility for Program rebate funds. As a minimum, the installation verification process will include databasing of the following: site contact information, BMP type, sector, device cost, rebate paid, installation date, make/model information (if applicable), conversion square footage (if applicable). Additional collected information may include the following, as applicable: existing irrigation equipment, new irrigation equipment, site plan, water source (including modification if applicable), conversion area measurement, landscape material (including modification if applicable), and site photographs depicting conversion area and existing irrigation equipment. Additionally, MWDOC will perform approximately 395 (30%) comprehensive on-site post-inspections following the completion of BMP implementation.

Task 4 – Rebate Incentive
Over the 24-month period of the potential grant award, MWDOC proposes to facilitate the implementation of 2,500 BMPs. To achieve this, the Program anticipates the removal of over 9 acres of non-functional turfgrass; the upgrade of approximately 928 antiquated irrigation timers to smart water application irrigation controllers (weather-based irrigation timers and soil); and the conversion of up to 127,000 high-volume conventional spray irrigation heads to low-precipitation-rate irrigation equipment (rotating nozzles and drip), conversion of up to 100 dedicated irrigation meters from utilizing a potable source to an alternative sustainable source (rainwater capture, storm-water runoff, recycled water). MWDOC proposes to provide incentives through a rebate-style format to residential property owners, commercial property owners/managers, or designated contractor for qualifying Conversions. The following proposed rebate amounts will be available for each participant site, these rebate levels may vary due to market transformation during the implementation-phase:

- Sustainable Water Source Conversion
  $1,000 per meter (commercial)

- Turfgrass Removal

$0.50 to $1.00 per square foot

- Smart Timers
  Up to $300 per smart timer (residential)
  Up to $35 per station (commercial)

- High-Efficiency Sprinklers
  Up to $2.00 rotating nozzle

- Drip Irrigation
  $0.20 to $0.50 per square foot

Rebate incentives shall be paid up to the cost of the installed device and be based on the square footage, device/material costs, or actual water savings. To receive the CLWUE Phase II rebate funds, the Participant's completed site conversion and irrigation system is required to be consistent with the intent of the Program; ensure efficient landscape water use by implementing BMP measures. Additionally, the Conversion area must remain in compliance with the conversion requirements for a period of five years. If this requirement is violated, the Participant may be required to refund all or a portion of MWDOC/Grant funds.

Task 5 – Program Evaluation
MWDOC staff, starting in the sixth (6) quarter of the agreement term, will initiate a Program process and statistical water savings impact evaluation to quantify Program benefits. The Program process evaluation will assess the Program's goals, format, and effectiveness including how the Program was developed, how success was measured, who the target audience was and how they were reached, and the Program successes and challenges.

The impact evaluation will use robust statistical methods, including regression analysis, to measure the change in water use of Program sites before and after CLWUE Phase II Program conversion, with comparison to a control group. This evaluation will also include weather normalization. This will give the water industry another opportunity to quantify actual water savings associated with comprehensive landscape/irrigation improvements occurring at sites. This analysis will include a statistically significant population of Program participants and will maintain 95% confidence. A written report describing the statistical methods and evaluation results will be submitted as the final report for the Program. Results from this Program will be shared with Reclamation, Metropolitan, California Urban Water Conservation Council, and MWDOC retail water agencies.

MWDOC will provide Reclamation a draft and final report of the statistical evaluation on the data provided during the final quarter of the agreement term. MWDOC will conduct the analysis by qualified staff, process the Program's data, and liaise between the involved retail water agencies and their site' water consumption data, and develop the draft and final report. If a consultant is hired to aid in the any component of the evaluation, MWDOC will develop and release a request for proposals to several qualified water use evaluation consulting firms, review submitted proposals, and select the most qualified submission per the terms of MWDOC's Administration Code.

Milestone / Task / Activity	Planned Start Date	Planned Completion Date
Regulatory Compliance and Notice to Proceed	September 1, 2016	September 30, 2016
Task 1 - Program Administration	October 1, 2016	September 30, 2018
Task 2 - Marketing and Promotion	October 1, 2016	June 30, 2018
Task 3 – Site Inspections	October 1, 2016	September 30, 2018
Task 4 – Rebate Incentive	October 1, 2016	September 30, 2018
Task 5 – Program Evaluation	January 1, 2018	September 30, 2018

After review of the methodology used to estimate water conservation savings, consideration of the supporting documentation provided by Recipient, and adjustments made during the evaluation of the Project, it was determined that these improvements are expected to result in annual water savings of 1151 acre-feet.

6. RESPONSIBILITY OF THE PARTIES

6.1 Recipient Responsibilities

6.1.1 The Recipient shall carry out the Scope of Work (SOW) in accordance with the terms and conditions stated herein. The Recipient shall adhere to Federal, state, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. If the SOW contains construction activities, the Recipient is responsible for construction inspection, oversight, and acceptance. If applicable, the Recipient shall also coordinate and obtain approvals from site owners and operators.

6.1.2 Recipient will prepare and submit to Reclamation a final project performance report (Final Report) as required by Section 9 of this Agreement. The Final Report will include (but is not limited to) the information identified in paragraph 9.3 and will discuss the following:

- Whether the Project objectives and goals were met
- The amount of water conserved, if applicable, including information and/or calculations supporting that amount
- The amount of energy the renewable energy system is generating annually, if applicable
- How the Project demonstrated collaboration, if applicable

6.2 Reclamation Responsibilities

6.2.1 Reclamation will monitor and provide Federal oversight of activities performed under this Agreement. Monitoring and oversight includes review and approval of financial status and performance reports, payment requests, and any other deliverables identified as part of the SOW. Additional monitoring activities may include site visits, conference calls, and other on-site and off-site monitoring activities. At the Recipient's request, Reclamation may also provide technical assistance to the Recipient in support of the SOW and objectives of this Agreement.

7. BUDGET

7.1 Budget Estimate. The following is the estimated budget for this Agreement. As Federal financial assistance agreements are cost-reimbursable, the budget provided is for estimation purposes only. Final costs incurred under the budget categories listed may be either higher or lower than the estimated costs. All costs incurred by the Recipient under this agreement must be in accordance with any pre-award clarifications conducted between the Recipient and Reclamation, as well as with the terms and conditions of this agreement. Final determination of the allowability, allocability, or reasonableness of costs incurred under this agreement is the responsibility of the Grants Officer. Recipients are encouraged to direct any questions regarding allowability, allocability or reasonableness of costs to the Grants Officer for review prior to incurrence of the costs in question.

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/Unit	Quantity		
Salaries and Wages				**$72,656**
Fringe Benefits				**$25,310**
Travel				**$0**
Equipment				**$0**
Supplies and Materials				**$2,500**
Marketing / Promotion	$0.03	100,000	EA	$2,500
Contractual/Construction				**$26,658**
Site Inspections (MRCD)	$133.29	200	EA	$26,658
Other				**$1,145,260**
Recycled Water Conversions - Rebate	$2,950.00	100	EA	$295,000
Turf Removal - Rebate	$0.70	400,000	SQFT	$280,000
Smart Timers (Residential)	$300.00	452	EA	$135,600
Smart Timers (Commercial)	$35.00	476	EA	$16,660
Rotating Nozzles (Residential & Commercial)	$2.00	86,000	EA	$172,000
Drip Irrigation (Residential & Commercial)	$0.50	490,000	SQFT	$245,000
Reclamation NEPA/NHPA (Hold-Back)	$1,000.00	1	LS	$1,000
TOTAL DIRECT COSTS				**$1,272,384**
Indirect Costs				**$0**
N/A				**$0**
TOTAL ESTIMATED PROJECT COSTS				**$1,272,384**

Funding Sources	Percent of Total Project Cost	Total Cost by Source
Recipient Funding	76%	$972,450
Other Recipient Funding	0%	$0
Reclamation Funding	24%	$299,934
Other Federal Funding	0%	$0
TOTALS	**100%**	**$1,272,384**

7.2 Cost Sharing Requirement

At least 50 % non-Federal cost-share is required for costs incurred under this Agreement. If pre-award costs are authorized, reimbursement of these costs is limited to federal cost share percentage identified in this Agreement.

The Federal share of allowable costs shall not be expended in advance of the Recipient's non-Federal share. It is expected that expenditure of Federal and non-Federal funds shall occur concurrently based upon the cost share percentages reflected in Block 12 of Form 7-2279 United States of America, Department of the Interior, Bureau of Reclamation, Assistance Agreement. At the end of the period of performance, if the final costs are lower than the original estimate and the 50% nonfederal cost share is met, the final payment and financial report can reflect a lower Recipient cost share than the original budget estimate.

If a bona fide need arises which requires the expenditure of Federal funds in advance of the Recipient share, then the Recipient must request written approval from the Grants Officer prior to the expenditure. Recipient's may expend their agreed upon share of costs in advance of the expenditure of Federal funds without prior written approval.

7.3 Pre-Award Incurrence of Costs

The Recipient is not authorized to incur costs prior to the award of this Agreement. Costs incurred prior to the award of this agreement are not allowable.

7.4 Allowable Costs (2 CFR Subpart E §200.400 through §200.475)

Costs incurred for the performance of this Agreement must be allowable, allocable to the project, and reasonable. The following regulations, codified within the Code of Federal Regulations (CFR), governs the allowability of costs for Federal financial assistance:

2 CFR Subpart E, “Cost Principles”

Expenditures for the performance of this Agreement must conform to the requirements within this CFR. The Recipient must maintain sufficient documentation to support these expenditures. Questions on the allowability of costs should be directed to the GO responsible for this Agreement.

The Recipient shall not incur costs or obligate funds for any purpose pertaining to operation of the program or activities beyond the expiration date stated in the Agreement. The only costs which are authorized for a period of up to 90 days following the project performance period are those strictly associated with closeout activities for preparation of the final reports.

7.5 Revision of Budget and Program Plans (2 CFR §200.308)

In accordance with 2 CFR §200.308(c)-(e) the recipient must request prior written approval for any of the following changes:

a) A change in the approved scope of work or associated tasks, even if there is no associated budget revisions.

b) Change in key personnel specified in section 8 "Key Personnel" of this agreement.

c) Changes in the approved cost-sharing or matching outlined within this agreement in section 7.2 "Cost Share requirements"

d) Inclusion of pre-award costs or reimbursement for pre-award costs which are not included in the initially approved budget and included in section 7.3 "Pre-Award Incurrence of Costs" of this agreement.

e) Extensions to the Completion Date outlined in block 10 of the coversheet (form 7-2279) of this agreement.

f) The transfer of funds between direct cost categories, functions, and activities for which the expected transfer amount is to exceed 10 percent of the total approved budget.

7.6 Modifications

Any changes to this Agreement shall be made by means of a written modification. Reclamation may make changes to the Agreement by means of a unilateral modification to address administrative matters, such as changes in address, no-cost time extensions, changes to Reclamation Key Personnel, or the addition of previously agreed upon funding. Additionally, a unilateral modification may be utilized by Reclamation if it should become necessary to suspend or terminate the Agreement in accordance with 2 CFR §200.338.

All other changes shall be made by means of a bilateral modification to the Agreement. No oral statement made by any person, or written statement by any person other than the GO, shall be allowed in any manner or degree to modify or otherwise effect the terms of the Agreement.

All requests for modification of the Agreement shall be made in writing, provide a full description of the reason for the request, and be sent to the attention of the GO. Any request for project extension shall be made at least 45 days prior to the expiration date of the Agreement or

the expiration date of any extension period that may have been previously granted. Any determination to extend the period of performance or to provide follow-on funding for continuation of a project is solely at the discretion of Reclamation.

8. KEY PERSONNEL

8.1 Recipient's Key Personnel

The Recipient's Project Manager for this Agreement shall be:

Joseph M. Berg, Director of Water Use Efficiency
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708-0895
714-593-5008
jberg@mwdoc.com

8.2 Reclamation's Key Personnel

8.2.1 Grants Officer (GO):

Wilson Orvis
Bureau of Reclamation
Financial Assistance Operations 84-27852
Denver Federal Center, P.O. Box 25007
Denver Colorado 80225
303-445-2444
worvis@usbr.gov

(a) The GO is the only official with legal delegated authority to represent Reclamation. The GO's responsibilities include, but are not limited to, the following:

(1) Formally obligate Reclamation to expend funds or change the funding level of the Agreement;

(2) Approve through formal modification changes in the scope of work and/or budget;

(3) Approve through formal modification any increase or decrease in the period of performance of the Agreement;

(4) Approve through formal modification changes in any of the expressed terms, conditions, or specifications of the Agreement;

(5) Be responsible for the overall administration, management, and other non-programmatic aspects of the Agreement including, but not limited to, interpretation of financial

assistance statutes, regulations, circulars, policies, and terms of the Agreement;

(6) Where applicable, ensures that Reclamation complies with the administrative requirements required by statutes, regulations, circulars, policies, and terms of the Agreement.

8.2.2 Grants Officer Technical Representative (GOTR):

Deb Whitney, Water Conservation Specialist
Bureau of Reclamation, Southern California Area Office
27708 Jefferson Avenue, Suite 202,
Temecula, CA 92590
951-695-5310
dwhitney@usbr.gov

(a) The GOTR's authority is limited to technical and programmatic aspects of the Agreement. The GOTR's responsibilities include, but are not limited to, the following:

(1) Assist the Recipient, as necessary, in interpreting and carrying out the scope of work in the Agreement;

(2) Review, and where required, approve Recipient reports and submittals as required by the Agreement;

(3) Where applicable, monitor the Recipient to ensure compliance with the technical requirements of the Agreement;

(4) Where applicable, ensure that Reclamation complies with the technical requirements of the Agreement;

(b) The GOTR does not have the authority to and may not issue any technical assistance which:

(1) Constitutes an assignment of additional work outside the scope of work of the Agreement;

(2) In any manner causes an increase or decrease in the total estimated cost or the time required for performance; or

(3) Changes any of the expressed terms, conditions, or specifications of the Agreement.

8.2.3 Grants Management Specialist. The Grants Management Specialist is the primary administrative point of contact for this agreement and should be contacted regarding issues related to the day-to-day management of the agreement. Requests for approval regarding the terms and conditions of the agreement, including but not limited to modifications and prior approval, may only be granted, in writing, by a Reclamation Grants Officer. Please note that for

some agreements, the Grants Officer and the Grants Management Specialist may be the same individual.

Janeen Koza
Bureau of Reclamation
Financial Assistance Operations 84-27852
Denver Federal Center, P.O. Box 25007
Denver Colorado 80225
303-445-3446
jkoza@usbr.gov

9. REPORTING REQUIREMENTS AND DISTRIBUTION

9.1 Noncompliance. Failure to comply with the reporting requirements contained in this Agreement may be considered a material noncompliance with the terms and conditions of the award. Noncompliance may result in withholding of payments pending receipt of required reports, denying both the use of funds and matching credit for all or part of the cost of the activity or action not in compliance, whole or partial suspension or termination of the Agreement, recovery of funds paid under the Agreement, withholding of future awards, or other legal remedies in accordance with 2 CFR §200.338.

9.2 Financial Reports. Financial Status Reports shall be submitted by means of the SF-425 and shall be submitted according to the Report Frequency and Distribution schedule below. All financial reports shall be signed by an Authorized Certifying Official for the Recipient's organization.

9.3 Monitoring and reporting program performance (2 CFR §200.328)

(a) Monitoring by the non-Federal entity. The non-Federal entity is responsible for oversight of the operations of the Federal award supported activities. The non-Federal entity must monitor its activities under Federal awards to assure compliance with applicable Federal requirements and performance expectations are being achieved. Monitoring by the non-Federal entity must cover each program, function or activity. See also §200.331 Requirements for pass-through entities.

(b) Non-construction performance reports. The Federal awarding agency must use standard, OMB-approved data elements for collection of performance information (including performance progress reports, Research Performance Progress Report, or such future collections as may be approved by OMB and listed on the OMB Web site).

> (1) The non-Federal entity must submit performance reports at the interval required by the Federal awarding agency or pass-through entity to best inform improvements in program outcomes and productivity. Intervals must be no less frequent than annually nor more frequent than quarterly except in unusual circumstances, for example where more frequent reporting is necessary for the effective monitoring of the Federal award or could significantly affect program outcomes. Annual reports must be due 90 calendar days after the reporting period; quarterly or semiannual reports must be due 30 calendar days after

the reporting period. Alternatively, the Federal awarding agency or pass-through entity may require annual reports before the anniversary dates of multiple year Federal awards. The final performance report will be due 90 calendar days after the period of performance end date. If a justified request is submitted by a non-Federal entity, the Federal agency may extend the due date for any performance report.

(2) The non-Federal entity must submit performance reports using OMB-approved governmentwide standard information collections when providing performance information. As appropriate in accordance with above mentioned information collections, these reports will contain, for each Federal award, brief information on the following unless other collections are approved by OMB:

(i) A comparison of actual accomplishments to the objectives of the Federal award established for the period. Where the accomplishments of the Federal award can be quantified, a computation of the cost (for example, related to units of accomplishment) may be required if that information will be useful. Where performance trend data and analysis would be informative to the Federal awarding agency program, the Federal awarding agency should include this as a performance reporting requirement.

(ii) The reasons why established goals were not met, if appropriate.

(iii) Additional pertinent information including, when appropriate, analysis and explanation of cost overruns or high unit costs.

(c) Construction performance reports. For the most part, onsite technical inspections and certified percentage of completion data are relied on heavily by Federal awarding agencies and pass-through entities to monitor progress under Federal awards and subawards for construction. The Federal awarding agency may require additional performance reports only when considered necessary.

(d) Significant developments. Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the non-Federal entity must inform the Federal awarding agency or pass-through entity as soon as the following types of conditions become known:

(1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.

(2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

Reclamation requires Performance reporting for all financial assistance awards, both Construction and non-Construction. Performance reports for Construction agreements shall meet the same minimum requirements outlined in 2 CFR §200.328(b)(2) above.

9.4 Report Frequency and Distribution. The following table sets forth the reporting requirements for this Agreement. Please note the first report due date listed for each type of report.

Required Reports	Interim Reports	Final Report
Performance Report		
Format	No specific format required. See content requirements within Section 9.3 (2 CFR §200.328) above.	Summary of activities completed during the entire period of performance is required. See content requirements within Section 9.3 (2 CFR §200.328) above.
Reporting Frequency	Semi-Annual	Final Report due after completion of Agreement's period of performance
Reporting Period	**For Semi-Annual Reporting:** October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date*	Within 30 days after the end of the Reporting Period.	Within 90 days after the completion date of the Agreement
First Report Due Date	The first performance report is due for reporting period ending March 31, 2017	N/A
Submit to:	**sha-dro-faoperations@usbr.gov**	**sha-dro-faoperations@usbr.gov**
Federal Financial Report		
Format	SF-425 (all sections must be completed)	SF-425(all sections must be completed)
Reporting Frequency	Semi-Annual	Final Report due after completion of Agreement's period of performance
Reporting Period	**For Semi-Annual Reporting:** October 1 through March 31 and April 1 through September 30.	Entire period of performance
Due Date*	**For Quarterly & Semi-Annual Reporting:** Within 30 days after the end of the Reporting Period.	Within 90 days after the completion date of the Agreement

Required Reports	Interim Reports	Final Report
First Report Due Date	The first Federal financial report is due for reporting period ending March 31, 2017	N/A
Submit to:	sha-dro-faoperations@usbr.gov	sha-dro-faoperations@usbr.gov

* If the completion date is prior to the end of the next reporting period, then no interim report is due for that period. Instead, the Recipient is required only to submit the final financial and performance reports, which will cover the entire period of performance including the last abbreviated reporting period.

10. REGULATORY COMPLIANCE

The Recipient agrees to comply or assist Reclamation with all regulatory compliance requirements and all applicable state, Federal, and local environmental and cultural and paleontological resource protection laws and regulations as applicable to this project. These may include, but are not limited to, the National Environmental Policy Act (NEPA), including the Council on Environmental Quality and Department of the Interior regulations implementing NEPA, the Clean Water Act, the Endangered Species Act, consultation with potentially affected Tribes, and consultation with the State Historic Preservation Office.

Certain environmental and other associated compliance are Federal responsibilities, and will occur as appropriate. Reclamation will identify the need for and will complete any appropriate environmental compliance requirements, as identified above, pertinent to Reclamation pursuant to activities specific to this assisted activity. Environmental and other associated compliance shall be completed prior to the start of this project. As such, notwithstanding any other provision of this Agreement, Reclamation shall not provide any funds to the Recipient for Agreement purposes, and the Recipient shall not begin implementation of the assisted activity described in this Agreement, until Reclamation provides written notice to the Recipient that all applicable environmental and regulatory compliance analyses and clearances have been completed and that the Recipient may begin implementation of the assisted activity. If the Recipient begins project activities that require environmental and other regulatory compliance approval, such as construction activities, prior to receipt of written notice from Reclamation that all such clearances have been obtained, then Reclamation reserves the right to unilaterally terminate this agreement for cause.

11. AGRICULTURAL OPERATIONS [Public Law 111-11, Section 9504(a)(3)(B)]

The Recipient shall not use any associated water savings to increase the total irrigated acreage of the Recipient or otherwise increase the consumptive use of water in the operation of the Recipient, as determined pursuant to the law of the State in which the operation of Recipient is located.

12. TITLE TO IMPROVEMENTS [Public Law 111-11, Section 9504(a)(3)(D)]

If the activities funded under this Agreement result in an infrastructure improvement to a federally owned facility, the Federal Government shall continue to hold title to the facility and improvements to the facility.

13. OPERATION AND MAINTENANCE COSTS [Public Law 111-11, Section 9504(a)(3)(E)(iv.)]

The non-Federal share of the cost of operating and maintaining any infrastructure improvement funded through this Agreement shall be 100 percent.

14. LIABILITY [Public Law 111-11, Section 9504(a)(3)(F)]

(a) IN GENERAL.—Except as provided under chapter 171 of title 28, United States Code (commonly known as the ‘‘Federal Tort Claims Act’’), the United States shall not be liable for monetary damages of any kind for any injury arising out of an act, omission, or occurrence that arises in relation to any facility created or improved under this Agreement, the title of which is not held by the United States.

(b) TORT CLAIMS ACT.—Nothing in this section increases the liability of the United States beyond that provided in chapter 171 of title 28, United States Code (commonly known as the ‘‘Federal Tort Claims Act’’).

II. RECLAMATION STANDARD TERMS AND CONDITIONS

1. REGULATIONS

The regulations at 2 CFR Subtitle A, Chapter II, Part 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", are hereby incorporated by reference as though set forth in full text. Failure of a Recipient to comply with any applicable regulation or circular may be the basis for withholding payments for proper charges made by the Recipient and/or for termination of support.

2. PAYMENT

2.1 Payment. (2 CFR §200.305)

(a) For states, payments are governed by Treasury-State CMIA agreements and default procedures codified at 31 CFR Part 205 "Rules and Procedures for Efficient Federal-State Funds Transfers" and TFM 4A-2000 Overall Disbursing Rules for All Federal Agencies.

(b) For non-Federal entities other than states, payments methods must minimize the time elapsing between the transfer of funds from the United States Treasury or the pass-through entity and the disbursement by the non-Federal entity whether the payment is made by electronic funds transfer, or issuance or redemption of checks, warrants, or payment by other means. See also §200.302 Financial management paragraph (b)(6). Except as noted elsewhere in this part, Federal agencies must require recipients to use only OMB-approved standard government-wide information collection requests to request payment.

> (1) The non-Federal entity must be paid in advance, provided it maintains or demonstrates the willingness to maintain both written procedures that minimize the time elapsing between the transfer of funds and disbursement by the non-Federal entity, and financial management systems that meet the standards for fund control and accountability as established in this part. Advance payments to a non-Federal entity must be limited to the minimum amounts needed and be timed to be in accordance with the actual, immediate cash requirements of the non-Federal entity in carrying out the purpose of the approved program or project. The timing and amount of advance payments must be as close as is administratively feasible to the actual disbursements by the non-Federal entity for direct program or project costs and the proportionate share of any allowable indirect costs. The non-Federal entity must make timely payment to contractors in accordance with the contract provisions.

(2) Whenever possible, advance payments must be consolidated to cover anticipated cash needs for all Federal awards made by the Federal awarding agency to the recipient.

(i) Advance payment mechanisms include, but are not limited to, Treasury check and electronic funds transfer and must comply with applicable guidance in 31 CFR part 208.

(ii) Non-Federal entities must be authorized to submit requests for advance payments and reimbursements at least monthly when electronic fund transfers are not used, and as often as they like when electronic transfers are used, in accordance with the provisions of the Electronic Fund Transfer Act (15 U.S.C. 1693-1693r).

(3) Reimbursement is the preferred method when the requirements in paragraph (b) cannot be met, when the Federal awarding agency sets a specific condition per §200.207 Specific conditions, or when the non-Federal entity requests payment by reimbursement. This method may be used on any Federal award for construction, or if the major portion of the construction project is accomplished through private market financing or Federal loans, and the Federal award constitutes a minor portion of the project. When the reimbursement method is used, the Federal awarding agency or pass-through entity must make payment within 30 calendar days after receipt of the billing, unless the Federal awarding agency or pass-through entity reasonably believes the request to be improper.

(4) If the non-Federal entity cannot meet the criteria for advance payments and the Federal awarding agency or pass-through entity has determined that reimbursement is not feasible because the non-Federal entity lacks sufficient working capital, the Federal awarding agency or pass-through entity may provide cash on a working capital advance basis. Under this procedure, the Federal awarding agency or pass-through entity must advance cash payments to the non-Federal entity to cover its estimated disbursement needs for an initial period generally geared to the non-Federal entity's disbursing cycle. Thereafter, the Federal awarding agency or pass-through entity must reimburse the non-Federal entity for its actual cash disbursements. Use of the working capital advance method of payment requires that the pass-through entity provide timely advance payments to any subrecipients in order to meet the subrecipient's actual cash disbursements. The working capital advance method of payment must not be used by the pass-through entity if the reason for using this method is the unwillingness or inability of the pass-through entity to provide timely advance payments to the subrecipient to meet the subrecipient's actual cash disbursements.

(5) Use of resources before requesting cash advance payments. To the extent available, the non-Federal entity must disburse funds available from program income (including repayments to a revolving fund), rebates, refunds, contract settlements, audit recoveries, and interest earned on such funds before requesting additional cash payments.

(6) Unless otherwise required by Federal statutes, payments for allowable costs by non-Federal entities must not be withheld at any time during the period of performance unless

the conditions of §§200.207 Specific conditions, Subpart D—Post Federal Award Requirements of this part, 200.338 Remedies for Noncompliance, or one or more of the following applies:

(i) The non-Federal entity has failed to comply with the project objectives, Federal statutes, regulations, or the terms and conditions of the Federal award.

(ii) The non-Federal entity is delinquent in a debt to the United States as defined in OMB Guidance A-129, "Policies for Federal Credit Programs and Non-Tax Receivables." Under such conditions, the Federal awarding agency or pass-through entity may, upon reasonable notice, inform the non-Federal entity that payments must not be made for obligations incurred after a specified date until the conditions are corrected or the indebtedness to the Federal Government is liquidated.

(iii) A payment withheld for failure to comply with Federal award conditions, but without suspension of the Federal award, must be released to the non-Federal entity upon subsequent compliance. When a Federal award is suspended, payment adjustments will be made in accordance with §200.342 Effects of suspension and termination.

(iv) A payment must not be made to a non-Federal entity for amounts that are withheld by the non-Federal entity from payment to contractors to assure satisfactory completion of work. A payment must be made when the non-Federal entity actually disburses the withheld funds to the contractors or to escrow accounts established to assure satisfactory completion of work.

(7) Standards governing the use of banks and other institutions as depositories of advance payments under Federal awards are as follows.

(i) The Federal awarding agency and pass-through entity must not require separate depository accounts for funds provided to a non-Federal entity or establish any eligibility requirements for depositories for funds provided to the non-Federal entity. However, the non-Federal entity must be able to account for the receipt, obligation and expenditure of funds.

(ii) Advance payments of Federal funds must be deposited and maintained in insured accounts whenever possible.

(8) The non-Federal entity must maintain advance payments of Federal awards in interest-bearing accounts, unless the following apply.

(i) The non-Federal entity receives less than $120,000 in Federal awards per year.

(ii) The best reasonably available interest-bearing account would not be expected to earn interest in excess of $500 per year on Federal cash balances.

(iii) The depository would require an average or minimum balance so high that it would not be feasible within the expected Federal and non-Federal cash resources.

(iv) A foreign government or banking system prohibits or precludes interest bearing accounts.

(9) Interest earned amounts up to $500 per year may be retained by the non-Federal entity for administrative expense. Any additional interest earned on Federal advance payments deposited in interest-bearing accounts must be remitted annually to the Department of Health and Human Services Payment Management System (PMS) through an electronic medium using either Automated Clearing House (ACH) network or a Fedwire Funds Service payment. Remittances must include pertinent information of the payee and nature of payment in the memo area (often referred to as “addenda records” by Financial Institutions) as that will assist in the timely posting of interested earned on federal funds. Pertinent details include the Payee Account Number (PAN) if the payment originated from PMS, or Agency information if the payment originated from ASAP, NSF or another federal agency payment system. The remittance must be submitted as follows:

(i) For ACH Returns:
Routing Number: 051036706
Account number: 303000
Bank Name and Location: Credit Gateway—ACH Receiver St. Paul, MN

(ii) For Fedwire Returns*:
Routing Number: 021030004
Account number: 75010501
Bank Name and Location: Federal Reserve Bank Treas NYC/Funds Transfer Division New York, NY
(* Please note organization initiating payment is likely to incur a charge from your Financial Institution for this type of payment)

(iii) For International ACH Returns:
Beneficiary Account: Federal Reserve Bank of New York/ITS (FRBNY/ITS)
Bank: Citibank N.A. (New York)
Swift Code: CITIUS33
Account Number: 36838868
Bank Address: 388 Greenwich Street, New York, NY 10013 USA
Payment Details (Line 70): Agency
Name (abbreviated when possible) and ALC Agency POC: Michelle Haney, (301) 492-5065

(iv) For recipients that do not have electronic remittance capability, please make check** payable to: "The Department of Health and Human Services."
Mail Check to Treasury approved lockbox:
HHS Program Support Center, P.O. Box 530231, Atlanta, GA 30353-0231
(** Please allow 4-6 weeks for processing of a payment by check to be applied to the appropriate PMS account)

(v) Any additional information/instructions may be found on the PMS Web site at http://www.dpm.psc.gov/.

2.2 Payment Method

Recipients must utilize the Department of Treasury Automated Standard Application for Payments (ASAP) payment system to request advance or reimbursement payments. ASAP is a Recipient-initiated payment and information system designed to provide a single point of contact for the request and delivery of Federal funds. ASAP is the only allowable method for request and receipt of payment. Recipient procedures must minimize the time elapsing between the drawdown of Federal funds and the disbursement for agreement purposes.

Recipients must complete enrollment in ASAP for all active financial assistance agreements with Reclamation. ASAP enrollment is specific to each Agency and Bureau; meaning, if a Recipient organization has an existing ASAP account with another Federal agency or Department of the Interior bureau, but not with Reclamation, then the Recipient must initiate and complete enrollment in ASAP under Reclamation's Agency Location Code (1425) through submission of an enrollment form found at www.usbr.gov/mso/aamd/asap.html. For information regarding ASAP enrollment, please visit www.usbr.gov/mso/aamd/asap.html, or contact the Reclamation ASAP Help Desk BOR_ASAP_Enroll@usbr.gov. Further information regarding ASAP may be obtained from the ASAP website at http://www.fms.treas.gov/asap.

In accordance with 2 CFR 25.200(b)(2) the Recipient shall "Maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by an agency". If the Recipient allows their SAM registration to lapse, the Recipient's accounts within ASAP will be automatically suspended by Reclamation until such time as the Recipient renews their SAM registration.

3. PROCUREMENT STANDARDS (2 CFR§200.317 through §200.326)

§200.317 Procurements by states.

When procuring property and services under a Federal award, a state must follow the same policies and procedures it uses for procurements from its non-Federal funds. The state will comply with §200.322 Procurement of recovered materials and ensure that every purchase order or other contract includes any clauses required by section §200.326 Contract provisions. All other non-Federal entities, including subrecipients of a state, will follow §§200.318 General procurement standards through 200.326 Contract provisions.

§200.318 General procurement standards.

(a) The non-Federal entity must use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in this part.

(b) Non-Federal entities must maintain oversight to ensure that contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders.

(c)

(1) The non-Federal entity must maintain written standards of conduct covering conflicts of interest and governing the actions of its employees engaged in the selection, award and administration of contracts. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. However, non-Federal entities may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of the non-Federal entity.

(2) If the non-Federal entity has a parent, affiliate, or subsidiary organization that is not a state, local government, or Indian tribe, the non-Federal entity must also maintain written standards of conduct covering organizational conflicts of interest. Organizational conflicts of interest means that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization.

(d) The non-Federal entity's procedures must avoid acquisition of unnecessary or duplicative items. Consideration should be given to consolidating or breaking out procurements to obtain a

more economical purchase. Where appropriate, an analysis will be made of lease versus purchase alternatives, and any other appropriate analysis to determine the most economical approach.

(e) To foster greater economy and efficiency, and in accordance with efforts to promote cost-effective use of shared services across the Federal Government, the non-Federal entity is encouraged to enter into state and local intergovernmental agreements or inter-entity agreements where appropriate for procurement or use of common or shared goods and services.

(f) The non-Federal entity is encouraged to use Federal excess and surplus property in lieu of purchasing new equipment and property whenever such use is feasible and reduces project costs.

(g) The non-Federal entity is encouraged to use value engineering clauses in contracts for construction projects of sufficient size to offer reasonable opportunities for cost reductions. Value engineering is a systematic and creative analysis of each contract item or task to ensure that its essential function is provided at the overall lower cost.

(h) The non-Federal entity must award contracts only to responsible contractors possessing the ability to perform successfully under the terms and conditions of a proposed procurement. Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources. See also §200.212 Suspension and debarment.

(i) The non-Federal entity must maintain records sufficient to detail the history of procurement. These records will include, but are not necessarily limited to the following: rationale for the method of procurement, selection of contract type, contractor selection or rejection, and the basis for the contract price.

(j)

(1) The non-Federal entity may use a time and materials type contract only after a determination that no other contract is suitable and if the contract includes a ceiling price that the contractor exceeds at its own risk. Time and materials type contract means a contract whose cost to a non-Federal entity is the sum of:

(i) The actual cost of materials; and

(ii) Direct labor hours charged at fixed hourly rates that reflect wages, general and administrative expenses, and profit.

(2) Since this formula generates an open-ended contract price, a time-and-materials contract provides no positive profit incentive to the contractor for cost control or labor efficiency. Therefore, each contract must set a ceiling price that the contractor exceeds at its own risk. Further, the non-Federal entity awarding such a contract must assert a high degree of oversight in order to obtain reasonable assurance that the contractor is using efficient methods and effective cost controls.

(k) The non-Federal entity alone must be responsible, in accordance with good administrative practice and sound business judgment, for the settlement of all contractual and administrative issues arising out of procurements. These issues include, but are not limited to, source evaluation, protests, disputes, and claims. These standards do not relieve the non-Federal entity of any contractual responsibilities under its contracts. The Federal awarding agency will not substitute its judgment for that of the non-Federal entity unless the matter is primarily a Federal concern. Violations of law will be referred to the local, state, or Federal authority having proper jurisdiction.

§200.319 Competition.

(a) All procurement transactions must be conducted in a manner providing full and open competition consistent with the standards of this section. In order to ensure objective contractor performance and eliminate unfair competitive advantage, contractors that develop or draft specifications, requirements, statements of work, or invitations for bids or requests for proposals must be excluded from competing for such procurements. Some of the situations considered to be restrictive of competition include but are not limited to:

(1) Placing unreasonable requirements on firms in order for them to qualify to do business;

(2) Requiring unnecessary experience and excessive bonding;

(3) Noncompetitive pricing practices between firms or between affiliated companies;

(4) Noncompetitive contracts to consultants that are on retainer contracts;

(5) Organizational conflicts of interest;

(6) Specifying only a “brand name” product instead of allowing “an equal” product to be offered and describing the performance or other relevant requirements of the procurement; and

(7) Any arbitrary action in the procurement process.

(b) The non-Federal entity must conduct procurements in a manner that prohibits the use of statutorily or administratively imposed state, local, or tribal geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts state licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criterion provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.

(c) The non-Federal entity must have written procedures for procurement transactions. These procedures must ensure that all solicitations:

(1) Incorporate a clear and accurate description of the technical requirements for the material, product, or service to be procured. Such description must not, in competitive procurements, contain features which unduly restrict competition. The description may include a statement of the qualitative nature of the material, product or service to be procured and, when necessary, must set forth those minimum essential characteristics and standards to which it must conform if it is to satisfy its intended use. Detailed product specifications should be avoided if at all possible. When it is impractical or uneconomical to make a clear and accurate description of the technical requirements, a "brand name or equivalent" description may be used as a means to define the performance or other salient requirements of procurement. The specific features of the named brand which must be met by offers must be clearly stated; and

(2) Identify all requirements which the offerors must fulfill and all other factors to be used in evaluating bids or proposals.

(d) The non-Federal entity must ensure that all prequalified lists of persons, firms, or products which are used in acquiring goods and services are current and include enough qualified sources to ensure maximum open and free competition. Also, the non-Federal entity must not preclude potential bidders from qualifying during the solicitation period.
[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.320 Methods of procurement to be followed.

The non-Federal entity must use one of the following methods of procurement.

(a) Procurement by micro-purchases. Procurement by micro-purchase is the acquisition of supplies or services, the aggregate dollar amount of which does not exceed the micro-purchase threshold (§200.67 Micro-purchase). To the extent practicable, the non-Federal entity must distribute micro-purchases equitably among qualified suppliers. Micro-purchases may be awarded without soliciting competitive quotations if the non-Federal entity considers the price to be reasonable.

(b) Procurement by small purchase procedures. Small purchase procedures are those relatively simple and informal procurement methods for securing services, supplies, or other property that do not cost more than the Simplified Acquisition Threshold. If small purchase procedures are used, price or rate quotations must be obtained from an adequate number of qualified sources.

(c) Procurement by sealed bids (formal advertising). Bids are publicly solicited and a firm fixed price contract (lump sum or unit price) is awarded to the responsible bidder whose bid, conforming with all the material terms and conditions of the invitation for bids, is the lowest in price. The sealed bid method is the preferred method for procuring construction, if the conditions in paragraph (c)(1) of this section apply.

(1) In order for sealed bidding to be feasible, the following conditions should be present:

(i) A complete, adequate, and realistic specification or purchase description is available;

(ii) Two or more responsible bidders are willing and able to compete effectively for the business; and

(iii) The procurement lends itself to a firm fixed price contract and the selection of the successful bidder can be made principally on the basis of price.

(2) If sealed bids are used, the following requirements apply:

(i) Bids must be solicited from an adequate number of known suppliers, providing them sufficient response time prior to the date set for opening the bids, for state, local, and tribal governments, the invitation for bids must be publically advertised;

(ii) The invitation for bids, which will include any specifications and pertinent attachments, must define the items or services in order for the bidder to properly respond;

(iii) All bids will be opened at the time and place prescribed in the invitation for bids, and for local and tribal governments, the bids must be opened publicly;

(iv) A firm fixed price contract award will be made in writing to the lowest responsive and responsible bidder. Where specified in bidding documents, factors such as discounts, transportation cost, and life cycle costs must be considered in determining which bid is lowest. Payment discounts will only be used to determine the low bid when prior experience indicates that such discounts are usually taken advantage of; and

(v) Any or all bids may be rejected if there is a sound documented reason.

(d) Procurement by competitive proposals. The technique of competitive proposals is normally conducted with more than one source submitting an offer, and either a fixed price or cost-reimbursement type contract is awarded. It is generally used when conditions are not appropriate for the use of sealed bids. If this method is used, the following requirements apply:

(1) Requests for proposals must be publicized and identify all evaluation factors and their relative importance. Any response to publicized requests for proposals must be considered to the maximum extent practical;

(2) Proposals must be solicited from an adequate number of qualified sources;

(3) The non-Federal entity must have a written method for conducting technical evaluations of the proposals received and for selecting recipients;

(4) Contracts must be awarded to the responsible firm whose proposal is most advantageous to the program, with price and other factors considered; and

(5) The non-Federal entity may use competitive proposal procedures for qualifications-based procurement of architectural/engineering (A/E) professional services whereby competitors' qualifications are evaluated and the most qualified competitor is selected, subject to negotiation of fair and reasonable compensation. The method, where price is not used as a selection factor, can only be used in procurement of A/E professional services. It cannot be used to purchase other types of services though A/E firms are a potential source to perform the proposed effort.

(e) [Reserved]

(f) Procurement by noncompetitive proposals. Procurement by noncompetitive proposals is procurement through solicitation of a proposal from only one source and may be used only when one or more of the following circumstances apply:

(1) The item is available only from a single source;

(2) The public exigency or emergency for the requirement will not permit a delay resulting from competitive solicitation;

(3) The Federal awarding agency or pass-through entity expressly authorizes noncompetitive proposals in response to a written request from the non-Federal entity; or

(4) After solicitation of a number of sources, competition is determined inadequate.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.321 Contracting with small and minority businesses, women's business enterprises, and labor surplus area firms.

(a) The non-Federal entity must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

(b) Affirmative steps must include:

(1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

(2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

(3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

(4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;

(5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and

(6) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (1) through (5) of this section.

§200.322 Procurement of recovered materials.

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

§200.323 Contract cost and price.

(a) The non-Federal entity must perform a cost or price analysis in connection with every procurement action in excess of the Simplified Acquisition Threshold including contract modifications. The method and degree of analysis is dependent on the facts surrounding the particular procurement situation, but as a starting point, the non-Federal entity must make independent estimates before receiving bids or proposals.

(b) The non-Federal entity must negotiate profit as a separate element of the price for each contract in which there is no price competition and in all cases where cost analysis is performed. To establish a fair and reasonable profit, consideration must be given to the complexity of the work to be performed, the risk borne by the contractor, the contractor's investment, the amount of subcontracting, the quality of its record of past performance, and industry profit rates in the surrounding geographical area for similar work.

(c) Costs or prices based on estimated costs for contracts under the Federal award are allowable only to the extent that costs incurred or cost estimates included in negotiated prices would be allowable for the non-Federal entity under Subpart E—Cost Principles of this part. The non-Federal entity may reference its own cost principles that comply with the Federal cost principles.

(d) The cost plus a percentage of cost and percentage of construction cost methods of contracting must not be used.

§200.324 Federal awarding agency or pass-through entity review.

(a) The non-Federal entity must make available, upon request of the Federal awarding agency or pass-through entity, technical specifications on proposed procurements where the Federal awarding agency or pass-through entity believes such review is needed to ensure that the item or service specified is the one being proposed for acquisition. This review generally will take place prior to the time the specification is incorporated into a solicitation document. However, if the non-Federal entity desires to have the review accomplished after a solicitation has been developed, the Federal awarding agency or pass-through entity may still review the specifications, with such review usually limited to the technical aspects of the proposed purchase.

(b) The non-Federal entity must make available upon request, for the Federal awarding agency or pass-through entity pre-procurement review, procurement documents, such as requests for proposals or invitations for bids, or independent cost estimates, when:

(1) The non-Federal entity's procurement procedures or operation fails to comply with the procurement standards in this part;

(2) The procurement is expected to exceed the Simplified Acquisition Threshold and is to be awarded without competition or only one bid or offer is received in response to a solicitation;

(3) The procurement, which is expected to exceed the Simplified Acquisition Threshold, specifies a “brand name” product;

(4) The proposed contract is more than the Simplified Acquisition Threshold and is to be awarded to other than the apparent low bidder under a sealed bid procurement; or

(5) A proposed contract modification changes the scope of a contract or increases the contract amount by more than the Simplified Acquisition Threshold.

(c) The non-Federal entity is exempt from the pre-procurement review in paragraph (b) of this section if the Federal awarding agency or pass-through entity determines that its procurement systems comply with the standards of this part.

(1) The non-Federal entity may request that its procurement system be reviewed by the Federal awarding agency or pass-through entity to determine whether its system meets these standards in order for its system to be certified. Generally, these reviews must occur where there is continuous high-dollar funding, and third party contracts are awarded on a regular basis;

(2) The non-Federal entity may self-certify its procurement system. Such self-certification must not limit the Federal awarding agency's right to survey the system. Under a self-certification procedure, the Federal awarding agency may rely on written assurances from the non-Federal entity that it is complying with these standards. The non-Federal entity must cite specific policies, procedures, regulations, or standards as being in compliance with these requirements and have its system available for review.

§200.325 Bonding requirements.

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The “bid guarantee” must consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by

law of all persons supplying labor and material in the execution of the work provided for in the contract.

§200.326 Contract provisions.

The non-Federal entity's contracts must contain the applicable provisions described in Appendix II to Part 200—Contract Provisions for non-Federal Entity Contracts Under Federal Awards.

4. EQUIPMENT (2 CFR §200.313)

See also §200.439 Equipment and other capital expenditures.

(a) Title. Subject to the obligations and conditions set forth in this section, title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity. Unless a statute specifically authorizes the Federal agency to vest title in the non-Federal entity without further obligation to the Federal Government, and the Federal agency elects to do so, the title must be a conditional title. Title must vest in the non-Federal entity subject to the following conditions:

(1) Use the equipment for the authorized purposes of the project during the period of performance, or until the property is no longer needed for the purposes of the project.

(2) Not encumber the property without approval of the Federal awarding agency or pass-through entity.

(3) Use and dispose of the property in accordance with paragraphs (b), (c) and (e) of this section.

(b) A state must use, manage and dispose of equipment acquired under a Federal award by the state in accordance with state laws and procedures. Other non-Federal entities must follow paragraphs (c) through (e) of this section.

(c) Use.

(1) Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by the Federal award, and the non-Federal entity must not encumber the property without prior approval of the Federal awarding agency. When no longer needed for the original program or project, the equipment may be used in other activities supported by the Federal awarding agency, in the following order of priority:

(i) Activities under a Federal award from the Federal awarding agency which funded the original program or project, then

(ii) Activities under Federal awards from other Federal awarding agencies. This includes consolidated equipment for information technology systems.

(2) During the time that equipment is used on the project or program for which it was acquired, the non-Federal entity must also make equipment available for use on other projects or programs currently or previously supported by the Federal Government, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for other use must be given to other programs or projects supported by Federal awarding agency that financed the equipment and second preference must be given to programs or projects under Federal awards from other Federal awarding agencies. Use for non-federally-funded programs or projects is also permissible. User fees should be considered if appropriate.

(3) Notwithstanding the encouragement in §200.307 Program income to earn program income, the non-Federal entity must not use equipment acquired with the Federal award to provide services for a fee that is less than private companies charge for equivalent services unless specifically authorized by Federal statute for as long as the Federal Government retains an interest in the equipment.

(4) When acquiring replacement equipment, the non-Federal entity may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property.

(d) Management requirements. Procedures for managing equipment (including replacement equipment), whether acquired in whole or in part under a Federal award, until disposition takes place will, as a minimum, meet the following requirements:

(1) Property records must be maintained that include a description of the property, a serial number or other identification number, the source of funding for the property (including the FAIN), who holds title, the acquisition date, and cost of the property, percentage of Federal participation in the project costs for the Federal award under which the property was acquired, the location, use and condition of the property, and any ultimate disposition data including the date of disposal and sale price of the property.

(2) A physical inventory of the property must be taken and the results reconciled with the property records at least once every two years.

(3) A control system must be developed to ensure adequate safeguards to prevent loss, damage, or theft of the property. Any loss, damage, or theft must be investigated.

(4) Adequate maintenance procedures must be developed to keep the property in good condition.

(5) If the non-Federal entity is authorized or required to sell the property, proper sales procedures must be established to ensure the highest possible return.

(e) Disposition. When original or replacement equipment acquired under a Federal award is no longer needed for the original project or program or for other activities currently or previously supported by a Federal awarding agency, except as otherwise provided in Federal statutes,

regulations, or Federal awarding agency disposition instructions, the non-Federal entity must request disposition instructions from the Federal awarding agency if required by the terms and conditions of the Federal award. Disposition of the equipment will be made as follows, in accordance with Federal awarding agency disposition instructions:

(1) Items of equipment with a current per unit fair market value of $5,000 or less may be retained, sold or otherwise disposed of with no further obligation to the Federal awarding agency.

(2) Except as provided in §200.312 Federally-owned and exempt property, paragraph (b), or if the Federal awarding agency fails to provide requested disposition instructions within 120 days, items of equipment with a current per-unit fair-market value in excess of $5,000 may be retained by the non-Federal entity or sold. The Federal awarding agency is entitled to an amount calculated by multiplying the current market value or proceeds from sale by the Federal awarding agency's percentage of participation in the cost of the original purchase. If the equipment is sold, the Federal awarding agency may permit the non-Federal entity to deduct and retain from the Federal share $500 or ten percent of the proceeds, whichever is less, for its selling and handling expenses.

(3) The non-Federal entity may transfer title to the property to the Federal Government or to an eligible third party provided that, in such cases, the non-Federal entity must be entitled to compensation for its attributable percentage of the current fair market value of the property.

(4) In cases where a non-Federal entity fails to take appropriate disposition actions, the Federal awarding agency may direct the non-Federal entity to take disposition actions.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75884, Dec. 19, 2014]

5. SUPPLIES (2 CFR §200.314)

See also §200.453 Materials and supplies costs, including costs of computing devices.

(a) Title to supplies will vest in the non-Federal entity upon acquisition. If there is a residual inventory of unused supplies exceeding $5,000 in total aggregate value upon termination or completion of the project or program and the supplies are not needed for any other Federal award, the non-Federal entity must retain the supplies for use on other activities or sell them, but must, in either case, compensate the Federal Government for its share. The amount of compensation must be computed in the same manner as for equipment. See §200.313 Equipment, paragraph (e)(2) for the calculation methodology.

(b) As long as the Federal Government retains an interest in the supplies, the non-Federal entity must not use supplies acquired under a Federal award to provide services to other organizations for a fee that is less than private companies charge for equivalent services, unless specifically authorized by Federal statute.

6. INSPECTION

Reclamation has the right to inspect and evaluate the work performed or being performed under this Agreement, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If Reclamation performs inspection or evaluation on the premises of the Recipient or a sub-Recipient, the Recipient shall furnish and shall require sub-recipients to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

7. AUDIT REQUIREMENTS (2 CFR Subpart F §200.501)

(a) Audit required. A non-Federal entity that expends $750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single or program-specific audit conducted for that year in accordance with the provisions of this part.

(b) Single audit. A non-Federal entity that expends $750,000 or more during the non-Federal entity's fiscal year in Federal awards must have a single audit conducted in accordance with §200.514 Scope of audit except when it elects to have a program-specific audit conducted in accordance with paragraph (c) of this section.

(c) Program-specific audit election. When an auditee expends Federal awards under only one Federal program (excluding R&D) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of the auditee, the auditee may elect to have a program-specific audit conducted in accordance with §200.507 Program-specific audits. A program-specific audit may not be elected for R&D unless all of the Federal awards expended were received from the same Federal agency, or the same Federal agency and the same pass-through entity, and that Federal agency, or pass-through entity in the case of a subrecipient, approves in advance a program-specific audit.

(d) Exemption when Federal awards expended are less than $750,000. A non-Federal entity that expends less than $750,000 during the non-Federal entity's fiscal year in Federal awards is exempt from Federal audit requirements for that year, except as noted in §200.503 Relation to other audit requirements, but records must be available for review or audit by appropriate officials of the Federal agency, pass-through entity, and Government Accountability Office (GAO).

(e) Federally Funded Research and Development Centers (FFRDC). Management of an auditee that owns or operates a FFRDC may elect to treat the FFRDC as a separate entity for purposes of this part.

(f) Subrecipients and Contractors. An auditee may simultaneously be a recipient, a subrecipient, and a contractor. Federal awards expended as a recipient or a subrecipient are subject to audit under this part. The payments received for goods or services provided as a contractor are not Federal awards. Section §200.330 Subrecipient and contractor determinations sets forth the considerations in determining whether payments constitute a Federal award or a payment for goods or services provided as a contractor.

(g) Compliance responsibility for contractors. In most cases, the auditee's compliance responsibility for contractors is only to ensure that the procurement, receipt, and payment for goods and services comply with Federal statutes, regulations, and the terms and conditions of Federal awards. Federal award compliance requirements normally do not pass through to contractors. However, the auditee is responsible for ensuring compliance for procurement transactions which are structured such that the contractor is responsible for program compliance or the contractor's records must be reviewed to determine program compliance. Also, when these procurement transactions relate to a major program, the scope of the audit must include determining whether these transactions are in compliance with Federal statutes, regulations, and the terms and conditions of Federal awards.

(h) For-profit subrecipient. Since this part does not apply to for-profit subrecipients, the pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The agreement with the for-profit subrecipient must describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the agreement, and post-award audits. See also §200.331 Requirements for pass-through entities.

[78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75887, Dec. 19, 2014]

8. REMEDIES FOR NONCOMPLIANCE (2 CFR §200.338)

§200.338 Remedies for noncompliance.

If a non-Federal entity fails to comply with Federal statutes, regulations or the terms and conditions of a Federal award, the Federal awarding agency or pass-through entity may impose additional conditions, as described in §200.207 Specific conditions. If the Federal awarding agency or pass-through entity determines that noncompliance cannot be remedied by imposing additional conditions, the Federal awarding agency or pass-through entity may take one or more of the following actions, as appropriate in the circumstances:

(a) Temporarily withhold cash payments pending correction of the deficiency by the non-Federal entity or more severe enforcement action by the Federal awarding agency or pass-through entity.

(b) Disallow (that is, deny both use of funds and any applicable matching credit for) all or part of the cost of the activity or action not in compliance.

(c) Wholly or partly suspend or terminate the Federal award.

(d) Initiate suspension or debarment proceedings as authorized under 2 CFR part 180 and Federal awarding agency regulations (or in the case of a pass-through entity, recommend such a proceeding be initiated by a Federal awarding agency).

(e) Withhold further Federal awards for the project or program.

(f) Take other remedies that may be legally available.

9. TERMINATION (2 CFR §200.339)

(a) The Federal award may be terminated in whole or in part as follows:

(1) By the Federal awarding agency or pass-through entity, if a non-Federal entity fails to comply with the terms and conditions of a Federal award;

(2) By the Federal awarding agency or pass-through entity for cause;

(3) By the Federal awarding agency or pass-through entity with the consent of the non-Federal entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated; or

(4) By the non-Federal entity upon sending to the Federal awarding agency or pass-through entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal awarding agency or pass-through entity determines in the case of partial termination that the reduced or modified portion of the Federal award or subaward

will not accomplish the purposes for which the Federal award was made, the Federal awarding agency or pass-through entity may terminate the Federal award in its entirety.

(b) When a Federal award is terminated or partially terminated, both the Federal awarding agency or pass-through entity and the non-Federal entity remain responsible for compliance with the requirements in §§200.343 Closeout and 200.344 Post-closeout adjustments and continuing responsibilities.

10. DEBARMENT AND SUSPENSION (2 CFR §1400)

The Department of the Interior regulations at 2 CFR 1400—Governmentwide Debarment and Suspension (Nonprocurement), which adopt the common rule for the governmentwide system of debarment and suspension for nonprocurement activities, are hereby incorporated by reference and made a part of this Agreement. By entering into this grant or cooperative Agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 1400, Subpart C, and agrees to include a similar term or condition in all lower-tier covered transactions. These regulations are available at http://www.gpoaccess.gov/ecfr/.

11. DRUG-FREE WORKPLACE (2 CFR §182 and §1401)

The Department of the Interior regulations at 2 CFR 1401—Governmentwide Requirements for Drug-Free Workplace (Financial Assistance), which adopt the portion of the Drug-Free Workplace Act of 1988 (41 U.S.C. 701 et seq, as amended) applicable to grants and cooperative agreements, are hereby incorporated by reference and made a part of this agreement. By entering into this grant or cooperative agreement with the Bureau of Reclamation, the Recipient agrees to comply with 2 CFR 182.

12. ASSURANCES AND CERTIFICATIONS INCORPORATED BY REFERENCE

The provisions of the Assurances, SF 424B or SF 424D as applicable, executed by the Recipient in connection with this Agreement shall apply with full force and effect to this Agreement. All anti-discrimination and equal opportunity statutes, regulations, and Executive Orders that apply to the expenditure of funds under Federal contracts, grants, and cooperative Agreements, loans, and other forms of Federal assistance. The Recipient shall comply with Title VI or the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and any program-specific statutes with anti-discrimination requirements. The Recipient shall comply with civil rights laws including, but not limited to, the Fair Housing Act, the Fair Credit Reporting Act, the Americans with Disabilities Act, Title VII of the Civil Rights Act of 1964, the Equal Educational Opportunities Act, the Age Discrimination in Employment Act, and the Uniform Relocation Act.

Such Assurances also include, but are not limited to, the promise to comply with all applicable Federal statutes and orders relating to nondiscrimination in employment, assistance, and housing; the Hatch Act; Federal wage and hour laws and regulations and work place safety standards; Federal environmental laws and regulations and the Endangered Species Act; and Federal protection of rivers and waterways and historic and archeological preservation.

13. COVENANT AGAINST CONTINGENT FEES

The Recipient warrants that no person or agency has been employed or retained to solicit or secure this Agreement upon an Agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide offices established and maintained by the Recipient for the purpose of securing Agreements or business. For breach or violation of this warranty, the Government shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the Agreement amount, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

14. TRAFFICKING VICTIMS PROTECTION ACT OF 2000 (2 CFR §175.15)

Trafficking in persons.

(a) *Provisions applicable to a recipient that is a private entity.*

(1) You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not

(i) Engage in severe forms of trafficking in persons during the period of time that the award is in effect;

(ii) Procure a commercial sex act during the period of time that the award is in effect; or

(iii) Use forced labor in the performance of the award or subawards under the award.

(2) We as the Federal awarding agency may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity —

(i) Is determined to have violated a prohibition in paragraph a.1 of this award term; or

(ii) Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either:

(A) Associated with performance under this award; or

(B) Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement),” as implemented by our agency at *2 CFR part 1400*.

(b) *Provision applicable to a recipient other than a private entity*. We as the Federal awarding agency may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity—

(1) Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or

(2) Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either:

(i) Associated with performance under this award; or

(ii) Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement)," as implemented by our agency at *2 CFR part 1400*.

(c) *Provisions applicable to any recipient*.

(1) You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.

(2) Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:

(i) Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and

(ii) Is in addition to all other remedies for noncompliance that are available to us under this award.

(3) You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.

(d) *Definitions*. For purposes of this award term:

(1) "Employee" means either:

(i) An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or

(ii) Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.

(2) "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through

the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.

(3) "Private entity":

(i) Means any entity other than a state, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.

(ii) Includes:

(A) A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).

(B) A for-profit organization.

(4) "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C. 7102).

15. NEW RESTRICTIONS ON LOBBYING (43 CFR §18)

The Recipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Recipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

(c) The Recipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who

fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

16. UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 (URA) (42 USC § 4601 *et seq.)*

(a) The Uniform Relocation Assistance Act (URA), 42 U.S.C. § 4601 *et seq.*, as amended, requires certain assurances for Reclamation funded land acquisition projects conducted by a Recipient that cause the displacement of persons, businesses, or farm operations. Because Reclamation funds only support acquisition of property or interests in property from willing sellers, it is not anticipated that Reclamation funds will result in any "displaced persons," as defined under the URA.

(b) However, if Reclamation funds are used for the acquisition of real property that results in displacement, the URA requires Recipients to ensure that reasonable relocation payments and other remedies will be provided to any displaced person. Further, when acquiring real property, Recipients must be guided, to the greatest extent practicable, by the land acquisition policies in 42 U.S.C. § 4651.

(c) Exemptions to the URA and 49 CFR Part 24

(1) The URA provides for an exemption to the appraisal, review and certification rules for those land acquisitions classified as "voluntary transactions." Such "voluntary transactions" are classified as those that do not involve an exercise of eminent domain authority on behalf of a Recipient, and must meet the conditions specified at 49 CFR § 24.101(b)(1)(i)-(iv).

(2) For any land acquisition undertaken by a Recipient that receives Reclamation funds, but does not have authority to acquire the real property by eminent domain, to be exempt from the requirements of 49 CFR Part 24 the Recipient must:

(i) provide written notification to the owner that it will not acquire the property in the event negotiations fail to result in an amicable agreement, and;

(ii) inform the owner in writing of what it believes to be the market value of the property

(d) Review of Land Acquisition Appraisals. Reclamation reserves the right to review any land appraisal whether or not such review is required under the URA or 49 CFR § 24.104. Such reviews may be conducted by the Department of the Interior's Appraisal Services Directorate or a Reclamation authorized designee. When Reclamation determines that a review of the original appraisal is necessary, Reclamation will notify the Recipient and provide an estimated completion date of the initial appraisal review.

17. CENTRAL CONTRACTOR REGISTRATION AND UNIVERSAL IDENTIFIER REQUIREMENTS (2 CFR 25, APPENDIX A)

The Central Contractor Registration (CCR) has been migrated to the System for Award Management (SAM). Recipients must continue to comply with the CCR requirements below by maintaining current registration within www.SAM.gov.

A. Requirement for Central Contractor Registration (CCR)
Unless you are exempted from this requirement under 2 CFR 25.110, you as the recipient must maintain the currency of your information in the CCR until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that you review and update the information at least annually after the initial registration, and more frequently if required by changes in your information or another award term.

B. Requirement for Data Universal Numbering System (DUNS) Numbers
If you are authorized to make subawards under this award, you:

1. Must notify potential subrecipients that no entity (*see* definition in paragraph C of this award term) may receive a subaward from you unless the entity has provided its DUNS number to you.

2. May not make a subaward to an entity unless the entity has provided its DUNS number to you.

C. Definitions
For purposes of this award term:

1. *Central Contractor Registration (CCR)* means the Federal repository into which an entity must provide information required for the conduct of business as a recipient. Additional information about registration procedures may be found at the CCR Internet site (currently at *http://www.ccr.gov*).

2. *Data Universal Numbering System (DUNS) number* means the nine-digit number established and assigned by Dun and Bradstreet, Inc. (D&B) to uniquely identify business entities. A DUNS number may be obtained from D&B by telephone (currently 866–705–5711) or the Internet (currently at *http://fedgov.dnb.com/webform*).

3. *Entity*, as it is used in this award term, means all of the following, as defined at 2 CFR part 25, subpart C:
   a. A Governmental organization, which is a state, local government, or Indian Tribe;
   b. A foreign public entity;
   c. A domestic or foreign nonprofit organization;
   d. A domestic or foreign for-profit organization; and
   e. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

4. *Subaward:*

   a. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

   b. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, *see* Sec. ll.210 of the attachment to OMB Circular A–133, ‘‘Audits of States, Local Governments, and Non-Profit Organizations’’).

   c. A subaward may be provided through any legal agreement, including an agreement that you consider a contract.

5. *Subrecipient* means an entity that:

   a. Receives a subaward from you under this award; and
   b. Is accountable to you for the use of the Federal funds provided by the subaward.

18. PROHIBITION ON TEXT MESSAGING AND USING ELECTRONIC EQUIPMENT SUPPLIED BY THE GOVERNMENT WHILE DRIVING

Executive Order 13513, *Federal Leadership On Reducing Text Messaging While Driving*, was signed by President Barack Obama on October 1, 2009 (ref: http://edocket.access.gpo.gov/2009/pdf/E9-24203.pdf). This Executive Order introduces a Federal Government-wide prohibition on the use of text messaging while driving on official business or while using Government-supplied equipment. Additional guidance enforcing the ban will be issued at a later date. In the meantime, please adopt and enforce policies that immediately ban text messaging while driving company-owned or rented vehicles, government-owned or leased vehicles, or while driving privately owned vehicles when on official government business or when performing any work for or on behalf of the government.

19. REPORTING SUBAWARDS AND EXECUTIVE COMPENSATION (2 CFR 170 APPENDIX A)

I. Reporting Subawards and Executive Compensation.

a. *Reporting of first-tier subawards.*

1. *Applicability.* Unless you are exempt as provided in paragraph d. of this award term, you must report each action that obligates $25,000 or more in Federal funds that does not include Recovery funds (as defined in section 1512(a)(2) of the American Recovery and Reinvestment Act of 2009, Pub. L. 111-5) for a subaward to an entity (see definitions in paragraph e. of this award term).

2. *Where and when to report.*

i. You must report each obligating action described in paragraph a.1. of this award term to *http://www.fsrs.gov*.

ii. For subaward information, report no later than the end of the month following the month in which the obligation was made. (For example, if the obligation was made on November 7, 2010, the obligation must be reported by no later than December 31, 2010.)

3. *What to report.* You must report the information about each obligating action that the submission instructions posted at http://www.fsrs.gov *specify.*

b. *Reporting Total Compensation of Recipient Executives.*

1. *Applicability and what to report.* You must report total compensation for each of your five most highly compensated executives for the preceding completed fiscal year, if—

i. the total Federal funding authorized to date under this award is $25,000 or more;

ii. in the preceding fiscal year, you received—

(A) 80 percent or more of your annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.)

2. *Where and when to report.* You must report executive total compensation described in paragraph b.1. of this award term:

i. As part of your registration profile at http://www.ccr.gov.

ii. By the end of the month following the month in which this award is made, and annually thereafter.

c. *Reporting of Total Compensation of Subrecipient Executives.*

1. *Applicability and what to report.* Unless you are exempt as provided in paragraph d. of this award term, for each first-tier subrecipient under this award, you shall report the names and total compensation of each of the subrecipient's five most highly compensated executives for the subrecipient's preceding completed fiscal year, if—

i. in the subrecipient's preceding fiscal year, the subrecipient received—

(A) 80 percent or more of its annual gross revenues from Federal procurement contracts (and subcontracts) and Federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

(B) $25,000,000 or more in annual gross revenues from Federal procurement contracts (and subcontracts), and Federal financial assistance subject to the Transparency Act (and subawards); and

ii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at *http://www.sec.gov/answers/execomp.htm*.)

2. *Where and when to report.* You must report subrecipient executive total compensation described in paragraph c.1. of this award term:

i. To the recipient.

ii. By the end of the month following the month during which you make the subaward. For example, if a subaward is obligated on any date during the month of October of a given year (*i.e.*, between October 1 and 31), you must report any required compensation information of the subrecipient by November 30 of that year.

d. *Exemptions*

If, in the previous tax year, you had gross income, from all sources, under $300,000, you are exempt from the requirements to report:

i. Subawards,

and

ii. The total compensation of the five most highly compensated executives of any subrecipient.

e. *Definitions.* For purposes of this award term:

1. *Entity* means all of the following, as defined in 2 CFR part 25:

i. A Governmental organization, which is a State, local government, or Indian tribe;

ii. A foreign public entity;

iii. A domestic or foreign nonprofit organization;

iv. A domestic or foreign for-profit organization;

v. A Federal agency, but only as a subrecipient under an award or subaward to a non-Federal entity.

2. *Executive* means officers, managing partners, or any other employees in management positions.

3. *Subaward:*

i. This term means a legal instrument to provide support for the performance of any portion of the substantive project or program for which you received this award and that you as the recipient award to an eligible subrecipient.

ii. The term does not include your procurement of property and services needed to carry out the project or program (for further explanation, see Sec. __ .210 of the attachment to OMB Circular A-133, “Audits of States, Local Governments, and Non-Profit Organizations”).

iii. A subaward may be provided through any legal agreement, including an agreement that you or a subrecipient considers a contract.

4. *Subrecipient* means an entity that:

i. Receives a subaward from you (the recipient) under this award; and

ii. Is accountable to you for the use of the Federal funds provided by the subaward.

5. *Total compensation* means the cash and noncash dollar value earned by the executive during the recipient's or subrecipient's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

i. *Salary and bonus.*

ii. *Awards of stock, stock options, and stock appreciation rights.* Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. *Earnings for services under non-equity incentive plans.* This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. *Change in pension value.* This is the change in present value of defined benefit and actuarial pension plans.

v. *Above-market earnings on deferred compensation which is not tax-qualified.*

vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

20. RECIPIENT EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS (SEP 2013)

(a) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at 41 U.S.C. 4712 by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub.L. 112-239).

(b) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C 4712.

(c) The Award Recipient shall insert the substance of this clause, including this paragraph (c), in all subawards or subcontracts over the simplified acquisition threshold. 48 CFR § 52.203-17 (as referenced in 48 CFR § 3.908-9).

21. RECIPIENT INTEGRITY AND PERFORMANCE MATTERS (APPENDIX XII to 2 CFR Part 200)

A. Reporting of Matters Related to Recipient Integrity and Performance

1. General Reporting Requirement

If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds $10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

2. Proceedings About Which You Must Report

Submit the information required about each proceeding that:

a. Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;

b. Reached its final disposition during the most recent five year period; and

c. Is one of the following:

(1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;

(2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more;

(3) An administrative proceeding, as defined in paragraph 5. of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of $5,000 or more or reimbursement, restitution, or damages in excess of $100,000; or

(4) Any other criminal, civil, or administrative proceeding if:

(i) It could have led to an outcome described in paragraph 2.c.(1), (2), or (3) of this award term and condition;

(ii) It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and

(iii) The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

3. Reporting Procedures

Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

4. Reporting Frequency

During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than $10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

5. Definitions

For purposes of this award term and condition:

a. Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.

b. Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.

c. Total value of currently active grants, cooperative agreements, and procurement contracts includes—

(1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and

(2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

IMPLEMENTATION AGREEMENT FOR THE SOUTH ORANGE COUNTY INTEGRATED REGIONAL WATER MANAGEMENT IMPLEMENTATION GRANT

THIS Implementation Agreement ("IA"), for purposes of identification hereby numbered MA-080-17010539, is made and entered into this _____ day of _____2016, by and between the COUNTY OF ORANGE, a political subdivision of the State of California **("County"),** and the listed PROJECT PROPONENT SIGNATORIES BELOW, ALL BEING EITHER CITIES, SPECIAL DISTRICTS, OR OTHER ORGANIZATIONS OPERATING IN South Orange County, and receiving grant funding from the California Department of Water Resources (DWR) Proposition 84 program. This IA is effective when signed by the County and participating PROJECT PROPONENTS. The COUNTY will serve as grantee with the DWR, and each PROJECT PROPONENT will serve as sub-grantee to the COUNTY.

RECITALS

WHEREAS, the County will accept and receive grant funds from the State of California under the State's Proposition 84 Integrated Regional Water Management Grant Program through that certain agreement entitled "Grant Agreement between the State of California Department of Water Resources (DWR) and the County of Orange, Agreement No. 4600011489 **("Grant Agreement"),** which agreement is attached as Attachment 1;

WHEREAS, Project Proponent are all agencies operating in South Orange County, the area named in the San Diego Regional Water Quality Control Board's Basin Plan as the San Juan Hydrologic Unit **("Region");**

WHEREAS, Project Proponents have collaborated with County and others to complete a successful Integrated Regional Water Management Plan **("IRWMP"),** a plan integrating water resource related activities throughout the Region into a common scheme of prioritization and to facilitate collaborative implementation of agreed upon strategies;

WHEREAS, the Grant Agreement adopts the IRWMP as the work plan for all reimbursable projects eligible under the State program, and the Project Proponent, along with the County, as well as the other Project Proponents, intend to carry out the IRWMP in anticipation of funding under that plan; and

WHEREAS, this Agreement intends to describe the obligations of the Parties and the procedures by which the County will disburse Proposition 84 grant funds to the Project Proponents.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency are hereby acknowledged, the Parties hereby agree as follows:

1. General Obligations of the Parties

Project Proponents agree that the cooperative and integrated implementation of the IRWMP is in the best interest of the Region. Project Proponent agrees to collaborate in good faith to implement its project(s) under the IRWMP.

a. Project Proponents authorize the County to apply for funds in order to implement the IRWMP.

b. County shall receive and administer any funds received under the Grant Agreement on behalf of the County or Project Proponents for the purposes of administration, implementation, and/or revision of the IRWMP.

c. County may retain qualified consultants for use on IRWMP matters, subject to the County's normal rules and procedures for procuring such services.

d. County may undertake efforts directly on behalf of the Project Proponents, if necessary.

e. County will provide funds received for implementation of the IRWMP to Project Proponents for implementation thereof and activities in furtherance of the IRWMP.

2. Funding and Implementation of IRWMP Projects

Funding received under the Grant Agreement will be administered in accordance with the following provisions:

a. Upon receipt of funds from the State, County will allocate funds received under the Grant Agreement to Project Proponents in accordance with the funding allocations specified in the IRWMP for that project component ("**component**"). Any required priorities for funding the projects in the IRWMP will be developed by County in consultation with Project Proponents.

b. County will be responsible for entering into necessary contracts and agreements for funds on behalf of the Project Proponents and for accounting for such funds and submitting all required reports associated with such funds. County is hereby designated "Contract Administrator" for this purpose.

c. Project Proponents upon receiving funding under this Agreement are hereby designated as "Sub-Grantees" for purposes of the Grant Agreement, and agree to abide by all terms and conditions applicable to Sub-Grantees in the Grant Agreement.

d. County shall draft and approve a process for administering grant funds by County. County shall be entitled to approximately 4% of all grant funds disbursed to Project Proponents under this Agreement in order to pay for County's administration costs. County may in its discretion withhold more than 4% if a Project Proponent does not meet invoicing deadlines or if incomplete paperwork is submitted, and the additional cost of County's contract administration services exceeds 4% of the disbursed grant funds to Project Proponent. In that case, County shall be entitled to its full costs of administration.

e. Project Proponent is responsible for the development and implementation of its component under this Agreement, including, but not limited to, project and environmental planning, design, permitting, construction, project administration, documentation, and completion of any required mitigation, monitoring, or reporting. Project Proponent agrees to be the lead agency for this project for purposes of the California Environmental Quality Act.

f. Project Proponent shall be responsible for completing all elements of the component scope of work and for delivering to County any and all requirements, deliverables, documents and documentation as described in the Grant Agreement at Attachment 1. All documents provided to County for transmission to DWR shall be in electronic format acceptable to County.

g. Project Proponent shall be reimbursed up to the maximum grant amount identified in Exhibit C (Project Budget, Table 4) of the Grant Agreement for the component. If the actual cost of the Project Proponent's component identified in Exhibit C of the Grant Agreement exceeds the maximum grant amount, County shall have no obligation to disburse grant funds for such excess costs.

h. County may withhold from Project Proponent all or any portion of the grant funds if Project Proponent has materially violated, or threatens to materially violate, any term, provision, condition, or commitment of this Agreement; Project Proponent's expenditure is ineligible under the Prop 84 program as determined by County or DWR; Project Proponent fails to maintain reasonable progress toward completion of the Project; or DWR directs County to withhold any such grant reimbursement. County shall give immediate notice of such direction from DWR to Project Proponent.

i. Project Proponent agrees, if applicable, to collect, manage and report performance and analytical data related to component in a manner that facilitates the reporting and management in accordance with DWR standards and consistent with the procedures to be developed by County, Project Proponent and the other Project Proponents.

j. Project Proponent agrees to ensure that County, DWR, or any authorized representative thereof, shall have suitable and reasonable access to a project site at all reasonable times during construction, and thereafter for the useful life of the project, as applicable.

k. Project Proponent shall provide the deliverable to County in advance of the date shown in Exhibit B (Project Schedule) of the Grant Agreement for the component.

l. Project Proponent shall provide County evidence of insurance or self-insurance (if self-insured, include limits, if any, of self insurance), and other financial information as needed to comply with the terms of Agreement.

m. As required in the Grant Agreement, Project Proponent shall name the County, the State, and the respective officers, agents and employees of each, as additional insured on their liability insurance for activities undertaken pursuant to this agreement.

3. Miscellaneous Terms and Provisions

a. All information about components undertaken under this Agreement is the responsibility of the Project Proponents. Project Proponents agree that County will administer this Agreement and the overall program of implementation, that County review of components is discretionary, and Project Proponents shall not assume that County will discover errors and/or omissions. While County will submit grant applications, factual reports, monitoring data, and the like to granting agencies on behalf of the Project Proponents, Project Proponents acknowledge their responsibility for the accuracy, completeness, and timeliness of project information submitted to County for this purpose.

b. Indemnity. For components undertaken under this Agreement, Project Proponents shall defend, indemnify and hold harmless County and the other Project Proponents not involved in the component, against any and all liability, loss, expense, attorney's fees, or claims for injury or damages arising out of:

   i. Project Proponent's failure to comply with its obligations under this Agreement.
   ii. Any act or omission of Project Proponent that prevents County from complying with County's obligations under the Grant Agreement.
   iii. Project Proponent's operation of any project funded by this Agreement.

Project Proponent's indemnity obligation shall be in proportion to and extend only to such liability, loss, expense, attorney's fees or claims for injury or damages as are caused by or result from the negligent or intentional acts or omissions of the Project Proponents. County agrees that it shall require the same indemnity terms set forth herein in all implementation agreements or any other arrangements entered into with any other Project Proponents in connection with the Grant Agreement, so as to provide Project Proponents with reciprocal indemnity from each such other Project Proponent. County shall indemnify Project Proponents against any and all liability, loss, expense, attorney's fees, or claims for injury or damages arising out of (1) County's failure to include such indemnity terms, or the absence of such terms, as described, or (2) County's failure to include the third party beneficiary rights of Project Proponents related to indemnity from other Project Proponents described under Section 3.g., or the absence of such terms, as described below.

c. Assignment. Neither this Agreement, nor any duties or obligations under this Agreement, nor any of the project facilities referenced in Attachment 1 (if any) shall be assigned by Project Proponents without the prior written consent of the County. Should an assignment or transfer occur with consent of the County, whenever County or the Project Proponent are named or referred to, such reference shall be deemed to include the successor to the powers, duties and functions that are presently vested in County and the Project Proponents, and all agreements and covenants required hereby to be performed by or on behalf of County and Project Proponents shall bind and inure to the benefit of the respective successors thereof, whether so expressed in such assignment or not.

d. Modification. This Agreement may be amended or modified only by a written document and approval of the Project Proponents unless required by an amendment or change to Attachment 1 required by DWR. Any such written modification shall be attached and incorporated hereto.

e. Term. This Agreement will continue in effect until the completion of the Proposition 84 Implementation grant funded projects unless terminated or extended by the County and Project Proponent(s). If County terminates this agreement before completion of efforts, Project Proponent(s) agrees to work with the other Project Proponents to designate a different entity to assume the lead role under this Agreement, who shall assume all responsibilities of County.

f. Completion by Project Proponent. In the event Project Proponent has completed component and all applicable documents, deliverables, and requirement of Attachment 1, is not currently receiving grant funds, and has received acceptance of completion of component, may terminate its participation in this Agreement upon ninety (90) days prior written notice to the County. Such termination shall be effective ninety (90) days after the notice is received or deemed received. Notwithstanding the foregoing, the Project Proponent(s) shall continue to be responsible for any and all outstanding obligations, including, but not limited to, any debts, liabilities, useful life operation covenants or other financial

commitments incurred or pledged by the Project Proponent(s), subject to constitutional debt limitation provisions of the law.

g. No Third Party Beneficiaries. Except as further set forth in this subsection (g), nothing in this Agreement shall be construed to give any person, other than the County and Project Proponent(s), any legal or equitable right, remedy or claim under or in respect of this Agreement or any provisions herein. This Agreement is intended to be for the sole and exclusive benefit of the County and Project Proponent(s), except for the purpose described as follows: the other Project Proponents are considered third party beneficiaries for the limited purpose of enforcement of the indemnity terms set forth under Section 3.b. County agrees to incorporate a third party beneficiary right of Project Proponent in all other implementation agreements or any other arrangements entered into with any other Project Proponents in connection with the Grant Agreement, for the same limited purpose, with substantially the terms set forth herein.

h. Severability. If any provision of this Agreement is held, determined or adjudicated to be illegal, void, or unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall be given effect to the fullest extent reasonably possible.

i. Project Proponents represent and warrant that this Agreement has been duly authorized and executed and constitutes the legally binding obligation of its' organization or entity, enforceable in accordance with its terms.

j. Counterparts. This Agreement may be executed in counterparts and the signed counterparts shall constitute a single instrument.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the dates opposite their respective signatures:

ORANGE COUNTY PUBLIC WORKS DEPARTMENT

By _____ Date_____
Name: Shane L. Silsby, PE
Title: Director – OC Public Works

APPROVED AS TO FORM:
COUNTY COUNSEL

By _____ Date_____
Deputy

CITY OF ALISO VIEJO

By _____ Date_____
Name: David Doyle
Title: City Manager

APPROVED AS TO FORM:
City Attorney

By _____ Date_____
Name:

UNITED STATES FOREST SERVICE – CLEVELAND NATIONAL FOREST

By _____ Date_____
Name: William Metz
Title: Forest Supervisor

APPROVED AS TO FORM:
General Counsel

By _____ Date_____
Name:

CITY OF LAGUNA NIGUEL

By _____ Date_____
Name: Rod Foster
Title: City Manager

APPROVED AS TO FORM:
City Attorney

By _____ Date_____
Name:

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

By _____ Date_____
Name: Robert Hunter
Title: General Manager

APPROVED AS TO FORM:
General Counsel

By _____ Date_____
Name:

SANTA MARGARITA WATER DISTRICT

By _____ Date_____
Name: Daniel Ferons
Title: General Manager

APPROVED AS TO FORM:
SMWD General Counsel

By _____ Date_____
Name:

SOUTH COAST WATER DISTRICT

By _____ Date_____
Name: Andrew Brunhart
Title: General Manager

APPROVED AS TO FORM:
SCWD General Counsel

By _____ Date_____
Name:

GRANT AGREEMENT BETWEEN THE STATE OF CALIFORNIA (DEPARTMENT OF WATER RESOURCES) AND ORANGE COUNTY
AGREEMENT NUMBER 4600011489
2015 PROPOSITION 84 INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) IMPLEMENTATION GRANT
CALIFORNIA PUBLIC RESOURCES CODE § 75026 ET SEQ.

THIS GRANT AGREEMENT is entered into by and between the Department of Water Resources of the State of California, herein referred to as the "State" or "DWR" and the **County of Orange**, a public agency in the State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee", which parties do hereby agree as follows:

1. PURPOSE. State shall provide funding from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 to Grantee to assist in financing projects associated with the **South Orange County IRWM Plan**, pursuant to Chapter 8 (commencing with §79560) of Division 26.5 of the California Water Code (CWC), hereinafter collectively referred to as "IRWM Program."

2. TERM OF GRANT AGREEMENT. The term of this Grant Agreement begins on the date this Grant Agreement is executed by State, and terminates on **June 30, 2020**, or when all of the Parties' obligations under this Grant Agreement are fully satisfied, whichever occurs earlier. Execution date is the date the State signs this Grant Agreement.

3. GRANT AMOUNT. The maximum amount payable by the State under this Grant Agreement shall not exceed **$4,949,368.**

4. GRANTEE COST SHARE. Grantee agrees to fund the difference between the Total Project Cost and the Grant Amount (amount specified in Paragraph 3). Grantee Cost Share consists of Funding Match and Additional Cost Share, as documented in Exhibit B (Budget). Additional Cost Share will not be reviewed by the State for invoicing purposes; however, the Grantee is required to maintain all financial records associated with the project in accordance with Exhibit I (State Audit Document Requirements and Funding Match Guidelines for Grantees).

5. FUNDING MATCH. Grantee is required to provide a Funding Match (non-State funds) of not less than 25 percent of the Grand Total of all the total project costs unless a Disadvantaged Community project waiver is granted. Grantee agrees to provide a Funding Match for the amount as documented in Exhibit B (Budget), and may include expenses directly related to Exhibit A (Work Plan) after January 1, 2011.

6. GRANTEE'S RESPONSIBILITY. Grantee and its representatives shall:
   a) Faithfully and expeditiously perform or cause to be performed all project work as described in Exhibit A (Work Plan) and in accordance with Exhibit B (Budget) and Exhibit C (Schedule).
   b) Accept and agree to comply with all terms, provisions, conditions, and written commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by Grantee in the application, documents, amendments, and communications filed in support of its request for Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 financing.
   c) Comply with all applicable California laws and regulations.
   d) Implement the Projects in accordance with applicable provisions of the law.
   e) Fulfill its obligations under the Grant Agreement, and be responsible for the performance of the projects.

7. LOCAL PROJECT SPONSOR'S RESPONSIBILITY. Grantee shall assign Local Project Sponsors to act on behalf of Grantee for the purposes of individual project management, oversight, compliance, and operations and maintenance. Local Project Sponsors shall be assigned in accordance with the participating agencies identified in the **South Orange County WMA 2015 IRWM** grant application. Exhibit F identifies Local Project Sponsors. Local Project Sponsors shall also act on behalf of Grantee in the fulfillment of Grantee responsibilities where specifically specified in this Grant Agreement.

8. BASIC CONDITIONS. State shall have no obligation to disburse money for projects under this Grant Agreement until Grantee has satisfied the following conditions (if applicable):

a) Grantee and Local Project Sponsors demonstrate the availability of sufficient funds to complete each project by submitting the most recent 3 years of audited financial statements and submitting an Audited Financial Statement Summary for each Local Project Sponsor.
b) Grantee must demonstrate compliance with the groundwater compliance options set forth on pages 14 and 15 of the IRWM Program Guidelines, dated May 2015.
c) Grantee submits deliverables as specified in Paragraph 19 of this Grant Agreement and in Exhibit A.
d) Prior to the commencement of construction or implementation activities, Grantee shall submit the following to the State for each project:

1) Final plans and specifications certified by a California Registered Professional (Civil Engineer or Geologist, as appropriate) for each approved project as listed in Exhibit A of this Grant Agreement.
2) Environmental Documentation:

i) Grantee submits to the State all applicable environmental permits,
ii) Documents that satisfy the CEQA process are received by the State,
iii) State has completed its CEQA compliance review as a Responsible Agency, and
iv) Grantee receives written concurrence from the State of Lead Agency's CEQA document and State notice of verification of environmental permit submittal.

State's concurrence of Lead Agency's CEQA documents is fully discretionary and shall constitute a condition precedent to any work (i.e., construction or implementation activities) for which it is required. Once CEQA documentation has been completed, State will consider the environmental documents and decide whether to continue to fund the projects or to require changes, alterations or other mitigation. Grantee must also demonstrate that it has complied with all applicable requirements of the National Environmental Policy Act by submitting copies of any environmental documents, including environmental impact statements, Finding of No Significant Impact, and mitigation monitoring programs as may be required prior to beginning construction/implementation.

3) A monitoring plan as required by Paragraph 21, "Project Monitoring Plan Requirements."

9. DISBURSEMENT OF FUNDS. State will disburse to Grantee the amount approved, subject to the availability of funds through normal State processes. Notwithstanding any other provision of this Grant Agreement, no disbursement shall be required at any time or in any manner which is in violation of, or in conflict with, federal or state laws, rules, or regulations, or which may require any rebates to the federal government, or any loss of tax-free status on state bonds, pursuant to any federal statute or regulation.

10. ELIGIBLE PROJECT COST. Grantee shall apply State funds received only to Eligible Project Costs in accordance with applicable provisions of the law and Exhibit B. Eligible project costs include the reasonable costs of studies, engineering, design, land and easement acquisition, legal fees, preparation of environmental documentation, environmental mitigations, monitoring, and project construction. Reasonable administrative expenses may be included as Total Project Costs and will depend on the complexity of the project preparation, planning, coordination, construction, acquisitions, and implementation. Reimbursable administrative expenses are the necessary costs incidentally but directly related to the projects including the portion of overhead and administrative expenses that are directly related to the projects included in this Grant Agreement in accordance with the standard accounting practices of the Grantee. Work performed on the projects after January 17, 2014, shall be eligible for reimbursement.

Costs that are not eligible for reimbursement with State funds cannot be counted as Funding Match. Costs that are not eligible for reimbursement include, but are not limited to the following items:

a) Costs, other than those noted above, incurred prior to the award date of the Grant.
b) Operation and maintenance costs, including post construction performance and monitoring costs.
c) Purchase of equipment that is not an integral part of a project.
d) Establishing a reserve fund.
e) Purchase of water supply.
f) Monitoring and assessment costs for efforts required after project construction is complete.

g) Replacement of existing funding sources for ongoing programs.
h) Travel and per diem costs (per diem includes subsistence and other related costs).
i) Support of existing agency requirements and mandates (e.g., punitive regulatory agency requirement).
j) Purchase of land in excess of the minimum required acreage necessary to operate as an integral part of a project, as set forth and detailed by engineering and feasibility studies.
k) Payment of principal or interest of existing indebtedness or any interest payments unless the debt is incurred after execution of this Grant Agreement, the State agrees in writing to the eligibility of the costs for reimbursement before the debt is incurred, and the purposes for which the debt is incurred are otherwise eligible costs. However, this will only be allowed as Grantee Cost Share (i.e., Funding Match).
l) Overhead not directly related to project costs.

11. METHOD OF PAYMENT.

a) **Reimbursement** – Submit a copy of invoice for costs incurred and supporting documentation to the DWR Project Manager via Grant Review and Tracking System (GRanTS). Additionally, the original invoice form with signature and date (in ink) of Grantee's Project Representative, as indicated on page 10 of this Grant Agreement, must be sent to the DWR Project Manager for approval. Invoices submitted via GRanTS shall include the following information:
   1) Costs incurred for work performed in implementing the project(s) during the period identified in the particular invoice.
   2) Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for the project(s) during the period identified in the particular invoice for the implementation of a project.
   3) Invoices shall be submitted on forms provided by State and shall meet the following format requirements:
      i) Invoices must contain the date of the invoice, the time period covered by the invoice, and the total amount due.
      ii) Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B. The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).
      iii) Sufficient evidence (e.g. receipts, copies of checks, time sheets) as determined by the State must be provided for all costs included in the invoice. Additional Cost Share shall be accounted for separately in the progress reports.
      iv) DWR Project Manager will notify Grantee, in a timely manner, when, upon review of an invoice, the State determines that any portion or portions of the costs claimed are not eligible costs or are not supported by documentation or receipts acceptable to State. Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to State to cure such deficiency(ies). After the disbursement requirements in Paragraph 8 "Basic Conditions" are met, State will disburse the whole or portions of State funding to Grantee, following receipt from Grantee via U.S. mail or Express mail delivery of a "wet signature" invoice for costs incurred, including Cost Share, and timely Quarterly Progress Reports as required by Paragraph 19 "Submission of Reports." Payment will be made no more frequently than monthly, in arrears, upon receipt of an invoice bearing the Grant Agreement number.

b) **Advanced Payment** – Water Code §10551 authorizes advance payment by State for projects which are sponsored by a nonprofit organization; a disadvantaged community (DAC); or, the proponent of a project that benefits a DAC. If these projects are awarded less than $1,000,000 in grant funds, the project proponent may receive an advanced payment of 50% of the grant award; the remaining 50% of the grant award will be reimbursed in arrears. Within 90 calendar days of execution of the Grant Agreement, the Grantee shall provide DWR an Advanced Payment Request. The Advanced Payment Request must contain the following:
   1) Documentation demonstrating that each Local Project Sponsor was notified about their eligibility to receive an advanced payment and a response from the Local Project Sponsor stating whether it wishes to receive the advanced payment or not.

2) If the Local Project Sponsor is requesting the advanced payment, the request must also include:
   i) A funding plan which shows how the advanced funds will be expended within 18 months of this Grant Agreement's execution. (i.e., for what, how much, and when)
   ii) A discussion of the Local Project Sponsor's financial capacity to complete the project once the advance funds have been expended.
3) If an Local Project Sponsor is requesting advanced payment, Grantee shall also submit a single Advance Payment invoice, containing the request for each qualified project, to the DWR Project Manager with signature and date (in ink) of Grantee's Project Representative, as indicated on page 10 of this Agreement. The Grantee shall be responsible for the timely distribution of the advanced funds to the individual Local Project Sponsors. Within 60 calendar days of receiving the Advanced Payment invoice and subject to the availability of funds, State will authorize payment of the advanced funds sought of 50% of the grant award for the qualified project(s).

The Advance Payment Invoice shall be submitted on forms provided by State and shall meet the following format requirements:
1) Invoice must contain the date of the invoice, the time period covered by the invoice, and the total amount due.
2) Invoice must be itemized based on the categories (i.e., tasks) specified in Exhibit B.
3) DWR Project Manager will notify Grantee, in a timely manner, when, upon review of an Advance Payment Invoice, the State determines that any portion or portions of the costs claimed are not eligible costs. Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to cure such deficiency(ies). After the disbursement requirements in Paragraph 8 "Basic Conditions" (8a) and 8b) only) are met, State will disburse the whole or portions of State funding to Grantee, following receipt from Grantee via US mail or Express mail delivery of a "wet signature" invoice for costs incurred, including Cost Share, and timely Progress Reports as required by Paragraph 19 "Submission of Reports."

On a quarterly basis, the Grantee will submit an Accountability Report to DWR that demonstrates how actual expenditures compare with the scheduled budget. The Accountability Report shall include the following information:
1) An itemization of how advanced funds have been expended to date (Expenditure Summary), including documentation that supports the expenditures (e.g. contractor invoices, receipts, personnel hours, etc.). Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B.
2) A funding plan which shows how the remaining advanced funds will be expended.
3) Documentation that the funds were placed in a non-interest bearing account, including the dates of deposits and withdrawals from that account.

DWR Project Manager will notify Grantee, in a timely manner, when, upon review of the Expenditure Summary, the State determines that any portion or portions of the expenditures claimed are not eligible costs. Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to cure such deficiency(ies). If costs are not consistent with the tasks in Exhibit B, the State will reject the claim and remove them from the Expenditure Summary.

<u>Once Grantee has expended all advanced funds, then the method of payment will revert to the reimbursement process specified in Paragraph 11a) and any remaining requirements of Paragraph 8.</u>

12. <u>REPAYMENT OF ADVANCES.</u> State may demand repayment from Grantee of all or any portion of the advanced State funding along with interest at the California general obligation bond interest rate at the time the State notifies the Grantee, as directed by State and take any other action that it deems necessary to protect its interests for the following conditions:
    a) A project is not being implemented in accordance with the provisions of this Grant Agreement.
    b) Grantee has failed in any other respect to comply with the provisions of this Grant Agreement, and if Grantee does not remedy any such failure to State's satisfaction.

Repayment amounts may also include:

c) Advance funds which have not been expended within 18 months of the Grant Agreement's execution by the Local Project Sponsor.
d) Actual costs incurred are not consistent with the Exhibit A (Work Plan) activities, not supported, or are ineligible.
e) At the completion of the project, the funds have not been expended.

For conditions 12c) and 12d), repayment may consist of deducting the amount from future reimbursement invoices.

State may consider Grantee's refusal to repay the requested advanced amount a substantial breach of this Grant Agreement subject to the default provisions in Paragraph 14, "Default Provisions." If State notifies Grantee of its decision to demand repayment or withhold the entire funding amount from Grantee pursuant to this paragraph, this Grant Agreement shall terminate upon receipt of such notice by Grantee and the State shall no longer be required to provide funds under this Grant Agreement and the Grant Agreement shall no longer be binding on either party.

13. WITHHOLDING OF DISBURSEMENTS BY STATE. If State determines that a project is not being implemented in accordance with the provisions of this Grant Agreement, or that Grantee has failed in any other respect to comply with the provisions of this Grant Agreement, and if Grantee does not remedy any such failure to State's satisfaction, State may withhold from Grantee all or any portion of the State funding and take any other action that it deems necessary to protect its interests. Where a portion of the State funding has been disbursed to the Grantee and State notifies Grantee of its decision not to release funds that have been withheld pursuant to Paragraph 14, the portion that has been disbursed shall thereafter be repaid immediately with interest at the California general obligation bond interest rate at the time the State notifies the Grantee, as directed by State. State may consider Grantee's refusal to repay the requested disbursed amount a contract breach subject to the default provisions in Paragraph 14, "Default Provisions." If State notifies Grantee of its decision to withhold the entire funding amount from Grantee pursuant to this paragraph, this Grant Agreement shall terminate upon receipt of such notice by Grantee and the State shall no longer be required to provide funds under this Grant Agreement and the Grant Agreement shall no longer be binding on either party.

14. DEFAULT PROVISIONS. Grantee (and a Local Project Sponsor receiving grant funding through this Grant Agreement) will be in default under this Grant Agreement if any of the following occur:

a) Substantial breaches of this Grant Agreement, or any supplement or amendment to it, or any other agreement between Grantee and State evidencing or securing Grantee's obligations.
b) Making any false warranty, representation, or statement with respect to this Grant Agreement or the application filed to obtain this Grant Agreement.
c) Failure to maintain an adopted IRWM Plan that meets the requirements contained in Part 2.2 of Division 6 of the CWC, commencing with §10530.
d) Failure to operate or maintain project(s) in accordance with this Grant Agreement (Paragraph 20).
e) Failure to make any remittance required by this Grant Agreement.
f) Failure to comply with Labor Compliance Program requirements (Paragraph 18).
g) Failure to submit timely progress reports.
h) Failure to routinely invoice State.
i) Failure to meet any of the requirements set forth in Paragraph 15, "Continuing Eligibility."

Should an event of default occur, State shall provide a notice of default to the Grantee and shall give Grantee at least ten (10) calendar days to cure the default from the date the notice is sent via first-class mail to the Grantee. If the Grantee fails to cure the default within the time prescribed by the State, State may do any of the following:

a) Declare the funding be immediately repaid, with interest, at the California general obligation bond interest rate at the time the State notifies the Grantee of the default.
b) Terminate any obligation to make future payments to Grantee.

c) Terminate the Grant Agreement.
d) Take any other action that it deems necessary to protect its interests.

In the event State finds it necessary to enforce this provision of this Grant Agreement in the manner provided by law, Grantee agrees to pay all costs incurred by State including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.

15. CONTINUING ELIGIBILITY. Grantee must meet the following ongoing requirement(s) to remain eligible to receive State funds:

a) An urban water supplier that receives grant funds governed by this Grant Agreement shall:

1) Maintain compliance with the Urban Water Management Planning (UWMP) Act (Water Code §10610 *et. seq.*) and Sustainable Water Use and Demand Reduction, Part 2.55 of Division 6 (Water Code §10608 *et. Seq.*). Urban water suppliers that submitted AB 1420 compliance Table 2 in the 2015 Implementation Grant Application must submit, until June 30, 2016, either:

i) List of tasks to implement the best management practices listed in AB 1420 compliance Table 2 and a corresponding schedule and budget or;

ii) The progress toward the 2015 interim Gallons per Capita per Day (GPCD) target. If not meeting the interim target also include a schedule, financing plan, and budget for achieving the GPCD, as required pursuant to Water Code §10608.24.

By July 1, 2016 all urban water suppliers must submit documentation that demonstrates they are meeting the 2015 interim GPCD target. If not meeting the interim target, also include a schedule, financing plan, and budget for achieving the GPCD, as required pursuant to Water Code §10608.24. Starting June 30, 2017, those urban water suppliers that did not meet their 2015 GPCD target must also submit, by June 30, annual reports that include a schedule, financing plan, and budget for achieving the GPCD (Water Code §10608.24).

2) Have their 2010 UWMP deemed consistent by DWR. The 2015 UWMP update must be submitted to DWR by July 1, 2016. If the 2015 UWMP is not submitted to DWR by July 1, 2016, funding disbursements to the urban water supplier will cease until the 2015 UWMP is submitted. If the 2015 UWMP is deemed inconsistent by DWR, the urban water supplier will be ineligible to receive funding disbursements until the inconsistencies are addressed and DWR deems the UWMP consistent. For more information, visit the following website: http://www.water.ca.gov/urbanwatermanagement.

b) An agricultural water supplier receiving grant funding must:

1) Comply with Sustainable Water Use and Demand Reduction requirements outlined in Part 2.55 (commencing with §10608) of Division 6 of the Water Code. Before July 1, 2016, submit a schedule, financing plan, and budget for implementation of the efficient water management practices, required pursuant to Water Code §10608.48.

2) Have their Agricultural Water Management Plan (AWMP) deemed consistent by DWR. The most recent AWMP update must have been submitted to DWR by December 31, 2015. To maintain eligibility and continue funding disbursements, an agricultural water supply must have their 2015 AWMP deemed consistent by DWR on or before October 1, 2016. For more information, visit the following website: http://www.water.ca.gov/wateruseefficiency/agricultural/agmgmt.cfm.

c) Grantees diverting surface water must maintain compliance with diversion reporting requirements as outlined in Part 5.1 of Division 2 of the Water Code.
d) Projects with potential groundwater impacts must demonstrate compliance with the groundwater compliance options set forth on pages 14 and 15 of the IRWM Program Guidelines, dated May 2015.
e) Project Proponents that have been designated as monitoring entities under the California Statewide Groundwater Elevation Monitoring (CASGEM) Program must maintain reporting compliance, as required by Water Code §10920 and the CASGEM Program.

16. PERMITS, LICENSES, APPROVALS, AND LEGAL OBLIGATIONS. Grantee shall be responsible for obtaining any and all permits, licenses, and approvals required for performing any work under this Grant Agreement, including those necessary to perform design, construction, or operation and maintenance of the Projects. Grantee shall be responsible for observing and complying with any applicable federal, state, and local laws, rules or regulations affecting any such work, specifically those including, but not limited to, environmental, procurement, and safety laws, rules, regulations, and ordinances. Grantee shall provide copies of permits and approvals to State.

17. RELATIONSHIP OF PARTIES. Grantee is solely responsible for design, construction, and operation and maintenance of projects within the work plan. Review or approval of plans, specifications, bid documents, or other construction documents by State is solely for the purpose of proper administration of funds by State and shall not be deemed to relieve or restrict responsibilities of Grantee under this Grant Agreement.

18. LABOR COMPLIANCE. Grantee agrees to comply with all applicable California Labor Code requirements and Standard Condition D.28 in Exhibit D. Grantee must, independently or through a third party, adopt and enforce a Department of Industrial Relations-certified Labor Compliance Program (LCP) meeting the requirements of Labor Code §1771.5 for projects funded by:
    a) Proposition 84 (Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006; Public Resources Code §75075 *et seq.*) or
    b) Any other funding source requiring an LCP.

    At the State's request, Grantee must promptly submit written evidence of Grantee's compliance with the LCP requirements.

19. SUBMISSION OF REPORTS. The submittal and approval of all reports is a requirement for the successful completion of this Grant Agreement. Reports shall meet generally accepted professional standards for technical reporting and shall be proofread for content, numerical accuracy, spelling, and grammar prior to submittal to State. If requested, Grantee shall promptly provide any additional information deemed necessary by State for the approval of reports. Reports shall be presented in the formats described in the applicable portion of Exhibit G. The timely submittal of reports is a requirement for initial and continued disbursement of State funds. Submittal and subsequent approval by the State of a Project Completion Report is a requirement for the release of any funds retained for such projects.
    a) Progress Reports: Grantee shall submit progress reports on a regular and consistent basis to meet the State's requirement for disbursement of funds. The reporting period shall not exceed one quarter in length. The progress reports shall be sent via e-mail to the State's Project Manager and shall be uploaded into GRanTS at the frequency specified in Exhibit C (Schedule). The progress reports shall provide a brief description of the work performed during the reporting period including: Grantee's activities, milestones achieved, any accomplishments, and any problems encountered in the performance of the work under this Agreement.

    b) Accountability Report: Grantee shall submit, on a quarterly basis, an Accountability Report by individual Local Project Sponsor that at a minimum:
        1) An itemization of how advanced funds have been expended to date (Expenditure Summary), including documentation that supports the expenditures (e.g. contractor invoices, receipts, personnel hours, etc.). Invoices must be itemized based on the categories (i.e., tasks) specified in Exhibit B.
        2) A funding plan which shows how the remaining advanced funds will be expended.
        3) Provides an accounting of distributing the advanced funds to the appropriate Local Project Sponsor.
        4) Documents that the funds were spent on eligible reimbursable costs.
        5) Documentation that the funds were placed in a non-interest bearing account, including the dates of deposits and withdrawals from that account.

    c) Water Management Status Report: Until June 30, 2016, Grantees shall submit status reports) on implementation of either AB 1420 status or SBx7-7 water conservation status for the urban water suppliers that submitted an AB 1420 compliance Table 2 in the 2015 Implementation Grant Application. AB 1420

status reports shall be uploaded into GRanTS no later than 30 calendar days after execution of this agreement. SBx7-7 GPCD status reports shall be uploaded via GRanTS no later than June 30, 2016. By July 1, 2016 all urban water suppliers must submit an UWMP that demonstrates they are meeting the 2015 interim SBx7-7 GPCD target. If the urban water supplier is not meeting the interim target, then the urban water suppliers must also submit with its UWMP, a schedule, financing plan, and budget for achieving the GPCD (Water Code §10608.24). Starting June 30, 2017, those urban water suppliers that did not meet their 2015 GPCD target must also submit, by June 30, annual reports that include a schedule, financing plan, and budget for achieving the GPCD (Water Code §10608.24). Failure to progress on implementation may result in continuing grant eligibility actions under Paragraph 15. Before July 1, 2016, all agricultural water suppliers must submit a schedule, financing plan, and budget for implementation of the efficient water management practices, required pursuant to Water Code §10608.48 to comply with Sustainable Water Use and Demand Reduction requirements outlined in Part 2.55 (commencing with §10608) of Division 6 of the Water Code.

d) Project Completion Report: Grantee shall prepare and submit to State a separate Project Completion Report for each project included in Exhibit A. Grantee shall submit a Project Completion Report within ninety (90) calendar days of project completion. Project Completion Report(s) shall include, in part, a description of actual work done, any changes or amendments to each project, and a final schedule showing actual progress versus planned progress, copies of any final documents or reports generated or utilized during a project. The Project Completion Report shall also include, if applicable, certification of final project by a California Registered Professional (Civil Engineer or Geologist, as appropriate), consistent with Standard Condition D.19 in Exhibit D. A DWR "Certification of Project Completion" form will be provided by the State.

e) Grant Completion Report: Upon completion of all projects included in Exhibit A, Grantee shall submit to State a Grant Completion Report. The Grant Completion Report shall be submitted within ninety (90) calendar days of submitting the Project Completion Report for the final project to be completed under this Grant Agreement. The Grant Completion Report shall include reimbursement status, a brief description of each project completed, and how those projects will further the goals of the IRWM Plan and identify any changes to the IRWM Plan, as a result of project implementation. Retention for the last project to be completed as part of this Grant Agreement will not be disbursed until the Grant Completion Report is submitted to and approved by the State.

f) Post-Performance Reports: Grantee shall submit Post-Performance Reports. Post-Performance Reports shall be submitted to State within ninety (90) calendar days after the first operational year of a project has elapsed. This record keeping and reporting process shall be repeated annually for a total of 10 years after the completed project(s) begins operation.

20. OPERATION AND MAINTENANCE OF PROJECT. For the useful life of construction and implementation projects and in consideration of the funding made by State, Grantee agrees to ensure or cause to be performed the commencement and continued operation of each project, and shall ensure or cause each project to be operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary to the efficient operation of the same are provided; and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. The State shall not be liable for any cost of such maintenance, management, or operation. Grantee or their successors may, with the written approval of State, transfer this responsibility to use, manage, and maintain the property. For purposes of this Grant Agreement, "useful life" means period during which an asset, property, or activity is expected to be usable for the purpose it was acquired or implemented; "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses, and "maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures. Refusal of Grantee to ensure operation and maintenance of the projects in accordance with this provision may, at the option of State, be considered a breach of this Grant Agreement and may be treated as default under Paragraph 14, "Default Provisions."

21. PROJECT MONITORING PLAN REQUIREMENTS. Grantee shall develop and submit to State a Project Monitoring Plan that incorporates: (1) the Project Performance Monitoring Table requirements outlined in the Proposition 84 2015 IRWM Implementation Grant Proposal Solicitation Package (pages 20 and 21), and (2) the guidance provided in Exhibit J, "Project Monitoring Plan Guidance."

22. STATEWIDE MONITORING REQUIREMENTS. Grantee shall ensure that all groundwater projects and projects that include groundwater monitoring requirements are consistent with the Groundwater Quality Monitoring Act of 2001 (Part 2.76 (commencing with §10780) of Division 6 of California Water Code) and, where applicable, that projects that affect water quality shall include a monitoring component that allows the integration of data into statewide monitoring efforts, including where applicable, the Surface Water Ambient Monitoring Program carried out by the State Water Resources Control Board. See Exhibit H (Requirements for Statewide Monitoring and Data Submittal), for web links and information regarding other State monitoring and data reporting requirements.

23. NOTIFICATION OF STATE. Grantee shall promptly notify State, in writing, of the following items:

    a) Events or proposed changes that could affect the scope, budget, or work performed under this Grant Agreement. Grantee agrees that no substantial change in the scope of a projects will be undertaken until written notice of the proposed change has been provided to State and State has given written approval for such change. Substantial changes generally include changes to the work plan, schedule or term, and budget.
    b) Any public or media event publicizing the accomplishments and/or results of this Grant Agreement and provide the opportunity for attendance and participation by State's representatives. Grantee shall make such notification at least 14 calendar days prior to the event.
    c) Final inspection of the completed work on a project by a California Registered Professional (Civil Engineer or Geologist, as appropriate), in accordance with Standard Condition D.19 in Exhibit D. Grantee shall notify the State's Project Manager of the inspection date at least 14 calendar days prior to the inspection in order to provide State the opportunity to participate in the inspection.

24. NOTICES. Any notice, demand, request, consent, or approval that either party desires or is required to give to the other party under this Grant Agreement shall be in writing. Notices may be transmitted by any of the following means:

    a) By delivery in person.
    b) By certified U.S. mail, return receipt requested, postage prepaid.
    c) By "overnight" delivery service; provided that next-business-day delivery is requested by the sender.
    d) By electronic means.

    Notices delivered in person will be deemed effective immediately on receipt (or refusal of delivery or receipt). Notices sent by certified mail will be deemed effective given ten (10) calendar days after the date deposited with the U. S. Postal Service. Notices sent by overnight delivery service will be deemed effective one business day after the date deposited with the delivery service. Notices sent electronically will be effective on the date of transmission, which is documented in writing. Notices shall be sent to the addresses set forth in Paragraph 26. Either party may, by written notice to the other, designate a different address that shall be substituted for the one below.

25. PERFORMANCE EVALUATION. Upon completion of this Grant Agreement, Grantee's performance will be evaluated by the State and a copy of the evaluation will be placed in the State file and a copy sent to the Grantee.

26. PROJECT REPRESENTATIVES. The Project Representatives during the term of this Grant Agreement are as follows:

Department of Water Resources
Arthur Hinojosa
Chief, Division of IRWM
P.O. Box 942836
Sacramento CA 94236-0001
Phone: (916) 653-4736
e-mail: Arthur.Hinojosa@water.ca.gov

County of Orange
Shane L. Silsby
Director of Orange County Public Works
300 N. Flower St., 8th Floor
Santa Ana, CA 92703
Phone: (855) 886-5400
e-mail: shane.silsby@ocpw.ocgov.com

Direct all inquiries to the Project Manager:

Department of Water Resources
Tanya Meeth
Division of Integrated Regional Water Management
P.O. Box 942836
Sacramento, CA 94236-0001
Phone: (916) 651-9227
e-mail: Tanya.Meeth@water.ca.gov

Orange County Department of Public Works
Marilyn Thoms
Manager, Watershed Management
2301 N. Glassell St.
Orange, CA 92865
Phone: (714) 955-0610
e-mail: Marilyn.Thoms@ocpw.ocgov.com

Either party may change its Project Representative or Project Manager upon written notice to the other party.

27. STANDARD PROVISIONS. The following Exhibits are attached and made a part of this Grant Agreement by this reference:

Exhibit A – Work Plan
Exhibit B – Budget
Exhibit C – Schedule
Exhibit D – Standard Conditions
Exhibit E – Authorizing Resolution
Exhibit F – Local Project Sponsors
Exhibit G – Report Formats and Requirements
Exhibit H – Requirements for Statewide Monitoring and Data Submittal
Exhibit I – State Audit Document Requirements and Funding Match Guidelines for Grantees
Exhibit J – Project Monitoring Plan Guidance

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Arthur Hinojosa, P.E., Chief
Division of Integrated Regional Water Management

Date 9-19-16

COUNTY OF ORANGE

Shane L. Silsby, P.E., Director
Orange County Public Works

Date 09/01/2016

Approved as to Legal Form and Sufficiency

James Brink for
Robin Brewer, Assistant Chief Counsel
Office of Chief Counsel

Date 9-19-16

EXHIBIT A
WORK PLAN

The Proposition 84 2015 IRWM Implementation Grant agreement provides funding for seven projects located within the South Orange County IRWM region.

PROJECT 1: Grant Agreement Administration

IMPLEMENTING AGENCY: County of Orange

PROJECT DESCRIPTION: The Regional Water Management Group, authorized the County of Orange (Grantee) to act as the applicant and the grant manager for the Proposition 84 2015 IRWM Implementation Grant.

The Grantee will administer these funds and respond to DWR's reporting and compliance requirements associated with the grant administration. This office will act in a coordination role: disseminating grant compliance information to the project managers responsible for implementing the projects contained in this agreement, obtaining and retaining evidence of compliance (e.g., CEQA/NEPA documents, reports, monitoring compliance documents, labor requirements, etc.), obtaining data for progress reports from individual project managers, assembling and submitting progress reports to the State, and coordinating all invoicing and payment of invoices.

Budget Category (a): Direct Project Administration

Task 1 Agreement Administration

The Grantee will respond to DWR's reporting and compliance requirements associated with the grant administration and will coordinate with the project managers responsible for implementing the projects contained in this agreement.

Task 2 Invoicing

The Grantee will be responsible for compiling invoices for submittal to DWR. This includes collecting invoice documentation from each of the project proponents and compiling the information into a DWR Invoice Packet.

Task 3 Progress Reports and Project Completion Report(s)

The Grantee will be responsible for compiling progress reports for submittal to DWR. The Grantee will coordinate with project proponent staff to retain consultants as needed to prepare and submit, Progress Reports and Final Project Completion Reports for each project, as well as the Grant Completion Reports.

Reports will meet generally accepted professional standards for technical reporting and the requirements terms of the contract with DWR outlined in **Exhibit G** of this agreement. For example, Progress Reports will explain the status of the project and will include the following information: summary of the work completed for the project during the reporting period; activities and milestones achieved; and accomplishments and any problems encountered in the performance of work. Project Completion Reports will include: documentation of actual work done, changes and amendments to each project, a final schedule showing actual progress versus planned progress, and copies of final documents and reports generated during the project.

Deliverables:

- ☐ Executed Grant Agreement
- ☐ Invoices and associated backup documentation
- ☐ Progress Reports
- ☐ Draft and Final Project Completion Report
- ☐ Draft and Final Grant Completion Report

PROJECT 2: Dairy Fork Wetland

IMPLEMENTING AGENCY: City of Aliso Viejo

PROJECT DESCRIPTION: The Dairy Fork Wetland Project (Project) includes two phases.

Phase 1 includes the construction of a wetland to reduce pollutant loads in urban runoff from the Dairy Fork sub-watershed, which is a tributary area of Aliso Viejo Creek Watershed. The wetland will treat 325 acre-feet per year (AFY) of urban runoff draining from 1,500 acres of land. This project includes the removal of invasive non-native plants from around the wetland site and re-vegetation of approximately 2 acres with native species.

Phase 2 includes the removal of approximately 5 acres of invasive *Arundo donax* (Arundo) stands over 9 total acres of riparian corridor in the Dairy Fork sub-watershed to Aliso Creek.

Budget Category (a): Direct Project Administration

Task 1 Project Management

Manage grant agreement including compliance with grant requirements, and preparation and submission of supporting grant documents and coordination with the Grantee. Prepare invoices including relevant supporting documentation for submittal to DWR via the Grantee. This task also includes administrative responsibilities associated with the project such as coordinating with partnering agencies and managing consultants/contractors.

Deliverables:

- ☐ Environmental Information Form (EIF)
- ☐ Financial Statements
- ☐ Invoices
- ☐ Other Applicable Project Deliverables

Task 2 Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3.

Deliverables:

- ☐ Proof of labor compliance upon request

Task 3 Reporting

Prepare progress reports detailing work completed during reporting period as outlined in **Exhibit G** of this agreement. Submit reports to the Grantee for review and inclusion in a progress report to be submitted to DWR.

Prepare Draft Project Completion Report and submit to DWR via the Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. Prepare Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of **Exhibit G**.

Deliverables:

- ☐ Project Progress Reports
- ☐ Draft and Final Project Completion Report

Budget Category (b): Land Purchase/Easement

Task 4 Land Purchase/Easement

Acquire easements from:

- Southern California Edison for approximately 2.0 acres of project located beneath their power lines; and
- Orange County Parks (approximately 2.52 acres) and Aliso Viejo Homeowner Association (approximately 0.42 acres) to construct and maintain the Dairy Fork Wetland project.

Deliverables:

- ☐ All relevant documentation regarding property ownership transfer or acquisition of easement including final recorded deed, title report, etc.

Budget Category (c): Planning/Design/Engineering and Environmental Documentation

Task 5 Feasibility Studies

The wetland treatment was selected as a natural treatment based on the success the City had with an existing wetland (Wood Canyon Wetland) for the removal of pollutants such as bacteria without the use of chemical and other treatments that requires costly equipment, energy and long term operation and maintenance. Feasibility Studies were not completed as part of the project development process.

Deliverables: Not Applicable

Task 6 CEQA Documentation

Phase 1 – Wetland Construction: The Project was found to be exempt from CEQA under CEQA Guidelines Sections 15304 and 15333. A Notice of Exemption (NOE) was filed for the wetland project on March 25, 2015 and the statute of limitations for challenges to this determination has run.

Phase 2 – Arundo Removal activities: the mitigated negative declaration (IP 08-537) was prepared and filed in 2008-09. No further actions requiring CEQA are anticipated for the Project.

Deliverables:

- ☐ Lead agency signed Notice of Exemption (Phase 1)
- ☐ Copy of Notice of Preparation (Phase 2)
- ☐ Draft and Final MND (Phase 2)
- ☐ Copy of Notice of Determination (Phase 2)
- ☐ California Department of Fish and Wildlife filing fee cash receipt (Phase 2)
- ☐ No Legal Challenges letter to DWR (Phases 1 & 2)

Task 7 Permitting

Obtain all necessary federal, state, and local permits. Permits may include:

- CDFW - Streambed Alteration Agreement (SAA)
- County of Orange – an Encroachment Permit may be required by OC Parks to conduct Arundo removal activities within and adjacent to the creek.
- US Army Corps of Engineers Regional General Permit No. 41 (RGP 41) – permit number 2003-01094-CLM became effective on January 22, 2009 and was extended effective April 7, 2014.

Additional permits may be required and will be obtained as necessary.

Deliverables:

- ☐ Copy of all required permits

Task 8 Design

Phase I Wetland Construction: Complete preliminary design, including the following supporting work: geotechnical investigation, topographic survey, Updated Project Cost Estimate, and 100% Design Documents (including plans and specifications).

Phase II Arundo Removal: Map extent of Arundo stands; develop project methodologies.

Deliverables (all specified deliverables have been completed):

- ☐ Geotechnical Report
- ☐ Topographic Survey
- ☐ Updated Project Cost Estimate
- ☐ Arundo extent mapping
- ☐ 100% Design Plans and Specifications

Task 9 Project Monitoring Plan

Develop and submit a Project Monitoring Plan. Along with the Project Performance Measures Table provided by DWR project manager, the Project Monitoring Plan (as described in **Exhibit J**) will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverables:

- ☐ Project Monitoring Plan

Budget Category (d): Construction/Implementation

Task 10 Construction Contracting

Activities necessary to secure a contractor and award the contracts for both phases include: develop bid documents, prepare advertisement and contract documents for construction contract bidding, conduct pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of notice to proceed.

Deliverables:

- ☐ Bid documents
- ☐ Proof of Advertisement
- ☐ Award of contract
- ☐ Notice to proceed

Task 11 Construction Administration

This task includes managing contractor submittal review, answering requests for information, and issuing work directives. A full-time engineering construction observer will be on-site for the duration of the wetland project. Construction observer duties include documenting pre-construction conditions, daily construction diary, preparing change orders, addressing questions of contractors on-site, reviewing/updating project schedule, reviewing contractor log submittals and pay requests, forecasting cash flow, notifying contractor if work is not acceptable. A biologist will be onsite for Arundo removal activities to assist management of plant removal in accordance with established permit and implementation protocol and to document pre-/post-implementation conditions.

Deliverables:

- ☐ Notice of Completion

Task 12 Construction/Implementation Activities

Construction activities may include, but are not limited to the following:

Phase 1 – Wetland Construction:

Construction/Implementation activities for the wetland portion of the project include the following:

Subtask 12a: Mobilization and Demobilization

This task will include loading and unloading of required equipment to start grading, and transport of equipment to/from site.

Subtask 12b: Site preparation

This task will include conducting a nesting survey, placing traffic control, best management practices for erosion and sediment control and clearing the 2 acre wetland site, which includes removal of invasive and/or non-native plant species, where present.

Subtask 12c: Installation/Excavation and Construction

This task will include: excavation of the wetland ponds, grading of ponds and access roads, channel construction (connecting Aliso Creek to wetland), erosion control BMPs and landscaping installation with native plant species, and temporary irrigation, as appropriate. The constructed wetland will be approximately 2 acres.

Subtask 12d: Start-up Testing

To ensure the proper operation and performance of the wetland after the completion of the construction phase, the start-up testing will include:

- Opening the channel to allow runoff flow into the wetland ponds. The channel will remain open indefinitely in order to supply the wetland ponds with water from Aliso Creek; and
- Water quality sampling and habitat field observation. These activities will be conducted approximately weekly, for a period of one month, following the completion of the construction phase (Phase 1). Habitat field observation activities include evaluating the re-vegetated areas and irrigation, and taking corrective action as needed.

Phase 2 – Arundo Removal:

Activities include the removal of approximately 5 acres of invasive, non-native Arundo donax (Arundo) stands and other non-native plants over approximately 9 acres of riparian area to the Dairy Fork sub-watershed to Aliso Creek. Arundo biomass will be removed by tractor and chainsaw crews, and will be conducted outside of the avian breeding season (Sep 15th – Mar 15th). Follow-up herbicide treatment will occur every 2-3 weeks for the duration of 15 months to assure that no additional re-sprouts occur.

Deliverables:

- ☐ Photographic documentation
- ☐ Engineer's Certification
- ☐ Notice of Completion

PROJECT 3: San Juan Aquatic Passage and Habitat Improvement

IMPLEMENTING AGENCY: USDA Forest Service, Cleveland National Forest (Forest Service)

PROJECT DESCRIPTION: The San Juan Aquatic Passage and Habitat Improvement Project (Project) includes the removal of 7 dams, design for improvements to three stream crossings, construction of improvements to two of these stream crossings, and invasive weed removal along 2 miles of stream (Project area). This project is a component of a larger dam removal project, which includes the removal of an additional 9 dams (for 16 dams total). These additional dams, which were removed in 2014, are outside the scope of this grant agreement.

The stream crossing improvements include: improving one large stream crossing by replacing an undersized culvert with a large bridge; and the replacement of one small stream crossing with a single lane, pre-fabricated bridge. The dam removals and stream improvements will connect 2 miles of stream that are currently disconnected by the dams.

Budget Category (a): Direct Project Administration

Task 1 Project Management

Manage grant agreement including compliance with grant requirements, and preparation and submission of supporting grant documents and coordination with the Grantee. Prepare invoices including relevant supporting documentation for submittal to DWR via the Grantee. This task also includes administrative responsibilities associated with the project such as coordinating with partnering agencies and managing consultants/contractors.

Deliverables:

- ☐ Environmental Information Form (EIF)
- ☐ Financial Statements
- ☐ Invoices
- ☐ Other Applicable Project Deliverables

Task 2 Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3.

Deliverables:

- ☐ Proof of labor compliance upon request

Task 3 Reporting

Prepare progress reports detailing work completed during reporting period as outlined in **Exhibit G** of this agreement. Submit reports to the Grantee for review and inclusion in a progress report to be submitted to DWR.

Prepare Draft Project Completion Report and submit to DWR via the Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. Prepare Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of **Exhibit G**.

Deliverables:

- ☐ Project Progress Reports
- ☐ Draft and Final Project Completion Report

Budget Category (b): Land Purchase/Easement

Task 4 Land Purchase/Easement

Land and/or easement acquisition is not applicable because the Project area is located in the Cleveland National Forest, USDA Forest Service land.

Deliverables: N/A

Budget Category (c): Planning/Design/Engineering and Environmental Documentation

Task 5 Planning Documentation

The Project implements three plans that have already been completed: the Southern California Steelhead Recovery Plan (NMFS 2012), the San Juan and Trabuco Creeks Steelhead Recovery Watershed Management Plan (TU and CDFW 2007), and the Cal State Water Action Plan (SWAP).

Deliverables:

- ☐ Copies of plans referenced above, if requested

Task 6 CEQA/NEPA Documentation

This Task includes NEPA, State Historic Preservation Office (SHPO) concurrence, tribal and CEQA compliance. CEQA compliance for the invasive weed treatment will be tiered from the NEPA document.

Deliverables:

NEPA:

- ☐ Copy of NEPA documentation (Decision Notice and Finding of No Significant Impact Invasive Weed Management on the Cleveland National Forest EA, completed 2014 and CE for the Holy Jim Stream Crossings).

CEQA:

- ☐ Lead agency signed Notice of Exemption for Trabuco Ranger District Dam Removal and Aquatic Passage Project
- ☐ Lead agency signed Notice of Exemption for Large dam replacement (completed 2015).
- ☐ Lead agency signed Notice of Exemption for Holy Jim Stream Crossings (anticipated completion: September, 2017
- ☐ Lead agency signed Notice of Exemption for invasive weed treatment (anticipated completion: August, 2017
- ☐ Documentation of Tribal Notification (per PRC §75102)
- ☐ Other CEQA documentation upon request.
- ☐ No Legal Challenges letter to DWR

Task 7 Permitting

Obtain all necessary federal, state, and local permits. Permits may include:

- 401 and 404 permits.

Additional permits may be required and will be obtained as necessary.

Deliverables:

- ☐ Copy of all required permits

Task 8 Design

Complete designs and site analysis for the replacement of two small stream crossings to prefabricated bridges.

Deliverables (all specified deliverables have been completed):

- ☐ 100% Design Plans and Specifications

Task 9 Project Monitoring Plan

Develop and submit a Project Monitoring Plan. Along with the Project Performance Measures Table provided by DWR project manager, the Project Monitoring Plan (as described in **Exhibit J**) will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverables:

- ☐ Project Monitoring Plan

Budget Category (d): Construction/Implementation

Task 10 Construction Contracting

Activities necessary to secure a contractor and award the contracts for both phases include: develop bid documents, prepare advertisement and contract documents for construction contract bidding, conduct pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of notice to proceed.

Deliverables:

- ☐ Bid documents
- ☐ Proof of Advertisement
- ☐ Award of contract
- ☐ Notice to proceed

Task 11 Construction Administration

This Task includes managing contractor submittal review, answering requests for information, and issuing work directives. A full-time engineering construction observer will be on-site for the duration of the project. Construction observer duties include documenting pre-construction conditions, daily construction diary, preparing change orders, addressing questions of contractors on-site, reviewing/updating project schedule, reviewing contractor log submittals and pay requests, forecasting cash flow, notifying contractor if work is not acceptable.

Deliverables:

- ☐ Notice of Completion

Task 12 Construction/Implementation Activities

Construction activities include the removal of 7 dams, the replacement of one small stream crossing with a single lane, pre-fabricated bridge, and the replacement of an undersized culvert with a large, onsite-built bridge. Specific construction activities may include, but are not limited to the following:

Subtask 12a: Invasive weed removal: Invasive weed removal will occur intermittently along 2 miles of stream for riparian habitat restoration.

Subtask 12b: Dam removal: This task includes removal of 7 rock and mortar dams and involves the following at each dam site:

- Site surveying and staking;
- site preparation;
- mobilization/demobilization of equipment and materials;
- dewatering during construction;
- stream simulation; and
- removal of existing dams

Subtask 12c: Small Stream crossing – Bridge Construction: This task includes the replacement of one small stream crossing with a single lane, pre-fabricated bridge.

Subtask 12d: Large Stream crossing – Bridge Construction (completed, 2015): This task includes the replacement of an undersized culvert with a large, onsite-built bridge, and will include:

- removal of existing crossing/culvert;
- site preparation;
- dewatering during construction; and
- stream simulation (channel restoration)

Project implementation of Subtasks 12b-d will require the following materials; aggregate base, concrete, railings, signs, erosion control, riprap, and bridge structures. Provisions to allow pedestrian access during construction activities will be made as appropriate.

Deliverables:

- ☐ Photographic documentation
- ☐ Engineer's Certification
- ☐ Notice of Completion

PROJECT 4: Crown Valley Park Channel Entry Improvements Project

IMPLEMENTING AGENCY: City of Laguna Niguel

PROJECT DESCRIPTION: The Crown Valley Park Channel Entry Improvements Project (Project), located in Laguna Niguel in and alongside the "J03P01" tributary channel to Sulfur Creek, will be constructed in two phases. Phase 1 will reduce potable water consumption by converting a 20-acre area of the park to recycled water for landscape irrigation. Phase 2 will: (1) improve the quality of surface water discharged from a fully-urbanized 1,197-acre contributory drainage area, by restoring natural and enhanced biofiltration capacity; (2) restore native vegetation to the channel and its embankments; (3) convert other landscaped areas from turfgrass to drought-tolerant vegetation; and (4) eliminate flooding impacts to park access and improve habitat connectivity by constructing an arched culvert crossing over the channel.

Budget Category (a): Direct Project Administration

Task 1 Project Management

Manage grant agreement including compliance with grant requirements, and preparation and submission of supporting grant documents and coordination with the Grantee. Prepare invoices including relevant supporting documentation for submittal to DWR via the Grantee. This task also includes administrative responsibilities associated with the project such as coordinating with partnering agencies and managing consultants/contractors.

Deliverables:

- ☐ Environmental Information Form (EIF)
- ☐ Financial Statements
- ☐ Invoices
- ☐ Other Applicable Project Deliverables

Task 2 Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3. The City formally adopted its Labor Compliance Program in June 2015 and submitted it to DIR. Because the program development work was accomplished in conjunction with a separate Proposition 84 grant project, it is not being accounted to the current project within this grant agreement.

Deliverables:

- ☐ Proof of labor compliance upon request

Task 3 Reporting

Prepare progress reports detailing work completed during reporting period as outlined in **Exhibit G** of this agreement. Submit reports to the Grantee for review and inclusion in a progress report to be submitted to DWR.

Prepare Draft Project Completion Report and submit to DWR via the Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. Prepare Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of **Exhibit G**.

Deliverables:

- ☐ Project Progress Reports
- ☐ Draft and Final Project Completion Report

Budget Category (b): Land Purchase/Easement

Task 4 Land Purchase/Easement

Land and/or easement acquisition is not applicable. All project site property is currently under City of Laguna Niguel ownership.

Deliverables: N/A

Budget Category (c): Planning/Design/Engineering and Environmental Documentation

Task 5 Feasibility Studies

Feasibility Study work was completed in 2013 as a precursor to a separate grant application to the Orange County Transportation Authority. Feasibility Study work informed the subsequent CEQA documentation process. This work is not included as part of this grant agreement.

Deliverables:

- ☐ Feasibility study, upon request

Task 6 CEQA Documentation

CEQA Documentation work included the adoption of a Mitigated Negative Declaration (MND) in June 2014, and filing with the State Clearinghouse.

Deliverables:

- ☐ Copy of Notice of Preparation
- ☐ Draft and Final MND
- ☐ Lead agency signed Notice of Determination
- ☐ California Department of Fish and Wildlife filing fee cash receipt
- ☐ Documentation of Tribal Notification (per PRC §75102)
- ☐ No Legal Challenges letter to DWR

Task 7 Permitting

Obtain all necessary federal, state, and local permits. Permits for Phase 2 of the project may include:

- 404Nationwide Permit 14 from US Army Corps of Engineers
- 401 Water Quality Certification from the Regional Water Quality Control Board
- 1602 Streambed Alteration Agreement from the California Dept. of Fish & Wildlife
- Statewide General Construction Permit WDID from State Water Resources Control Board

Additional permits may be required and will be obtained as necessary.

Deliverables:

- ☐ Copy of all required permits

Task 8 Design

Complete final design plans, technical specifications, and cost estimates as applicable, for Phase 1 and Phase 2 Project components. As part of the design plans, a geotechnical investigation was conducted on site.

Deliverables (all specified deliverables have been completed):

- ☐ Geotechnical report, upon request
- ☐ 100% Design Plans and Specifications – Phase 1
- ☐ 100% Design Plans and Specifications – Phase 2

Task 9 Project Monitoring Plan

Develop and submit a Project Monitoring Plan. Along with the Project Performance Measures Table provided by DWR project manager, the Project Monitoring Plan (as described in **Exhibit J**) will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverables:

- ☐ Project Monitoring Plan

Budget Category (d): Construction/Implementation

Task 10 Construction Contracting

Develop and distribute Request(s) for Proposals for third-party Construction Management/Inspection services, evaluate proposals received, and award the professional services contract(s) for Construction Administration/ Management/Public Works Inspection services. Implement Construction Management services during Phase 1 and Phase 2 construction using City staff and Construction Manager consultants as applicable, including contractor submittals review, coordination of requests for information, documentation of pre-construction conditions, review of pay requests and change orders, tracking of project schedule and progress of construction work, coordination of inspections and interagency relations, document control, and oversight of environmental and NPDES implementation under the terms of resource agency and Statewide General Construction Permits. Construction Administration work by City staff and Construction Management consultants for Phase 1 will begin at the award of the Phase 1 construction contract. Construction Administration work by consultant(s) for Phase 2 will begin when the plans are put out to bid.

Deliverables:

- ☐ Phase 1 bid documents and construction contract
- ☐ Phase 2 Bid documents and construction contract
- ☐ Phase 2 Amendments to Professional Services Agreements for construction-period support services

Task 11 Construction Administration

Develop and distribute Request(s) for Proposals for third-party Construction Management/Inspection services, evaluate proposals received, and award the professional services contract(s) for Construction Administration/ Management/Public Works Inspection services. Implement Construction Management services during Phase 1 and Phase 2 construction as applicable, including contractor submittals review, coordination of requests for information, documentation of pre-construction conditions, review of pay requests and change orders, tracking of project schedule and progress of construction work, coordination of inspections and interagency relations, document control, and oversight of environmental and NPDES implementation under the terms of resource agency and Statewide General Construction Permits.

Deliverables:

- ☐ Notices of Completion for Phase 1 and Phase 2

Task 12 Construction/Implementation Activities

Implement Phase 1 and Phase 2 Construction/Implementation Activities in conformance with the applicable Standard Specifications for Public Works Construction, County of Orange Standard Plans, Standard Plans for the Moulton Niguel Water District, City of Laguna Niguel Standard Plans and Ordinances, Resource Agency Permit Conditions, and other requirements to be set forth in the General Provisions, Special Provisions and Technical Specifications in the Bid Documents. Construction activities may include, but are not limited to the following:

Phase 1

Subtask 12a: Improve Irrigation Water Supply

Task includes converting an approximate 20-acre area of the park to recycled water for landscape irrigation. This includes: the purchase/installation of auxiliary equipment (such as a pump and electrical connections) and supply lines (including approximately 250 feet of main line pipe), and related refurbishment of existing on-site irrigation system at key logistical areas of Crown Valley Park. Work will be completed in conformance with recycled water standards of Moulton Niguel Water District, and City of Laguna Niguel Standard Plans, as applicable.

Phase 2

Subtask 12b: Mobilization and Demobilization

Task includes construction preparation, construction trailer, mobilization and demobilization of equipment to site and related work.

Subtask 12c: Site Preparation

Task includes removal of existing pavement, structural and rockwork surfacings, and of gas, water and electrical lines.

Subtask 12d: Install, Construct, and Excavate

Task includes:

- Install landscaping and amenities (irrigation, ornamental and mitigation plantings; site furnishings; signage; mowstrip; and planting establishment);
- Construct an arched Culvert Crossing over channel (to eliminate flooding impacts to park access and improve habitat connectivity). This task includes construction of a new bridge.
- Construct Sediment Forebay
- Construct South Parking Lot and North Parking Lot (pavements, utilities, structures, drainage, lighting, fencing and striping);
- Excavate/ Earthwork (grubbing, excavation, grading, import/export dirt, construction BMPs);
- Construct vegetated swale (which will reduce pollutants and improve surface water quality discharged from the drainage area).
- Restore native vegetation to the channel and its embankments. The task will include removal of invasive species from the channel and planting native materials.
- Remove turfgrass from landscaped areas and replace with drought-tolerant vegetation to help conserve water usage.

Deliverables:

- ☐ Photographic documentation
- ☐ Engineer's Certification
- ☐ Notice of Completion

PROJECT 5: Strategic Turfgrass Removal & Design Assistance Program

IMPLEMENTING AGENCY: Municipal Water District of Orange County

PROJECT DESCRIPTION: The Strategic Turfgrass Removal and Design Assistance Project (Project) will expand Municipal Water District of Orange County (MWDOC's) current Turf Removal Project by issuing rebates to incentivize the removal of approximately 42 acres (1,796,330 square-feet (ft^2)) of turfgrass. A condition of this rebate will be for recipients to replace the turfgrass with California-Friendly landscapes. MWDOC will provide technical design assistance to help recipients with this conversion. These efforts are estimated to conserve 252 AFY of water supply. MWDOC will administer this Project as the lead agency on behalf of the cities and retail water agencies within the South Orange County WMA. MWDOC will facilitate the removal of turfgrass by providing incentives through a rebate-style format to residential and commercial property owners. Rebates will be provided to property owners for qualifying projects. The technical assistance component of the Project will be offered as a pilot to approximately 4,000 residential, commercial, and public sites as a means to promote landscape renovations yielding optimum benefits, and will include a tutorial/workshop on how to remove existing turfgrass, and detailed site design plans.

Budget Category (a): Direct Project Administration

Task 1 Project Management

Manage grant agreement including compliance with grant requirements, and preparation and submission of supporting grant documents and coordination with the Grantee. Prepare invoices including relevant supporting documentation for submittal to DWR via the Grantee. This task also includes administrative responsibilities associated with the project such as coordinating with partnering agencies and managing consultants/contractors.

Deliverables:

- ☐ Environmental Information Form (EIF)
- ☐ Financial Statements
- ☐ Invoices
- ☐ Other Applicable Project Deliverables

Task 2 Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3. Task will be completed in accordance with MWDOC's Administrative Code.

Deliverables:

- ☐ Proof of labor compliance upon request

Task 3 Reporting

Prepare progress reports detailing work completed during reporting period as outlined in **Exhibit G** of this agreement. Submit reports to the Grantee for review and inclusion in a progress report to be submitted to DWR.

Prepare Draft Project Completion Report and submit to DWR via the Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. Prepare Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of **Exhibit G**.

Deliverables:

- ☐ Project Progress Reports
- ☐ Draft and Final Project Completion Report

Budget Category (b): Land Purchase/Easement

Task 4 Land Purchase/Easement

Land and/or easement acquisition is not applicable, as this is a turf-removal rebate Project where the land owner applies for the rebate and converts the landscape area.

Deliverables: N/A

Budget Category (c): Planning/Design/Engineering and Environmental Documentation

Task 5 Feasibility Studies

Feasibility studies are not included as part of this Project's budget and therefore, are not applicable. MWDOC has implemented a number of projects similar to the proposed Project as part of its suite of landscape water use improvement efforts. Such programs include: Water Use Efficiency Program Expansion (WUEPE) funded by Prop 50, Public Spaces Water Smart Landscape funded by Prop 84 Round 1, and Comprehensive Landscape Water Use Efficiency Program funded by Prop 84 Round 2. These Programs will be used as the guide for this Project's implementation.

Deliverables: N/A

Task 6 CEQA Documentation

MWDOC will submit the CEQA requirement's categorical exemption (Class 1, Section 15301 – Existing Facilities) and prepare the letter stating no legal challenges (or addressing legal challenges). As part of this project, the following are not applicable: Notice of Preparation (including tribal notification to the California Native Heritage Commission), Environmental Impact Reports (EIR), and File Notice of Completion with State Clearinghouse.

Deliverables:

- ☐ All required CEQA documentation
- ☐ No Legal Challenges letter to DWR

Task 7 Permitting

The Municipal Water District of Orange County will not be required to obtain permits to implement the proposed project because the project offers incentives for landscape improvements; however, participants receiving rebate incentives administered through the Project for landscape improvements may be required to obtain a landscape permit. Adherence to local permitting requirements will be a condition of receiving rebate incentives from the Project.

Deliverables: N/A

Task 8 Design

This task includes providing technical design assistance for up to 4,000 participants. This will be a combination of participants who attend a classroom style instruction or access our program website for design development templates. Technical design assistance includes, but is not limited to providing the following:

- Develop tutorial workshop materials on how to remove existing turfgrass. Materials provided will include at a minimum the following:
    - Site plan development matrix; design instructions and objectives; California Friendly non-evasive plant list; Suggestions on plant and permeable surface recommendations, hydrozones by plant type or water use category, and irrigation equipment
- Prepare and conduct a minimum 5 tutorial workshop on how to remove existing turfgrass.
- Provide detailed site design plan assistance in a workshop format
- Detailed site design plans assistance and will include the following elements:

- Participants bring their own site plans and design ideas;
- Understand steps to design a landscape;
- Create a plant list;
- Develop design objectives;
- Identify obstacles to successful project implementation; and
- Create strategies for overcoming obstacles.

Technical design assistance also includes providing participants with information on:

- Plant and permeable surface recommendations, hydrozones by plant type or water use category, irrigation equipment, location of point of connection, meters, sensors, supplemental water sources, etc.

Work under this task also includes:

- Develop and release a request for quotes to several qualified landscape designers, consultants, and architects, review submitted proposals, and select the qualified submissions per the terms of MWDOC's Administration Code and procurement criteria listed in the award agreement.

Deliverables:

- ☐ Workshop Materials
- ☐ Design Documents

Task 9 Project Monitoring Plan

Develop and submit a Project Monitoring Plan. Along with the Project Performance Measures Table provided by DWR project manager, the Project Monitoring Plan (as described in **Exhibit J**) will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverables:

- ☐ Project Monitoring Plan

Budget Category (d): Construction/Implementation

Task 10 Database Improvement

This task includes making improvements to MWDOC's current historical Landscape Project's database to accommodate the Project's participation data and enhancement to participant resources. Administration/processing of participant data includes MWDOC uploading the monthly Participant data, verifying its accuracy, developing reporting documents from the data for reporting and invoicing needs, and utilizing data queries for the Project evaluation. Enhancements to the database will increase automation and create a centralized database that encompasses all elements of the process. Both participant and staff-side processes would be improved through clearer messaging of the application progress, and a reduction of manual input. In addition to the database modification, the technical resource gallery (templates and tutorials) would be added to the Turf Removal Project website.

Deliverables:

- ☐ Rebate program participant information, as applicable
- ☐ Other documentation, upon request

Task 11 Marketing and Promotion

Design and produce marketing and promotional material that will be distributed to property owners to publicize the Project. Promotional pieces will encourage property owners to participate in the Project by directing them to log onto the Project website to: read about Project rules and regulations, to submit a Project application, and to learn about rebate levels through the Project. Marketing will primarily consist of bill inserts, water bill messages, newsletter articles, and posts on water agency websites. Project sites will also receive lawn signs to display during the conversion process.

Stakeholders will also be actively involved in the Project to further educate and promote participation. Stakeholders include retail water agencies, County and city municipal storm water permit holders, landscape maintenance contractors, facilities/property managers, homeowner association board members, and business owners.

Deliverables:

- ☐ Marketing Materials, upon request.

Task 12 Implementation Activities - Rebate Incentive and Site Inspection

This task includes removal of up to 1,796,330 ft^2 of turfgrass by providing incentives through a rebate-style format to residential and commercial property owners. Rebates will be provided to property owners for qualifying project areas. The current regional rebate incentive offer to the participant is at minimum $1.00/$ft^2$ of non-functional turfgrass removed. This funding allows for an additional $0.50/$ft^2$ per rebate. The following implementation tasks may include, but are not limited to the following:

- Review customer rebate applications and determine customer eligibility
- Provide follow-up letters and authorization to proceed to eligible customers
- Project Inspection: All sites (100%) will be provided with a visual pre-inspection to determine Project eligibility. Following the turf removal project, all (100%) sites will also receive at a minimum a visual post-field inspection to confirm all conversion requirements are met.
- Up to 350 turf removal projects will receive a post-field inspection measurement to determine the actual square footage of turf removed.
- The maximum rebate paid to a program participant utilizing grant funds will be up to $1 per square foot.

Deliverables:

- ☐ Photographic documentation
- ☐ Applicant information including square footage of conversion areas and rebates paid

PROJECT 6: 3A Water Recycling Plant Tertiary Expansion

IMPLEMENTING AGENCY: Santa Margarita Water District

PROJECT DESCRIPTION: The 3A Water Recycling Plant (WRP) Tertiary Expansion (Project) will expand the existing 3A Water Reclamation Plant to provide at least 3,000 AFY of new recycled water. The Project benefits Moulton Niguel Water District (MNWD), which is a project partner.

Budget Category (a): Direct Project Administration

Task 1 Project Management

Manage grant agreement including compliance with grant requirements, and preparation and submission of supporting grant documents and coordination with the Grantee. Prepare invoices including relevant supporting documentation for submittal to DWR via the Grantee. This task also includes administrative responsibilities associated with the project such as coordinating with partnering agencies, such as Moulton Niguel Water District, and managing consultants/contractors.

Deliverables:

- ☐ Environmental Information Form (EIF)
- ☐ Financial Statements
- ☐ Invoices
- ☐ Other Applicable Project Deliverables

Task 2 Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3.

Deliverables:

- ☐ Proof of labor compliance upon request

Task 3 Reporting

Prepare progress reports detailing work completed during reporting period as outlined in **Exhibit G** of this agreement. Submit reports to the Grantee for review and inclusion in a progress report to be submitted to DWR.

Prepare Draft Project Completion Report and submit to DWR via the Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. Prepare Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of **Exhibit G**.

Deliverables:

- ☐ Project Progress Reports
- ☐ Draft and Final Project Completion Report

Budget Category (b): Land Purchase/Easement

Task 4 Land Purchase/Easement

Land and/or easement acquisition is not applicable. No additional land is anticipated to be acquired to implement this project.

Deliverables: N/A

Budget Category (c): Planning/Design/Engineering and Environmental Documentation

Task 5 Feasibility Studies

A project feasibility study has been prepared for the Project to demonstrate the feasibility of implementing the Project. The study provided information on the existing tertiary treatment capacity of the plant and identified methods in which the tertiary capacity could be expanded within the existing site boundaries.

Deliverables:

- ☐ Feasibility study, upon request

Task 6 CEQA Documentation

Due to the scope of the proposed expansion, it is anticipated that an Initial Study/Mitigated Negative Declaration will be appropriate to identify the impacts, discuss the mitigation required and prepare an appropriate mitigation monitoring and reporting plan.

This task includes the preparation and circulation of a Notice of Preparation, adherence to Assembly Bill 52 (including the researching and addressing of tribal cultural resources), and preparation of an IS/MND. Based on the findings, any significant impacts, including those determined to be less than significant, will be identified and appropriate mitigation discussed.

File Notice of Completion with the State Clearinghouse. Prepare a letter to DWR stating no legal challenges (or addressing legal challenges).

Deliverables:

- ☐ Copy of Notice of Preparation
- ☐ Draft and Final MND
- ☐ Lead agency signed Notice of Determination
- ☐ California Department of Fish and Wildlife filing fee cash receipt
- ☐ Documentation of Tribal Notification (per PRC §75102)
- ☐ No Legal Challenges letter to DWR

Task 7 Permitting

Obtain all necessary federal, state, and local permits. Permits may include:

Permit to construct, permit to operate, and a recycled water permit from South Orange County Wastewater Authority (SOCWA). Additional permits may be required and will be obtained as necessary.

Deliverables:

- ☐ Copy of all required permits

Task 8 Design

Complete preliminary design, including the preliminary design report (PDR). The PDR will provide the overall Project concept for use in development of final design, plans, and specifications, including preliminary earthwork calculations, preliminary design details, equipment foundations, preliminary design details for and 100% (final) design, plans, and specifications.

Deliverables (all specified deliverables have been completed):

- ☐ PDR
- ☐ Updated Project Cost Estimate

- ☐ 100% Design Documents (Plans and Specifications)

Task 9 Project Monitoring Plan

Develop and submit a Project Monitoring Plan. Along with the Project Performance Measures Table provided by DWR project manager, the Project Monitoring Plan (as described in **Exhibit J**) will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverables:

- ☐ Project Monitoring Plan

Budget Category (d): Construction/Implementation

Task 10 Construction Contracting

Activities necessary to secure a contractor and award the contract include development of bid documents, preparation of advertisement and contract documents for construction contract bidding, conducting of pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of notice to proceed. The contract documents will include final plans and specifications for the construction of the improvements.

Deliverables:

- ☐ Bid documents
- ☐ Proof of Advertisement
- ☐ Award of contract
- ☐ Notice to proceed

Task 11 Construction Administration

This task includes managing contractor submittal review, answering requests for information, and issuing work directives. A full-time engineering construction observer will be on-site for the duration of the Project. Construction observer duties include documenting pre-construction conditions, daily construction diary, preparing change orders, addressing questions of contractors on-site, reviewing/updating Project schedule, reviewing contractor log submittals and pay requests, forecasting cash flow, notifying contractor if work is not acceptable. It is anticipated that this task will also include activities related to hiring a consulting engineer to perform construction engineering services to assist SMWD staff with the construction management activities.

Deliverables:

- ☐ Notices of Completion

Task 12 Construction/Implementation Activities

Construction components include: Increasing the reliability of the aeration system, expanding and or replacing the existing filters with more effective tertiary filters, expanding the disinfection system, expanding the tertiary effluent pumps, the possible upsizing of the discharge pipeline where it connects to the District's recycled water distribution system, the modification to various in-plant piping and electrical systems and the addition of a standby generator to the facility to be able to maintain some level of operation during a power outage. The 3A Water Recycling Plant Tertiary Expansion Project will be constructed in accordance with the final plans and specifications. Further, construction will be performed in conformance with the applicable Standard Plans and Specifications for SMWD, Public Works Construction, County of Orange and the State of California. Construction will be designed to meet SMWD Design Criteria and all

applicable standards including American Water Works Association (AWWA). Construction activities may include, but are not limited to the following:

Subtask 12a: Mobilization and Demobilization

This subtask includes mobilization, which will include the acquisition of necessary bonds and insurance, preparing submittals for review, ordering materials, moving contractor facilities and equipment to pre-determined staging area(s) and other similar activities. The Contractor will be required to maintain District- approved staging areas for storage of equipment and material for the duration of the construction period. Demobilization will include removal of material and equipment, cleanup of the site, restoration of any damaged areas to their original conditions and other similar activities.

Subtask 12b: Site preparation

This subtask includes cutting and demolition of existing facilities in advance of constructing the various improvements. Site preparation will include Underground Service Alert (USA) field location and marking of all existing utilities, implementation of the City approved traffic control plans, provisions for sheeting, shoring, and bracing in accordance with applicable OSHA Standards, plating of trenches, demolition of existing facilities that will impede the construction of the new facilities.

Subtask 12c: Install, construct, excavate

This subtask includes excavating for any foundations and piping that may need to be installed underground. The construction will include the placing of reinforcing steel and concrete for any structures, installation of both above and below ground piping, installation of the various mechanical and electrical devices required for the improvements and connecting the necessary control equipment. The new facilities include but are not limited to new interconnecting piping, new filters, new disinfection connections, new blowers, new standby generation facilities, new pumps, new electrical systems, new instrumentation components and new programming of the plant's existing SCADA system to incorporate the new facilities.

Subtask 12d: Procure Equipment

This subtask involves the actual purchasing of the major equipment required for the project. Purchase of the equipment associated to the improvements at the plant includes the filters, blowers, generator, pumps, electrical and instrumentation.

Deliverables:

- ☐ Photographic documentation
- ☐ Engineer's Certification
- ☐ Notice of Completion

PROJECT 7: Recycled Water Distribution Upgrade

IMPLEMENTING AGENCY: South Coast Water District

PROJECT DESCRIPTION: The Recycled Water Distribution Upgrade (Project) includes upgrading the existing recycled water distribution pipeline to eliminate an existing hydraulic bottleneck that currently limits the recycled water distribution in the region. A new pipeline will increase capacity by approximately 850 AFY and provide recycled water to more users throughout the region. The Project components include replacement of an existing 6,600 feet section of 10-inch Polyvinyl Chloride (PVC) pipe with a 16-inch new High Density Polyethylene (HDPE) pipe, replacement of a manual gate valve with an electrically-actuated ball valve inside an underground vault, and abandonment of the existing 10-inch pipe and 16-inch casing. The Project will occur along the Pacific Coast Highway, between Aliso Street and 10th Avenue.

Budget Category (a): Direct Project Administration

Task 1 Project Management

Manage grant agreement including compliance with grant requirements, and preparation and submission of supporting grant documents and coordination with the Grantee. Prepare invoices including relevant supporting documentation for submittal to DWR via the Grantee. This task also includes administrative responsibilities associated with the project such as coordinating with partnering agencies and managing consultants/contractors associated with the Project.

Deliverables:

- ☐ Environmental Information Form (EIF)
- ☐ Financial Statements
- ☐ Invoices
- ☐ Other Applicable Project Deliverables

Task 2 Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3.

Deliverables:

- ☐ Proof of labor compliance upon request

Task 3 Reporting

Prepare progress reports detailing work completed during reporting period as outlined in **Exhibit G** of this agreement. Submit reports to the Grantee for review and inclusion in a progress report to be submitted to DWR.

Prepare Draft Project Completion Report and submit to DWR via the Grantee for DWR Project Manager's comment and review no later than 90 days after project completion. Prepare Final Report addressing Grantee/DWRs comments. The report shall be prepared and presented in accordance with the provision of **Exhibit G**.

Deliverables:

- ☐ Project Progress Reports
- ☐ Draft and Final Project Completion Report

Budget Category (b): Land Purchase/Easement

Task 4 Land Purchase/Easement

Land and/or easement acquisition is not applicable. The entire Project will be constructed in public street right-of-way and on District property.

Deliverables: N/A

Budget Category (c): Planning/Design/Engineering and Environmental Documentation

Task 5 Feasibility Studies

Project Feasibility Studies were completed as part of the Project development process. This Project was originally identified in the District's 2008 Infrastructure Master Plan. Since this pipeline is a replacement project, it was not deemed necessary to perform a feasibility study. The District has completed a comprehensive evaluation of alternatives and alignment study as part of the Preliminary Design Report (PDR). The PDR includes and exceeds all aspects of evaluation of this Project that would be covered in a feasibility study. Additional information regarding the PDR is contained under Task 8 Design. Work and costs associated with this task are not being included in the grant agreement.

Deliverables:

- ☐ Preliminary Design Report, upon request

Task 6 CEQA Documentation

Environmental compliance efforts have been completed. The District, acting in the capacity of Lead Agency, undertook the preparation of an Initial Study to determine if the proposed Project would have a significant environmental impact. Based on the Initial Study, it was determined that with implementation of appropriate mitigation measures the Project will not result in significant environmental impacts; therefore, a Mitigated Negative Declaration is the appropriate CEQA determination for this Project.

Staff prepared a Proposed Negative Declaration with a Mitigation and Monitoring Plan. The District prepared and circulated a Notice of Public Review and Intent to Adopt a Proposed Mitigated Negative Declaration ("Notice") in March, 2009. District Board of Directors approved the Proposed Mitigated Negative Declaration and Mitigation and Monitoring Plan (April 23, 2009).

Deliverables:

- ☐ Copy of Notice of Preparation
- ☐ Draft and Final MND
- ☐ Lead agency signed Notice of Determination
- ☐ California Department of Fish and Wildlife filing fee cash receipt
- ☐ Documentation of Tribal Notification (per PRC §75102)
- ☐ No Legal Challenges letter to DWR

Task 7 Permitting

Obtain all necessary federal, state, and local permits. Permits may include:

- Encroachment Permit from Caltrans
- Encroachment Permit from the City of Laguna Beach
- Storm Water Pollution Prevention Plan (SWPPP)

Additional permits may be required and will be obtained as necessary.

Deliverables:

- ☐ Copy of all required permits

Task 8 Design

Complete preliminary design, including the following supporting work: geotechnical investigation, topographic survey, and preliminary design report (PDR). The PDR will provide the overall Project concept for use in development of final design, plans, and specifications.

Deliverables (all specified deliverables have been completed):

- ☐ PDR
- ☐ Geotechnical report
- ☐ 100% Design Documents (Plans and Specifications)

Task 9 Project Monitoring Plan

Develop and submit a Project Monitoring Plan. Along with the Project Performance Measures Table provided by DWR project manager, the Project Monitoring Plan (as described in **Exhibit J**) will include baseline conditions, a brief discussion of monitoring systems to be used, methodology of monitoring, frequency of monitoring, and location of monitoring points.

Deliverables:

- ☐ Project Monitoring Plan

Budget Category (d): Construction/Implementation

Task 10 Construction Contracting

Activities necessary to secure a contractor and award the contract include development of bid documents, preparation of advertisement and contract documents for construction contract bidding, conducting of pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of Notice to Proceed.

Deliverables:

- ☐ Bid documents
- ☐ Proof of Advertisement
- ☐ Award of contract
- ☐ Notice to proceed

Task 11 Construction Administration

Construction administration will consist of regular construction meetings to monitor progress, review and response to any requests for information (RFIs) from the contractor, review of contract submittals, analysis of any potential change orders, issuance of any approved contract changes, review and approval of contractor pay requests, coordinate engineering support services and preparation of Notice of Completion. The District (or Consultant) will coordinate the installation of the pipelines and connections, completed facility testing, and necessary cross connection testing, and conduct necessary construction inspections.

Deliverables:

- ☐ As-built Drawings
- ☐ Notice of Completion

Task 12 Construction/Implementation Activities

Construction will be performed in conformance with the applicable Standard Plans and Specifications for SCWD, Public Works Construction, County of Orange and the State of California. Construction will be designed to meet SCWD Design Criteria and all applicable standards including American Water Works Association (AWWA). Construction activities may include, but are not limited to the following:

Subtask 12a: Mobilization and Demobilization

Mobilization will include the acquisition of necessary bonds and insurance, ordering materials, moving contractor facilities and equipment to pre-determined staging area(s) and other similar activities. District and Caltrans approved staging areas for storage of equipment and material will be maintained for the duration of the construction period. Demobilization will include removal of material and equipment, cleanup of the site, restoration of any damaged areas to their original conditions and other similar activities.

Subtask 12b: Site preparation

Site preparation will include Underground Service Alert (USA) field location and marking of all existing utilities, implementation of the Caltrans and City approved traffic control plans, provisions for sheeting, shoring, and bracing in accordance with applicable OSHA Standards, plating of trenches, and maintenance of access to businesses.

Subtask 12c: Install, construct, excavate

- Replace an existing 6,600 foot section of 10-inch PVC pipe with a new 16-inch High Density Polyethylene (HDPE) pipe for recycled water distribution;
- Replace one manual gate valve with an electrically-actuated ball valve inside an underground vault; and
- Abandon the existing 10-inch pipe and 16-inch casing.

Subtask 12d: Start-up Testing

Start-up testing will take place once all of the improvements have been completed. This will include all mechanical, electrical and controls. Operation and Maintenance manuals will be prepared.

Deliverables:

- ☐ Photographic documentation
- ☐ Engineer's Certification

EXHIBIT B
BUDGET

Summary Budget Table: South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant						
Project No.	**Project Title**	**Grant Amount**	**Cost Share: Non-State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**	**% Funding Match**
1	County of Orange Grant Administration	$199,373	-	-	$199,373	-
2	Dairy Fork Wetland Project	$500,000	$288,387	$279,713	$1,068,101	-
3	San Juan Aquatic Passage and Habitat Improvement	$700,000	$409,912	$408,282	$1,518,194	-
4	Crown Valley Park Entry Channel Improvements	$700,000	$1,943,531	$4,554,731	$7,198,262	-
5	Strategic Turfgrass Removal & Design Assistance Program	$1,099,995	$790,332	$1,036,828	$2,927,156	-
6	3A Water Recycling Plant Tertiary Expansion	$1,000,000	$1,080,000	$1,920,000	$4,000,000	-
7	Recycled Water Distribution Upgrade	$750,000	$721,724	$1,201,329	$2,673,053	-
Totals:		**$4,949,368**	**$5,233,887**	**$9,400,883**	**$19,584,138**	**27%**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 1 - Grant Administration					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	$199,373	-	-	$199,373
b	Land Purchase/Easement	-	-	-	-
b	Planning/Design/Engineering / Environmental Documentation	-	-	-	-
d	Construction/Implementation Activities	-	-	-	-
Totals:		**$199,373**	**-**	**-**	**$199,373**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 2 - Dairy Fork Wetland Project					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	$25,005	-	$60,000	$85,005
b	Land Purchase/Easement	$2,340	-	$2,660	$5,000
b	Planning/Design/Engineering / Environmental Documentation	$38,553	-	$43,468	$82,021
d	Construction/Implementation Activities	$434,102	$288,387	$173,585	$896,075
Totals:		**$500,000**	**$288,387**	**$279,713**	**$1,068,101**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 3 - San Juan Aquatic Passage and Habitat Improvement					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	$14,000	-	$500	$14,500
b	Land Purchase/Easement	-	-	-	-
b	Planning/Design/Engineering / Environmental Documentation	$101,000	-	$3,000	$104,000
d	Construction/Implementation Activities	$585,000	$409,912	$404,782	$1,399,694
Totals:		**$700,000**	**$409,912**	**$408,282**	**$1,518,194**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 4 - Crown Valley Park Entry Channel Improvements					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	-	-	$39,210	$39,210
b	Land Purchase/Easement	-	-	-	-
b	Planning/Design/Engineering / Environmental Documentation	-	-	$787,745	$787,745
d	Construction/Implementation Activities	$700,000	$1,943,531	$3,727,776	$6,371,307
Totals:		**$700,000**	**$1,943,531**	**$4,554,731**	**$7,198,262**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 5 - Strategic Turfgrass Removal & Design Assistance Program					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	$24,265	-	$24,265	$48,531
b	Land Purchase/Easement	-	-	-	-
b	Planning/Design/Engineering / Environmental Documentation	$50,315	-	$6,565	$56,880
d	Construction/Implementation Activities	$1,025,415	$790,332	$1,005,998	$2,821,745
Totals:		**$1,099,995**	**$790,332**	**$1,036,828**	**$2,927,156**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 6 - 3A Water Recycling Plant Tertiary Expansion					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	$13,000	-	$37,000	$50,000
b	Land Purchase/Easement	-	-	-	-
b	Planning/Design/Engineering / Environmental Documentation	$69,000	-	$238,000	$307,000
d	Construction/Implementation Activities	$918,000	$1,080,000	$1,645,000	$3,643,000
Totals:		**$1,000,000**	**$1,080,000**	**$1,920,000**	**$4,000,000**

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant Project 7 - Recycled Water Distribution Upgrade					
Budget Category		**Grant Amount**	**Cost Share: Non- State Fund Source (Required Funding Match)**	**Additional Cost Share**	**Total Cost**
a	Direct Project Administration	-	-	$23,000	$23,000
b	Land Purchase/Easement	-	-	-	-
b	Planning/Design/Engineering / Environmental Documentation	$50,000	-	$168,053	$218,053
d	Construction/Implementation Activities	$700,000	$721,724	$1,010,276	$2,432,000
Totals:		**$750,000**	**$721,724**	**$1,201,329**	**$2,673,053**

EXHIBIT C
SCHEDULE

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 1 **Grant Agreement Adminsistration**	**Start Date**	**End Date**
Task 1: Agreement Administration	12/15/2015	10/31/2019
Task 2: Invoicing	4/1/2016	4/30/2020
Task 3: Progress Reports and Project Completion Report	4/1/2016	6/30/2020

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 2 **Dairy Fork Wetland Project**	**Start Date**	**End Date**
Task 1: Project Management		
Project Management	7/1/2014	5/7/2016
Task 2: Labor Compliance		
Contractor Labor Compliance	7/1/2014	5/7/2016
Task 3: Reporting		
Progress Reports	7/1/2014	5/7/2016
Task 4: Land Purchasing		
4. Southern California Edison Easement	7/1/2014	12/1/2015
Task 5: Feasibility Studies		
Not applicable		
Task 6: CEQA Documentation		
CEQA Documentation	7/1/2014	12/1/2015
Milestone: CEQA Notice of Exemption Filed	3/1/2015	3/1/2015
Task 7: Permitting		
Streambed Alteration Agreement	7/1/2014	12/1/2015
Task 8: Design		
Design Documents	7/1/2014	6/1/2015
Task 9: Project Monitoring Plan		
Performance Monitoring Plan	7/1/2014	3/1/2016
Task 10: Construction Contracting		
Construction Contracting	6/1/2015	12/2/2015
Milestone: Award of Contract	12/2/2015	12/2/2015
Task 11: Construction Administration		
Construction Administration	12/2/2015	5/7/2016
Task 12: Construction/Implementation Activities	**2/22/2016**	**5/23/2016**
12(a). Mobilization/Demobilization	2/22/2016	10/31/2016
Milestone: mobilization	2/22/2016	2/29/2016
Milestone: demobilization	10/24/2016	10/31/2016
12(b) Site Preparation	2/22/2016	2/29/2016
12(c) Installation/Excavation and Construction	6/15/2016	10/23/2016
12(d) Start-Up Testing	10/24/2016	10/24/2016

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 3 **San Juan Aquatic Passage and Habitat Improvement**	**Start Date**	**End Date**
Task 1: Project Management	10/1/2015	3/31/2020
Task 2: Labor Compliance Program	7/1/2016	10/31/2019
Task 3: Reporting	1/1/2016	3/31/2020
Task 4: Land Purchase/Easement - Not applicable		
Task 5: Planning Documentation - (completed)	1/1/2007	1/1/2012
Task 6: CEQA/NEPA Documentation	1/1/2014	9/30/2017
Task 7: Permitting (completed)	1/1/2014	9/30/2017
Task 8: Design	10/1/2015	9/30/2017
Task 9: Project Monitoring Plan	1/1/2016	9/30/2017
Task 10: Construction Contracting	7/1/2017	9/30/2018
Task 11: Construction Administration	10/1/2017	12/31/2019
Task 12: Construction/Implementation Activities	11/1/2014	12/31/2019
Subtask 12a: Invasive Weed Removal	9/15/2017	12/31/2019
Subtask 12b: Dam Removal	9/15/2017	12/31/2019
Subtask 12c: Small Stream Crossings	9/15/2017	12/31/2019
Subtask 12d: Large Bridge Construction	8/1/2015	12/31/2015

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 4 **Crown Valley Park Channel Entry Improvements Project**	**Start Date**	**End Date**
Task 1: Project Management	7/22/2013	9/30/2019
Task 2: Labor Compliance Program	4/15/2015	6/28/2019
Task 3: Reporting	1/4/2016	9/30/2019
Task 4: Land Purchase/Easement - Not applicable		
Task 5: Feasibility Studies	7/22/2013	9/17/2013
Task 6: CEQA Documentation	9/17/2013	6/17/2014
Task 7: Permitting	6/17/2014	6/30/2017
Submit Permits	6/30/2015	6/30/2015
Task 8: Design	6/17/2014	6/30/2017
Submit Ph. 1 PS&E	3/31/2016	3/31/2016
Submit Ph. 2 PS&E	6/30/2017	6/30/2017
Task 9: Project Monitoring Plan	7/1/2015	9/30/2019
Task 10: Construction Contracting	12/1/2015	6/28/2019
Award Ph. 1 Contract	5/31/2016	5/31/2016
Award Ph. 2 Contract	6/30/2017	6/30/2017
Task 11: Construction Administration	1/4/2016	3/29/2019
Task 12: Construction/Implementation Activities	6/1/2016	3/29/2019
Phase 1		
Subtask 12a: Improve Irrigation Water Supply	6/1/2016	6/30/2017
Phase 2		
Subtask 12b: Mobilization and Demobilization	7/5/2016	3/29/2019
Subtask 12c: Site Preparation	7/5/2016	8/31/2018
Subtask 12d: Install, Construct, and Excavate	7/5/2016	3/29/2019

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 5 **Strategic Turfgrass Removal & Design Assistance Program**	**Start Date**	**End Date**
Task 1: Project Management	12/15/2015	10/31/2019
Task 2: Labor Compliance Program	12/18/2015	12/18/2015
Task 3: Reporting	1/29/2016	10/30/2019
Task 4: Land Purchase/Easement - Not applicable		
Task 5: Feasibility Studies - Not applicable		
Task 6: CEQA Documentation	12/15/2015	12/15/2015
Task 7: Permitting - Not applicable		
Task 8: Design	1/22/2016	9/5/2019
Task 9: Project Monitoring Plan	1/11/2016	9/30/2019
Task 10: Database Improvement	11/28/2016	1/6/2017
Task 11: Marketing and Promotion	1/18/2016	8/30/2019
Task 12: Implementation Activities - Rebate Incentive & Inspection	1/11/2016	9/16/2019

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 6 **3A Water Recycling Plant Tertiary Expansion**	**Start Date**	**End Date**
Task 1: Project Management	7/1/2015	12/29/2017
Task 2: Labor Compliance Program	9/5/2016	12/8/2017
Task 3: Reporting	1/4/2016	2/28/2017
Task 4: Land Purchase/Easement - Not applicable		
Task 5: Feasibility Studies - completed	6/1/2015	12/31/2015
Task 6: CEQA Documentation	2/15/2016	9/23/2016
Task 7: Permitting	8/1/2016	9/2/2016
Task 8: Design	1/4/2016	6/17/2016
Task 9: Project Monitoring Plan	1/25/2016	11/28/2017
Task 10: Construction Contracting	6/20/2016	11/24/2017
Task 11: Construction Administration	6/20/2016	11/24/2017
Task 12: Construction/Implementation Activities	6/20/2016	11/24/2017
Subtask 12a: Mobilization and Demobilization	9/5/2016	10/27/2017
Subtask 12b: Site preparation	10/3/2016	11/2/2016
Subtask 12c: Install, construct, excavate	11/3/2016	10/5/2017
Subtask 12d: Procure Equipment	6/6/2016	8/4/2017

South Orange County WMA IRWM - 2015 - Prop. 84 Implementation Grant		
Project 7 **Recycled Water Distribution Upgrade**	**Start Date**	**End Date**
Task 1: Project Management	11/17/2014	2/24/2017
Task 2: Labor Compliance Program	9/6/2016	2/24/2017
Task 3: Reporting	12/14/2015	2/24/2017
Task 4: Land Purchase/Easement - Not applicable		
Task 5: Feasibility Studies - completed (per District's 2008 IMP)	1/1/2008	1/1/2008
Task 6: CEQA Documentation - completed	11/17/2014	11/17/2014
Task 7: Permitting	2/3/2015	3/17/2016
Task 8: Design	6/26/2015	3/31/2016
Task 9: Project Monitoring Plan	12/14/2015	8/25/2017
Task 10: Construction Contracting	11/17/2014	4/28/2016
Task 11: Construction Administration	4/28/2016	3/10/2017
Task 12: Construction/Implementation Activities	9/6/2016	3/10/2017
Subtask 12a: Mobilization and Demobilization	9/6/2016	2/24/2017
Subtask 12b: Site preparation	9/12/2016	2/17/2017
Subtask 12c: Install, construct, excavate	9/12/2016	2/17/2017
Subtask 12d: Start-up Testing	2/27/2017	3/10/2017

EXHIBIT D
STANDARD CONDITIONS

D.1) ACCOUNTING AND DEPOSIT OF FUNDING DISBURSEMENT:

a) Separate Accounting of Funding Disbursements and Interest Records: Grantee shall account for the money disbursed pursuant to this Grant Agreement separately from all other Grantee funds. Grantee shall maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices, consistently applied. Grantee shall keep complete and accurate records of all receipts, disbursements, and interest earned on expenditures of such funds. Grantee shall require its contractors or subcontractors to maintain books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices. Records are subject to inspection by State at any and all reasonable times.

b) Fiscal Management Systems and Accounting Standards: The Grantee agrees that, at a minimum, its fiscal control and accounting procedures will be sufficient to permit tracing of grant funds to a level of expenditure adequate to establish that such funds have not been used in violation of state law or this Grant Agreement.

c) Disposition of Money Disbursed: All money disbursed pursuant to this Grant Agreement shall be deposited, administered, and accounted for pursuant to the provisions of applicable law.

d) Remittance of Unexpended Funds: Grantee shall remit to State any unexpended funds that were disbursed to Grantee under this Grant Agreement and were not used to pay Eligible Project Costs within a period of sixty (60) calendar days from the final disbursement from State to Grantee of funds or, within thirty (30) calendar days of the expiration of the Grant Agreement, whichever comes first.

D.2) ACKNOWLEDGEMENT OF CREDIT: Grantee shall include appropriate acknowledgement of credit to the State and to all cost-sharing partners for their support when promoting the Projects or using any data and/or information developed under this Grant Agreement. During construction of each project, Grantee shall install a sign at a prominent location, which shall include a statement that the project is financed under the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, administered by State of California, Department of Water Resources. Grantee shall notify State that the sign has been erected by providing them with a site map with the sign location noted and a photograph of the sign.

D.3) AIR OR WATER POLLUTION VIOLATION: Under State laws, the Grantee shall not be: (1) in violation of any order or resolution not subject to review promulgated by the State Air Resources Board or an air pollution control district; (2) subject to cease and desist order not subject to review issued pursuant to §13301 of the Water Code for violation of waste discharge requirements or discharge prohibitions; or (3) finally determined to be in violation of provisions of federal law relating to air or water pollution.

D.4) AMENDMENT: This Grant Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Grantee for amendments must be in writing stating the amendment request and the reason for the request. State shall have no obligation to agree to an amendment.

D.5) AMERICANS WITH DISABILITIES ACT: By signing this Grant Agreement, Grantee assures State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C., 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

D.6) APPROVAL: This Agreement is of no force or effect until signed by all parties to the agreement. Grantee may not submit invoices or receive payment until all required signatures have been obtained.

D.7) AUDITS: State reserves the right to conduct an audit at any time between the execution of this Grant Agreement and the completion of Projects, with the costs of such audit borne by State. After completion of the Projects, State may require Grantee to conduct a final audit to State's specifications, at Grantee's expense, such audit to be conducted by and a report prepared by an independent

Certified Public Accountant. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may elect to pursue any remedies provided in Paragraph 14 or take any other action it deems necessary to protect its interests.

Pursuant to Government Code §8546.7, the Grantee shall be subject to the examination and audit by the State for a period of three years after final payment under this Grant Agreement with respect to all matters connected with this Grant Agreement, including but not limited to, the cost of administering this Grant Agreement. All records of Grantee or its contractor or subcontractors shall be preserved for this purpose for at least three (3) years after project completion or final billing, whichever comes later.

D.8) **BUDGET CONTINGENCY:** If the Budget Act of the current year covered under this Grant Agreement does not appropriate sufficient funds for the Proposition 84 Implementation Grant Program, this Grant Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of State to make any payments under this Grant Agreement. In this event, State shall have no liability to pay any funds whatsoever to Grantee or to furnish any other considerations under this Grant Agreement and Grantee shall not be obligated to perform any provisions of this Grant Agreement. Nothing in this Grant Agreement shall be construed to provide Grantee with a right of priority for payment over any other Grantee. If funding for any fiscal year after the current year covered by this Grant Agreement is reduced or deleted by the Budget Act for purposes of this program, State shall have the option to either cancel this Grant Agreement with no liability occurring to State, or offer a Grant Agreement amendment to Grantee to reflect the reduced amount.

D.9) **CALIFORNIA CONSERVATION CORPS:** As required in Water Code §79038(b), Grantee shall examine the feasibility of using the California Conservation Corps or community conservation corps to accomplish the habitat restoration, enhancement and protection activities listed in the Exhibit A, Work Plan, and shall use the services of one of these organizations whenever feasible.

D.10) **CEQA:** Activities funded under this Grant Agreement, regardless of funding source, must be in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code §21000 *et seq.*). Information on CEQA may be found at the following links:

Environmental Information: http://resources.ca.gov/ceqa/

California State Clearinghouse Handbook:
https://www.opr.ca.gov/docs/SCH_Handbook_2012.pdf

D.11) **CHILD SUPPORT COMPLIANCE ACT:** For any Grant Agreement in excess of $100,000, the Grantee acknowledges in accordance with Public Contract Code §7110, that:

a) The Grantee recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with §5200) of Part 5 of Division 9 of the Family Code; and

b) The Grantee, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

D.12) **CLAIMS DISPUTE:** Any claim that the Grantee may have regarding performance of this agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the State's Project Manager, within thirty (30) calendar days of the Grantee's knowledge of the claim. State and Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to this Agreement to implement the terms of any such resolution.

D.13) **COMPETITIVE BIDDING AND PROCUREMENTS:** Grantee shall comply with all applicable laws and regulations regarding securing competitive bids and undertaking competitive negotiations in Grantee's contracts with other entities for acquisition of goods and services and construction of public works with funds provided by State under this Grant Agreement.

D.14) **COMPUTER SOFTWARE:** Grantee certifies that it has appropriate systems and controls in place to ensure that state funds will not be used in the performance of this Grant Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.

D.15) **CONFLICT OF INTEREST:** All participants are subject to State and Federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the application being rejected and any subsequent contract being declared void. Other legal action may also be taken. Applicable statutes include, but are not limited to, Government Code, §1090 and Public Contract Code, §10410 and §10411, for State conflict of interest requirements.

a) Current State Employees: No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.

b) Former State Employees: For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.

c) Employees of the Grantee: Employees of the Grantee shall comply with all applicable provisions of law pertaining to conflicts of interest, including but not limited to any applicable conflict of interest provisions of the California Political Reform Act, Government Code §87100 *et seq.*

d) Employees and Consultants to the Grantee: Individuals working on behalf of a Grantee may be required by the Department to file a Statement of Economic Interests (Fair Political Practices Commission Form 700) if it is determined that an individual is a consultant for Political Reform Act purposes.

D.16) **DELIVERY OF INFORMATION, REPORTS, AND DATA:** Grantee agrees to expeditiously provide throughout the term of this Grant Agreement, such reports, data, information, and certifications as may be reasonably required by State.

D.17) **DISPOSITION OF EQUIPMENT:** Grantee shall provide to State, not less than 30 calendar days prior to submission of the final invoice, an itemized inventory of equipment purchased with funds provided by State. The inventory shall include all items with a current estimated fair market value of more than $5,000.00 per item. Within 60 calendar days of receipt of such inventory State shall provide Grantee with a list of the items on the inventory that State will take title to. All other items shall become the property of Grantee. State shall arrange for delivery from Grantee of items that it takes title to. Cost of transportation, if any, shall be borne by State.

D.18) **DRUG-FREE WORKPLACE CERTIFICATION:** Certification of Compliance: By signing this Grant Agreement, Grantee, its contractors or subcontractors hereby certify, under penalty of perjury under the laws of State of California, compliance with the requirements of the Drug-Free Workplace Act of 1990 (Government Code §8350 *et seq.*) and have or will provide a drug-free workplace by taking the following actions:

a) Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code §8355(a)(1).

b) Establish a Drug-Free Awareness Program, as required by Government Code §8355(a)(2) to inform employees, contractors, or subcontractors about all of the following:
   i) The dangers of drug abuse in the workplace,
   ii) Grantee's policy of maintaining a drug-free workplace,
   iii) Any available counseling, rehabilitation, and employee assistance programs, and
   iv) Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.

c) Provide, as required by Government Code §8355(a)(3), that every employee, contractor, and/or subcontractor who works under this Grant Agreement:
   i) Will receive a copy of Grantee's drug-free policy statement, and
   ii) Will agree to abide by terms of Grantee's condition of employment, contract or subcontract.

D.19) **FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED PROFESSIONAL:** Upon completion of the Project, Grantee shall provide for a final inspection and certification by the appropriate registered professional (California Registered Civil Engineer or Geologist) that the Project has been completed in accordance with submitted final plans and specifications and any modifications thereto and in accordance with this Grant Agreement. Grantee shall notify the State's Project Manager of the inspection date at least 14 calendar days prior to the inspection in order to provide State the opportunity to participate in the inspection.

D.20) **GRANTEE COMMITMENTS:** Grantee accepts and agrees to comply with all terms, provisions, conditions and commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by the Grantee in the application, documents, amendments, and communications filed in support of its request for funding.

D.21) **GRANTEE NAME CHANGE:** Approval of the State's Program Manager is required to change the Grantee's name as listed on this Grant Agreement. Upon receipt of legal documentation of the name change the State will process an amendment. Payment of invoices presented with a new name cannot be paid prior to approval of said amendment.

D.22) **GOVERNING LAW:** This Grant Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.

D.23) **INDEMNIFICATION:** Grantee shall indemnify and hold and save the State, its officers, agents, and employees, free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Projects and this Agreement, including, but not limited to any claims or damages arising from planning, design, construction, maintenance and/or operation of levee rehabilitation measures for this Project and any breach of this Agreement. Grantee shall require its contractors or subcontractors to name the State, its officers, agents and employees as additional insured on their liability insurance for activities undertaken pursuant to this Agreement.

D.24) **INDEPENDENT CAPACITY:** Grantee, and the agents and employees of Grantees, in the performance of the Grant Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.

D.25) **INSPECTION OF BOOKS, RECORDS, AND REPORTS:** During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Grant Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this Grant Agreement. Failure or refusal by Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and State may withhold disbursements to Grantee or take any other action it deems necessary to protect its interests.

D.26) **INSPECTIONS OF PROJECT BY STATE:** State shall have the right to inspect the work being performed at any and all reasonable times during the term of the Grant Agreement. This right shall extend to any subcontracts, and Grantee shall include provisions ensuring such access in all its contracts or subcontracts entered into pursuant to its Grant Agreement with State.

D.27) **INVOICE DISPUTES:** In the event of an invoice dispute, payment will not be made until the dispute is resolved and a corrected invoice submitted. Failure to use the address exactly as provided may result in return of the invoice to the Grantee. Payment shall be deemed complete upon deposit of the payment, properly addressed, postage prepaid, in the United States mail. Any claim that Grantee may have regarding the performance of this Grant Agreement including, but not limited to claims for additional compensation or extension of time, shall be submitted to the DWR Project Manager within thirty (30) calendar days of Grantee's knowledge of the claim. State and Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to the Grant Agreement to implement the terms of any such resolution.

D.28) **LABOR CODE COMPLIANCE:** The Grantee will be required to keep informed of and take all measures necessary to ensure compliance with applicable Labor Code requirements, including, but not limited to, §1720 *et seq.* of the Labor Code regarding public works, limitations on use of volunteer labor (Labor Code §1720.4), labor compliance programs (Labor Code §1771.5) and payment of prevailing wages for work done and funded pursuant to these Guidelines, including any payments to the Department of Industrial Relations under Labor Code §1771.3.

D.29) **NONDISCRIMINATION:** During the performance of this Grant Agreement, Grantee and its contractors or subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex (gender), sexual orientation, race, color, ancestry, religion, creed, national origin (including language use restriction), pregnancy, physical disability (including HIV and AIDS), mental disability, medical condition (cancer/genetic characteristics), age (over 40), marital status, and denial of medial and family care leave or pregnancy disability leave. Grantee and its contractors or subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Grantee and its contractors or subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code §12990 (a-f) *et seq.*) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, §7285 *et seq.*). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code §12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Grantee and its contractors or subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.

Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Grant Agreement.

D.30) **NO DISCRIMINATION AGAINST DOMESTIC PARTNERS:** For contracts over $100,000 executed or amended after January 1, 2007, the Grantee certifies by signing this Grant Agreement, under penalty of perjury under the laws of State of California that Grantee is in compliance with Public Contract Code §10295.3.

D.31) **OPINIONS AND DETERMINATIONS:** Where the terms of this Grant Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

D.32) **PERFORMANCE AND ASSURANCES:** Grantee agrees to faithfully and expeditiously perform or cause to be performed all Project work as described in Exhibit A (Work Plan) and to apply State funds received only to Eligible Project Costs in accordance with applicable provisions of the law.

D.33) **PRIORITY HIRING CONSIDERATIONS:** If this Grant Agreement includes services in excess of $200,000, the Grantee shall give priority consideration in filling vacancies in positions funded by the Grant Agreement to qualified recipients of aid under Welfare and Institutions Code §11200 in accordance with Public Contract Code §10353.

D.34) **PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION:** The Grantee shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the

Projects, or with Grantee's service of water, without prior permission of State. Grantee shall not take any action, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of Grantee to meet its obligations under this Grant Agreement, without prior written permission of State. State may require that the proceeds from the disposition of any real or personal property be remitted to State.

D.35) **REMEDIES NOT EXCLUSIVE:** The use by either party of any remedy specified herein for the enforcement of this Grant Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.

D.36) **RETENTION:** Notwithstanding any other provision of this Grant Agreement, State shall, for each project, withhold five percent (5.0%) until January 1, 2018 and ten percent (10.0%), thereafter, of the funds requested by Grantee for reimbursement of Eligible Costs. Each project in this Grant Agreement will be eligible to release its respective retention when that project is completed and Grantee has met requirements of Paragraph 19, "Submissions of Reports", except in the case of the last project to be completed under this Grant Agreement, in which case retention for such project will not be disbursed until the "Grant Completion Report" is submitted to and approved by State. State shall disburse retained funds to the Grantee.

D.37) **RIGHTS IN DATA:** Grantee agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Grant Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act., Government Code §6250 *et seq*. Grantee may disclose, disseminate and use in whole or in part, any final form data and information received, collected and developed under this Grant Agreement, subject to appropriate acknowledgement of credit to State for financial support. Grantee shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.

D.38) **SEVERABILITY:** Should any portion of this Grant Agreement be determined to be void or unenforceable, such shall be severed from the whole and the Grant Agreement shall continue as modified.

D.39) **STATE REVIEWS:** The parties agree that review or approval of projects applications, documents, permits, plans, and specifications or other project information by the State is for administrative purposes only and does not relieve the Grantee of their responsibility to properly plan, design, construct, operate, maintain, implement, or otherwise carry out the projects.

D.40) **SUSPENSION OF PAYMENTS:** This Grant Agreement may be subject to suspension of payments or termination, or both, and Grantee may be subject to debarment if the State determines that:

a) Grantee, its contractors, or subcontractors have made a false certification, or
b) Grantee, its contractors, or subcontractors violates the certification by failing to carry out the requirements noted in this Grant Agreement.

D.41) **SUCCESSORS AND ASSIGNS:** This Grant Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this Grant Agreement or any part thereof, rights hereunder, or interest herein by the Grantee shall be valid unless and until it is approved by State and made subject to such reasonable terms and conditions as State may impose.

D.42) **TERMINATION BY GRANTEE:** Subject to State approval which may be reasonably withheld, Grantee may terminate this Agreement and be relieved of contractual obligations. In doing so, Grantee must provide a reason(s) for termination. Grantee must submit all progress reports summarizing accomplishments up until termination date.

D.43) **TERMINATION FOR CAUSE:** Subject to the right to cure under Paragraph 14, the State may terminate this Grant Agreement and be relieved of any payments should Grantee fail to perform the requirements of this Grant Agreement at the time and in the manner herein, provided including but not limited to reasons of default under Paragraph 14.

D.44) **TERMINATION WITHOUT CAUSE:** The State may terminate this Grant Agreement without cause on 30 calendar days advance written notice. The Grantee shall be reimbursed for all reasonable expenses incurred up to the date of termination.

D.45) **THIRD PARTY BENEFICIARIES:** The parties to this Grant Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or any duty, covenant, obligation or understanding established herein.

D.46) **TIMELINESS:** Time is of the essence in this Grant Agreement.

D.47) **TRAVEL:** Grantee agrees that travel and per diem costs shall NOT be eligible for reimbursement with State funds, and shall NOT be eligible for computing Grantee cost match. Travel includes the costs of transportation, subsistence, and other associated costs incurred by personnel during the term of this Grant Agreement.

D.48) **WAIVER OF RIGHTS:** None of the provisions of this Grant Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties here to that from time to time either party may waive any of its rights under this Grant Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Grant Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.

D.49) **WORKERS' COMPENSATION:** Grantee affirms that it is aware of the provisions of §3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and Grantee affirms that it will comply with such provisions before commencing the performance of the work under this Grant Agreement and will make its contractors and subcontractors aware of this provision.

EXHIBIT E
AUTHORIZING RESOLUTION

RESOLUTION OF THE BOARD OF SUPERVISORS OF

ORANGE COUNTY, CALIFORNIA

June 16, 2015

By the authority of the Orange County Board of Supervisors

The following resolution is hereby issued:

WHEREAS, the mission of the OC Public Works Department includes regional resources and environmental quality throughout Orange County; and

WHEREAS, OC Public Works has led development of the South Orange County Integrated Regional Water Management (IRWM) Plan pursuant to Senate Bill 1672 (SB 1672) of the State of California, known as the Integrated Regional Water Management Planning Act of 2002, approved by the Governor on September 20,2002 to encourage local agencies to work cooperatively to manage local and imported water supplies improve the quality, quantity, and reliability; and

WHEREAS, in November 2002 California voters passed Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (CWC 79560-79565) to fund competitive grantsfor projects consistent with an adopted IRWM Plan; and

WHEREAS, the South Orange County IRWM Group was formed with cities and water / special districts located within the San Diego Regional water Quality Control Board boundary in Orange County with OC Public Works serving as the Group's lead; and

WHEREAS, SB 1672 provides for the acceptance of said Plan by participants in the IRWM group that have authority to implement the Plan; and

WHEREAS, the Board of Supervisors has reviewed and accepted said Plan with its staff and general public at its regular Board meeting on June 7, 2005 and provided for minor modifications to the Plan at its regular Board meeting on May 23, 2006; and

WHEREAS, in November 2006 California voters passed Proposition 84, the Safe Drinking Water, Water Quality, and Supply, Flood Control, River and Coastal Protection Bond Act (PRC 75001-75130) which requires that IRWM Plans be updated to new guidelines in order to be eligible for Proposition 84 grant funding; and

WHEREAS, OC Public Works is authorized by the South Orange County IRWM Group to serve as the Proposition 84 grant Administrator.

NOW, THEREFORE, BE IT RESOLVED that this Board does hereby:

1. Authorize the director of the OC Public Works Department, or his designee, to submit, on behalf of the County and the South Orange County Integrated Regional Water Management Group, an application for a proposition 84 2015 IRWM Implementation grant from the California Department of Water Resources in an amount not to exceed $ 4,950,000 for the 6 highest ranked water resource projects.
2. Authorize the Director of the OC Public Works Department, or his designee, to negotiate and execute Grant Agreement with the California Department of Water Resources, on behalf of the South Orange County Integrated Regional Water Management Group and to approve amendments and minor modifications to the Grant Agreement subject to Board policy.

3. Authorize the director of the OC Public Works Department, or his designee, to negotiate and execute Implementation Agreements on behalf of the South Orange County Integrated Regional Water Management Group with representatives of the 6 highest ranked city/water district projects and to approve amendments and minor modifications to the Implementation Agreements subject to Board policy.
4. Authorize the Director of OC Public Works Department, or his designee, to certify that the County of Orange has and will comply with all applicable state statutory and regulatory requirements related to any state grants received.

The foregoing was passed and adopted by the following vote of the Orange County Board of Supervisors, on June 16, 2015, to wit:

AYES:	Supervisors:	SHAWN NELSON, MICHELLE STEEL, ANDREW DO LISA A. BARTLETT, TODD SPITZER
NOES:	Supervisor(s):	
EXCUSED:	Supervisor(s):	
ABSTAINED:	Supervisor(s):	

CHAIRMAN

STATE OF CALIFORNIA)
)
COUNTY OF ORANGE)

I, ROBIN STIELER, Interim Clerk of the Board of Orange County, California, hereby certify that a copy of this document has been delivered to the Chairman of the Board and that the above and foregoing Resolution was duly and regularly adopted by the Orange County Board of Supervisors .

IN WITNESS WHEREOF, I have hereto set my hand and seal.

ROBIN STIELER
Interim Clerk of the Board
County of Orange, State of California

Resolution No: 15-052

Agenda Date: 06/16/2015

Item No: 38

I certify that the foregoing is a true and correct copy of the Resolution adopted by the Board of Supervisors , Orange County, State of California

Robin Stieler, Interim Clerk of the Board of Supervisors

By, _____
Deputy

EXHIBIT F
LOCAL PROJECT SPONSORS

Grantee has assigned, for each project, a Local Project Sponsor according to the roles of the participating agencies identified in the IRWM Plan. Local Project Sponsors may act on behalf of Grantee for the purposes of individual project management, oversight, compliance, and operations and maintenance. Local Project Sponsors are identified for each Sponsored Project below:

Sponsored Project	Sponsor Agency	Agency Address
Project 1 - Grant Administration	County of Orange	2301 N. Glassell Street, Orange, CA 92865
Project 2 - Dairy Fork Wetland Project	City of Aliso Viejo	12 Journey, Suite 100, Aliso Viejo, CA 92656
Project 3 - San Juan Aquatic Passage and Habitat Improvement	USDA Forest Service, Cleveland National Forest (Forest Service)	10845 Rancho Bernardo Rd., Suite 200, San Diego, CA 92127
Project 4 - Crown Valley Park Entry Channel Improvements	City of Laguna Niguel	30111 Crown Valley Parkway, Laguna Niguel, CA 92677
Project 5 - Strategic Turfgrass Removal & Design Assistance Program	Municipal Water District of Orange County	18700 Ward Street, Fountain Valley, CA 92708
Project 6 - 3A Water Recycling Plant Tertiary Expansion	Santa Margarita Water District	P. O. Box 7005, Mission Viejo, CA 92690
Project 7 - Recycled Water Distribution Upgrade	South Coast Water District	31592 West Street, Laguna Beach, CA 92651

EXHIBIT G
REPORT FORMATS AND REQUIREMENTS

The following reporting formats should be utilized. Please obtain State approval prior to submitting a report in an alternative format.

PROGRESS REPORTS

Progress reports shall generally use the following format. This format may be modified as necessary to effectively communicate information. For each project, discuss the following at the task level, as organized in Exhibit A (Work Plan):

- Percent complete estimate.
- Discussion of work accomplished during the reporting period.
- Milestones or deliverables completed/submitted during the reporting period.
- Scheduling concerns and issues encountered that may delay completion of the task.

For each project, discuss the following at the project level, as organized in Exhibit A (Work Plan):

- Work anticipated for the next reporting period.
- Photo documentation, as appropriate.
- Any schedule or budget modifications approved by DWR during the reporting period.

PROJECT COMPLETION REPORT

Project Completion Reports shall generally use the following format.

Executive Summary
Should include a brief summary of project information and include the following items:

- Brief description of work proposed to be done in the original Grant application.
- Description of actual work completed and any deviations from Exhibit A. List any official amendments to this Grant Agreement, with a short description of the amendment.

Reports and/or Products
The following items should be provided, unless already submitted as a deliverable:

- Provide a copy of any final technical report or study, produced for this project as described in the Work Plan, if applicable
- Electronic copies of any data collected, not previously submitted
- As-built drawings
- Final geodetic survey information
- Project photos
- Discussion of problems that occurred during the work and how those problems were resolved
- A final project schedule showing actual progress versus planned progress

Costs and Dispositions of Funds
A list showing:

- Summary of project cost including the following items:
  - Accounting of the cost of project expenditure;
  - Include all internal and external costs not previously disclosed (i.e., additional cost share); and
  - A discussion of factors that positively or negatively affected the project cost and any deviation from the original project cost estimate.

Additional Information

- Benefits derived from the project, with quantification of such benefits provided, if applicable.
- A final project schedule showing actual progress versus planned progress as shown in Exhibit C.
- Certification from a California Registered Professional (Civil Engineer or Geologist, as appropriate) that the project was conducted in accordance with the approved work plan and any approved modifications thereto.
- Submittal schedule for the Post Performance Report.

GRANT COMPLETION REPORT

The Grant Completion Report shall generally use the following format. This format may be modified as necessary to effectively communicate information on the various projects in the IRWM Program funded by this Grant Agreement, and includes the following:

Executive Summary

The Executive Summary consists of a maximum of twenty (20) pages summarizing information for the grant as well as the individual projects.

Reports and/or products

- Summary of the regional priorities, objectives, and water management strategies of the IRWM Plan.
- Brief comparison of work proposed in the original Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 IRWM Implementation Grant application and actual work done.
- Brief description of the projects completed and how they will further the goals identified in the Agency's final approved IRWM Plan.
- Describe how the implemented projects will meet the regional priorities identified in the final approved IRWM Plan and how the projects contribute to regional integration.
- Identify remaining work and mechanism for their implementation.
- Identify any changes to the IRWM Plan as result of project implementation.
- If applicable, a short discussion on how the IRWM Plan will assist in reducing dependence on Delta water supplies.
- If applicable, a discussion of the critical water supply or water quality benefits to DAC as part of this Grant Agreement.

Cost & Disposition of Funds Information

- A summary of final funds disbursement for each project.

Additional Information

- Summary of the submittal schedule for the Post Performance Reports for each of the projects in this Grant Agreement.

POST-PERFORMANCE REPORT

Report should be concise, and focus on how (each/the) project is actually performing compared to its expected performance; whether the project is being operated and maintained, and providing intended benefits as proposed.

Reports and/or products

- Time period of the annual report (e.g., January 2015 through December 2015)
- Short project description
- Discussion of the project benefits
- An assessment of any explanations for any differences between the expected versus actual project benefits in meeting IRWM priorities as stated in the original IRWM Implementation Grant application. Where applicable, the reporting should include quantitative metrics, i.e., new acre-feet of water produced that year, acres of wildlife habitat added, etc.

- Summary of any additional costs and/or benefits deriving from the project since its completion, if applicable.
- Continued reporting on meeting the Output Indicators and Targets discussed in the Project Monitoring Plan discussed in Paragraph 21 of this Grant Agreement.
- Any additional information relevant to or generated by the continued operation of the project.

EXHIBIT H
REQUIREMENTS FOR STATEWIDE MONITORING AND DATA SUBMITTAL

Surface and Groundwater Quality Data

Groundwater quality and ambient surface water quality monitoring data that include chemical, physical, or biological data shall be submitted to the State as described below, with a narrative description of data submittal activities included in project reports, as described in Exhibit G.

Surface water quality monitoring data shall be prepared for submission to the California Environmental Data Exchange Network (CEDEN). The CEDEN data templates are available on the CEDEN website. Inclusion of additional data elements described on the data templates is desirable. Data ready for submission should be uploaded to your CEDEN Regional Data Center via the CEDEN website. CEDEN website: http://www.ceden.org.

If a project's Work Plan contains a groundwater ambient monitoring element, groundwater quality monitoring data shall be submitted to the State for inclusion in the State Water Resources Control Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program Information on the GAMA Program can be obtained at: http://www.waterboards.ca.gov/gama/geotracker_gama.shtml. If further information is required, the Grantee can contact the State Water Resources Control Board (SWRCB) GAMA Program.

Groundwater Level Data

Grantee shall submit to DWR groundwater level data collected as part of this grant. Water level data must be submitted using the California Statewide Groundwater Elevation Monitoring (CASGEM) online data submission system. Grantee should use their official CASGEM Monitoring Entity or Cooperating Agency status to gain access to the online submittal tool and submit data. If the data is from wells that are not part of the monitoring network, the water level measurements should be classified as voluntary measurements in the CASGEM system. If the grantee is not a Monitoring Entity or Cooperating Agency, please contact your DWR grant project manager for further assistance with data submittal. The activity of data submittal should be documented in appropriate progress or final project reports, as described in Exhibit G. Information regarding the CASGEM program can be found at http://www.water.ca.gov/groundwater/casgem/.

EXHIBIT I
STATE AUDIT DOCUMENT REQUIREMENTS AND FUNDING MATCH GUIDELINES FOR GRANTEES

State Audit Document Requirements

The list below details the documents/records that State Auditors typically reviewed in the event of a Grant Agreement being audited. Grantees should ensure that such records are maintained for each State funded Program/Project. Where applicable, this list of documents also includes documents relating to the Grantee's funding match which will be required for audit purposes.

Internal Controls:

1. Organization chart (e.g., Agency's overall organization chart and organization chart for this Grant Agreement's funded project.
2. Written internal procedures and flowcharts for the following:
   a) Receipts and deposits
   b) Disbursements
   c) State reimbursement requests
   d) State funding expenditure tracking
   e) Guidelines, policy(ies), and procedures on State funded Program/Project
3. Audit reports of the Grantee's internal control structure and/or financial statements within the last two years.
4. Prior audit reports on State funded Program/Project.

State Funding:

1. Original Grant Agreement, any amendment(s) and budget modification documents.
2. A list of all bond-funded grants, loans or subventions received from the State.
3. A list of all other funding sources for each Program/Project.

Contracts:

1. All subcontractor and consultant contracts and related, if applicable.
2. Contracts between the Grantee, member agencies, and project partners as related to the State funded Program/Project.

Invoices:

1. Invoices from vendors and subcontractors for expenditures submitted to the State for payments under the Grant Agreement.
2. Documentation linking subcontractor invoices to State reimbursement requests and related Grant Agreement budget line items.
3. Reimbursement requests submitted to the State for the Grant Agreement.

Cash Documents:

1. Receipts (copies of warrants) showing payments received from the State.
2. Deposit slips or bank statements showing deposit of the payments received from the State.
3. Cancelled checks or disbursement documents showing payments made to vendors, subcontractors, consultants, and/or agents under the Grant Agreement.

Accounting Records:

1. Ledgers showing receipts and cash disbursement entries for State funding.
2. Ledgers showing receipts and cash disbursement entries of other funding sources.
3. Bridging documents that tie the general ledger to reimbursement requests submitted to the State for the Grant Agreement

Administration Costs:

1. Supporting documents showing the calculation of administration costs.

Personnel:

1. List of all contractors and Grantee staff that worked on the State funded Program/Project.
2. Payroll records including timesheets for contractor staff and the Grantee's

Project Files:

1. All supporting documentation maintained in the Program/Project files.
2. All Grant Agreement related correspondence.

Funding Match Guidelines

Funding Match consists of non-State funds including in-kind services. In-kind services are defined as work performed or items contributed (i.e., dollar value of non-cash contributions) by the Grantee (and potentially other parties involved) directly related to the execution of Exhibit A (Work Plan) (*examples*: volunteer services, equipment use, and facilities). The cost of in-kind service can be counted as funding match in-lieu of actual funds (or revenue) provided by the Grantee. Other funding match and in-kind service eligibility conditions may apply. Provided below is guidance for documenting funding match with and without in-kind services.

1. Although tracked separately, in-kind services shall be documented and, to the extent feasible, supported by the same methods used by the Grantee for its own employees. Such documentation should include the following:
   a. Detailed description of the contributed item(s) or service(s)
   b. Purpose for which the contribution was made (tied to Grant Agreement Exhibit A (Work Plan))
   c. Name of contributing organization and date of contribution
   d. Real or approximate value of contribution. Who valued the contribution and how the value was determined? (e.g., actual, appraisal, fair market value, etc.). Justification of rate. (See item #2, below)
   e. For contributed labor, the person's name, the work performed, the number of hours contributed, and the pay rate applied
   f. If multiple sources exist, these should be summarized on a table with summed charges
   g. Source of contribution and whether it was provided by, obtained with, or supported by government funds
2. Rates for volunteer or in-kind services shall be consistent with those paid for similar work in the Grantee's organization. For example, volunteer service of clearing vegetation performed by an attorney shall be valued at a fair market value for this service, not the rate for professional legal services. In those instances in which the required skills are not found in the recipient organization, rates shall be consistent with those paid for similar work in the labor market. Paid fringe benefits that are reasonable, allowable and allocable may be included in the valuation.
3. Funding match contribution (including in kind services) shall be for costs and services directly attributed to activities included in the Grant Agreement Work Plan. These services, furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as in-kind if the activities are an integral and necessary part of the State funded Program/Project under the Grant Agreement.
4. Cash contributions made to a Program/Project shall be documented as revenue and in-kind services as expenditure. These costs should be tracked separately in the Grantee's accounting systems.

EXHIBIT J
PROJECT MONITORING PLAN GUIDANCE

Introduction

Please include a brief description of the project (maximum ~150 words) including project location, implementation elements, and need for project (what problem will the project address).

Project Monitoring Plan Components

The Project Monitoring Plan should contain responses to the following questions:

- What are the anticipated project physical benefits?
- What are the corresponding numeric targets for each project benefit?
- How will proposed numeric targets be measured?
- What are baseline conditions?
- When will the targets be met (upon project completion, five years after completion, etc.)
- How often will monitoring be undertaken (monthly yearly, etc.).
- Where are monitoring point locations (ex: meter located at.., at stream mile...)? Include relevant maps.
- How will the project be maintained (ex: irrigation, pest management, weed abatement...)?
- What will be the frequency and duration of maintenance proposed activities?
- Are there any special environmental considerations (e.g., resource agency requirements, permit requirements, CEQA/NEPA mitigation measures)?
- Who is responsible for collecting the samples (who is conducting monitoring and/or maintenance)?
- How, and to whom, will monitoring results be reported (e.g.,: paper reports, online databases, public meetings)?
- What adaptive management strategies will be employed if problems are encountered during routine monitoring or maintenance?
- What is the anticipated life of the project?

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Item No. 5-6

ACTION ITEM
November 16, 2016

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Dick, Hinman, Finnegan)

Robert Hunter
General Manager

Staff Contact: Keith Lyon

SUBJECT: **LRP Agreement between Metropolitan, MWDOC and El Toro Water District for the El Toro Recycled Water System Expansion Phase II Project.**

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to execute the final Local Resources Program agreement with Metropolitan Water District of Southern California and El Toro Water District substantially in the form as attached for the El Toro Recycled Water System Expansion Phase II Project, subject to review and approval by Legal Counsel of any agreement changes.

COMMITTEE RECOMMENDATION

Committee will review this item on November 14, 2016 and make a recommendation to the Board.

SUMMARY

In August 2016, El Toro Water District (ETWD) submitted a Local Resources Program (LRP) application through MWDOC to Metropolitan Water District (MET) for the Recycled Water System Expansion Phase II Project. MET staff reviewed the application, and developed an LRP agreement (attached) for approval by MWDOC and ETWD prior to consideration by MET's Board. As the MET member agency, MWDOC's approval is required before MET's Board may consider the Project, which is scheduled for the December 2016 MET Board meeting.

Budgeted (Y/N): N	Budgeted amount: n/a	Core _X_	Choice __
Action item amount: none	Line item:		
Fiscal Impact (explain if unbudgeted):			

ETWD's Recycled Water System Expansion Phase II will expand ETWD's existing recycled water distribution system to deliver up to an additional 350 acre-feet per year (AFY) of recycled water to the City of Laguna Woods within the ETWD's service area; thereby equally reducing ETWD's demand for treated full service MET water.

DETAILED REPORT

ETWD is one of the first member agencies in Orange County to provided recycled water. For over 30 years ETWD"s Water Reclamation Plant (WRP) has served the Laguna Woods Village Golf Course with irrigation water.

In 2012, ETWD submitted an LRP application to MET through MWDOC for the El Toro Recycled Water System Expansion Project, and an LRP Agreement was executed. This Expansion Project currently provides about 1,100 AFY (Ultimate Yield of 1,175 AFY) of recycled water to newly converted irrigation water users. ETWD receives an LRP incentive of up to $250/AF for each AF produced. The expanded treatment plant utilizes cloth media disc filters and included approximately 101,500 feet of transmission and distribution system pipelines with a 2.4 million gallon equalization storage tank at the treatment plant site.

In August, ETWD submitted to MET through MWDOC an LRP application for its Phase II Recycled Water System Expansion, which will add about 20,600 feet of distribution pipeline within ETWD's southwest area, and about 7,900 feet of distribution pipeline within ETWD's east side area. This will increase the distribution of recycled water from the existing treatment plant as much as 350 AFY.

In the LRP application, ETWD selected LRP incentive Option 2, which provides a higher incentive amount (up to $475/AF) for a shorter period (15 years instead of 25 years). The agreement term will be 25 years, and Project production is required to continue after the initial 15 years even though no LRP financial incentives will be provided by MET during the last 10 years of the Agreement term.

MET staff reviewed ETWD's application, and will recommend approval of the Project by MET's Board during its December 13 Board meeting. As the MET Member Agency, MWDOC must approve the agreement before the project can be considered by MET's Board of Directors. ETWD's Board approval of the LRP Agreement is scheduled for November.

The LRP Agreement follows the standard MET template, but includes two additions changes:

1. Section 2.4 has been added in response to a requirement for MET to comply with the Patriot Act, and the regulations administered by the Office of Foreign Assets Control of the US Department of Treasury related to bond issuance.

2. Exhibit F is new as a means to ensure that Project production will continue during the last 10 years of the LRP Agreement. ETWD selected LRP Financial Incentive Option 2, which can be up to $475/AF for the first 15 years, with a 25-year Agreement term. The purpose of Exhibit F is to ensure that the Project will continue producing during the last 10 years of the 25-year term, or the agency will be required to refund to MET a portion of LRP Financial Incentives received during the first 15 years.

Staff recommends the Board of Directors to authorize the General Manager to execute the final LRP Agreement with MET and ETWD substantially in the form as attached for ETWD's Recycled Water Expansion Phase II Project, subject to review and approval by Legal Counsel of any agreement changes.

AGREEMENT NO. 157433
EL TORO RECYCLED WATER SYSTEM EXPANSION PHASE II PROJECT
2014 LOCAL RESOURCES PROGRAM AGREEMENT
AMONG
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY,
AND EL TORO WATER DISTRICT

Draft 11/18/16

(Note: Need a simple map/schematic for Exhibit A.)

AGREEMENT NO. 157433
EL TORO RECYCLED WATER SYSTEM EXPANSION PHASE II PROJECT
EXPANSION PROJECT
2014 LOCAL RESOURCES PROGRAM AGREEMENT
AMONG
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY,
AND EL TORO WATER DISTRICT

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AGREEMENT NO. 157433
EL TORO RECYCLED WATER SYSTEM EXPANSION PHASE II PROJECT
EXPANSION PROJECT
2014 LOCAL RESOURCES PROGRAM AGREEMENT
AMONG
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY,
AND EL TORO WATER DISTRICT

THIS AGREEMENT (Agreement) is made and entered into as of _____ by and between The Metropolitan Water District of Southern California (Metropolitan), and the Municipal Water District of Orange County (MWDOC), and El Toro Water District (El Toro). Metropolitan, MWDOC, and El Toro may be collectively referred to as "Parties" and individually as "Party".

RECITALS

A. Metropolitan's Board of Directors, at its October 2014 meeting, established terms and conditions for the 2014 Local Resources Program (LRP) for local resource development projects within Metropolitan's service area for the purposes of improving regional water supply reliability. The 2014 LRP Program provides three LRP incentive payment structure options to choose from: (1) sliding scale incentives up to $340/AF over 25 years, (2) sliding scale incentives up to $475/AF over 15 years, or (3) fixed incentive up to $305/AF over 25 years. Under option 2, project must continue to produce for 25 years, even when LRP payments are reduced to zero after 15 years. If an agency fails to comply with this provision, Metropolitan may, at its sole discretion, require reimbursement for a portion of the previous LRP payments toward the project.

B. El Toro has chosen option 2 for this Project (defined below).

C. Metropolitan was incorporated under the Metropolitan Water District Act (Act) Statutes 1969, ch.209, as amended, [§§109.1 et seq. of the Appendix to the West's California Water Code] to transport, store and distribute water in the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura, within the State of California.

D. The Act empowers Metropolitan to acquire water and water rights within or without the state; develop, store and transport water; provide, sell and deliver water at wholesale for municipal and domestic uses and purposes; set the rates for water; and acquire, construct, operate and maintain any and all works, facilities, improvements and property necessary or convenient to the exercise of the powers granted by the Act.

E. MWDOC, as a member public agency of Metropolitan under the Act, is a wholesale purchaser within its service area of water developed, stored, and distributed by Metropolitan.

F. El Toro provides retail water and recycled water services within its service area.

G. El Toro is authorized under Article XI, §9 of the California Constitution and Water Code sections 35400 et seq., to sell and distribute its recycled water.

H. Metropolitan's mission is to provide its service area with adequate and reliable water to meet present and future needs in an environmentally and economically responsible way.

I. El Toro owns and operates an existing recycled water system consisting of secondary and tertiary treatment facilities, pump station, storage and distribution pipelines (Existing Project). The Existing Project has a capacity of 1,175 acre feet per year (AFY) and is currently serving the Laguna Woods Village golf course, various landscaped areas, homeowners associations, school, and on-site process and irrigation uses within the water recycling plant's treatment facilities. There is now in effect an LRP agreement No. 123037 for the Existing project. Existing Project is not part of this agreement.

G. EL Toro is currently planning to construct the El Toro Recycled Water System Expansion Phase II Project (Project) to develop additional recycled water distribution infrastructure to increase recycled water deliveries in the City of Laguna Woods and within the El Toro service area.

H. Metropolitan, MWDOC, and El Toro have determined that it is mutually beneficial for local water projects originating in the service area of El Toro to be developed as a supplement to Metropolitan's imported water supplies in order to meet future water needs.

I. Metropolitan in accordance with the LRP desires to assist in increasing distribution of recycled water by providing a financial incentive to El Toro to implement the Project.

J. MWDOC and El Toro believe that Metropolitan's continued financial contribution toward the cost of the Project will make Project operation economically viable, and is committed to implementation of the Project.

K. Metropolitan's LRP and the provisions for financial incentives are premised upon, and require verification of, actual costs for delivering recycled water from the Project.

L. The Parties believe the development of recycled water by the Project will benefit the local community within El Toro, MWDOC, and the region served by Metropolitan.

NOW, THEREFORE, in consideration of the promises and covenants hereinafter set forth, the Parties do agree as follows:

Section 1: Definitions

The following words and terms, unless otherwise expressly defined in their context, shall be defined to mean:

1.1 "Allowable Yield" shall mean the amount of Recycled Water delivered to End Users by El Toro from the Project in a Fiscal Year that is eligible to receive Metropolitan's financial assistance. Allowable Yield shall be used for non-potable uses through direct deliveries to End Users. Allowable Yield shall not exceed Ultimate Yield and shall exclude Recycled Water that Metropolitan reasonably determines will not reduce El Toro's demand for Metropolitan's imported water. Unless otherwise approved in writing by Metropolitan, Allowable Yield shall exclude: (1) first 1,175 AFY of Recycled Water deliveries, which is covered under the LRP agreement No. 123037 for the Existing Project; (2) Recycled water provided by existing projects, (3) Allowable Yield from other projects with active or terminated LRP or Local Projects Program agreements; (4) groundwater, surface water, or potable water deliveries to supplement the Recycled Water system; (5) Recycled Water delivered to environmental and recreational impoundments; and (5) disposed recycled water.

1.2 "End User" shall mean each user that purchases Allowable Yield furnished by this Project within El Toro's service area.

1.3 "Estimated LRP Contribution" shall mean the advanced financial contribution in dollars per acre-foot, not to exceed $475 per acre-foot, Metropolitan pays for Allowable Yield to El Toro for monthly billing purposes until the Final LRP Contribution is calculated pursuant to procedures in Section 5. LRP payments are for up to 15 years after project starts operation but project must continue to produce for 25 years, even after LRP payments are reduced to zero after 15 years, subject to reimbursement provisions outlined in Exhibit F, incorporated herein by this reference.

1.4 "Final LRP Contribution" shall mean the financial contribution, not to exceed $475 per acre-foot, by Metropolitan to the Project for Allowable Yield. The Final LRP Contribution for the Project is equal to the Project Unit Cost minus Metropolitan's prevailing full service treated water rate as defined in Exhibit E attached hereto and incorporated herein by this reference.

1.5 "Fiscal Year" shall mean a Metropolitan Fiscal Year which begins on July 1 and ends on June 30 of the following calendar year.

1.6 "Project" shall mean the El Toro Recycled Water System Expansion Phase II Project, as defined in Exhibit A attached hereto and incorporated herein by this reference, being developed by El Toro to deliver the Ultimate Yield. El Toro shall notify Metropolitan prior to making any changes to the Project that requires new environmental documentation other than an addendum to the existing environmental documentation. Metropolitan shall inform El Toro of Metropolitan's decision to include or exclude the Project change to this Agreement.

1.7 "Project Unit Cost" shall mean the actual cost to distribute an acre-foot of Recycled Water by the Project and is comprised of an Annualized Capital Component and an Operation and Maintenance Component, as specified in Exhibits B and C attached hereto and incorporated herein by this reference.

1.8 "Recycled Water" shall mean treated municipal wastewater which, subject to regulatory requirements, is suitable for beneficial uses.

1.9 "Recovered Water" shall mean all types of water including Recycled Water and groundwater, or other water delivered for beneficial use to any users by the Project in a Fiscal Year.

1.10 "Ultimate Yield" is 350 acre-feet per Fiscal Year and subject to reduction provisions outlined in Exhibit D, incorporated herein by this reference.

Section 2: Representations and Warranties

2.1 El Toro warrants that it is able and has a right to sell Allowable Yield from the Project.

2.2 El Toro warrants that neither it nor any of its agents discriminate against employees or against any applicant for employment because of ancestry, creed, religion, age, sex, color, national origin, denial of family and medical care leave, marital status, medical condition, mental or physical disability (including HIV and AIDS), and further warrants that it requires all contractors and consultants performing work on the Project to comply with all laws and regulations prohibiting discrimination against employees or against any applicant for employment because of ancestry, creed, religion, age, sex, color, national origin, denial of family and medical care leave, marital status, medical condition, mental or physical disability (including HIV and AIDS).

2.3 El Toro warrants that it has or will comply with the provisions of the California Environmental Quality Act for each and all components of the Project facilities.

2.4 El Toro represents and warrants that both 1) El Toro and 2) to El Toro's knowledge, its directors, officers, employees, subsidiaries and sub-consultants, are not engaged in any business transactions or other activities prohibited by any laws, regulations or executive orders relating to terrorism, trade embargoes or money laundering ("Anti-Terrorism Laws"), including Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the "Executive Order"), the Patriot Act, and the regulations administered by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of Treasury, including those parties named on OFAC's Specially Designated Nationals and Blocked Persons List. El Toro is in compliance with the regulations administered by OFAC and any other Anti-Terrorism Laws, including the Executive Order and the Patriot Act. In the event of any violation of this section, Metropolitan shall be entitled to immediately terminate this Agreement and take such other actions as are permitted or required to be taken under law or in equity.

Section 3: Ownership and Responsibilities

3.1 El Toro shall be the sole owner of Project facilities. Metropolitan shall have no ownership right, title, security interest or other interest in the Project facilities.

3.2 El Toro shall be solely responsible for all design, environmental compliance, right-of-way acquisitions, permits, construction, and cost of the Project and all modifications thereof.

3.3 El Toro shall be solely responsible for operating and maintaining the Project, in accordance with all applicable local, state, and federal laws. Metropolitan shall have no rights, duties or responsibilities for operation and maintenance of Project facilities.

3.4 El Toro shall install, operate, and maintain metering devices for the purpose of measuring the quantity of Recovered Water and Allowable Yield delivered to each End User.

3.5 El Toro shall also provide electrical metering devices to accurately measure the energy used for the Project to determine incurred operation and maintenance costs. Metropolitan shall not pay for electrical energy costs if El Toro fails to install electrical metering devices.

3.6 El Toro shall at all times during the term of this Agreement, use its best efforts to operate the Project facilities to maximize Allowable Yield on a sustained basis.

3.7 El Toro shall assist Metropolitan in its effort to forecast future Project production and cost.

3.8 El Toro shall notify and provide Metropolitan with a copy of relevant agreements and payments if El Toro decides to convey water using Project facilities to any party that is not an End User.

Section 4: Invoicing Process

4.1 El Toro shall notify Metropolitan in writing not less than 30 days prior to the start of Project operation. Before the first invoice, MWDOC, El Toro, and Metropolitan shall meet to coordinate the agreement administration requirements and to determine the Estimated LRP Contribution based on historical cost data and expected Project activities. After the first year of operation, the Estimated LRP Contribution will be determined during the annual reconciliation process pursuant to Section 5.

4.2 After the start of Project operation, El Toro shall invoice Metropolitan monthly for the Estimated LRP Contribution based upon Allowable Yield delivered during the previous month. Metropolitan shall pay El Toro for invoiced Estimated LRP Contribution by means of a credit included on the next monthly water service invoice issued to MWDOC in accordance with Metropolitan's Administrative Code.

4.3 Pursuant to Metropolitan's Administrative Code, invoices for Estimated LRP Contribution must be received by Metropolitan before 3:30 p.m. on the third working day after the end of the month to receive credit for any preceding month on the next monthly water service invoices issued to MWDOC. Metropolitan will not pay for any invoiced Estimated LRP Contribution received more than six months following the end of any month in which a credit is claimed, and the Recycled Water claimed in any such late invoice shall not be included in the Allowable Yield.

4.4 Metropolitan, MWDOC, and El Toro have entered into agreements for development of local water resources projects in addition to this Agreement. Each agreement contains specific terms and conditions to determine project yield, payment process, and project performance and any adjustments to contractual yield and incentive payments. Unless approved in writing by Metropolitan, these agreements are independent from each other and, therefore, the yield produced under one agreement shall not be used to fulfill the performance requirements under other agreements. These provisions shall also apply to all future incentive agreements between Metropolitan, MWDOC, and El Toro.

Section 5: Reconciliation Process

5.1 After the start of Project operation and by December 31 of each year, El Toro shall provide Metropolitan with the following reconciliation data for the previous Fiscal Year: (a) records of Recovered Water and Allowable Yield; (b) supporting documentation of the actual cost of the Project required to perform the calculations prescribed in Exhibits B and C; (c) records of water deliveries to end users; (d) terms and schedule of payments of the Project's financing instruments; (e) a description of any changes to the Project's financing instruments; and (f) all contributions pursuant to Section 5.4.

5.2 If reconciliation data is not submitted by December 31 in accordance with Section 5.1, Metropolitan will assess a late penalty charge to El Toro as prescribed in Metropolitan's Administration Code, currently set at $2,500 in Section 4507. Metropolitan may suspend its payment of Estimated LRP Contribution if El Toro fails to provide reconciliation data by the ensuing April 1. During the suspension period, El Toro shall continue to invoice Metropolitan for the Estimated LRP Contribution based upon the Allowable Yield for water accounting purposes. Metropolitan will resume payment of the monthly Estimated LRP Contribution once complete data is received and the corresponding reconciliation is complete pursuant to Section 5.3. In the event El Toro fails to provide reconciliation data by December 31 of the following Fiscal Year, which is 18 months after the end of the Fiscal Year for which a reconciliation is required, this Agreement shall automatically terminate without notice or action by any Party and El Toro shall repay Metropolitan all Estimated LRP Contributions for which no reconciliation data was provided within 90 days of termination.

5.3 Within 180 days after Metropolitan receives complete data from El Toro, pursuant to Section 5.1, Metropolitan shall calculate the Final LRP Contribution for the Fiscal Year. The Final LRP Contribution shall then apply retroactively to all Allowable Yield for the applicable Fiscal Year. An adjustment shall be computed by Metropolitan for over- or under-payment for the Allowable Yield and included on the next monthly water service invoice issued to MWDOC. As part of this reconciliation, Metropolitan shall also consult with El Toro to determine the Estimated LRP Contribution for the following year based on historic cost data and expected Project activities.

5.4 The Parties agree that all contributions other than LRP incentives under this Agreement and contributions by El Toro, including but not limited to grants provided by the U.S. Bureau of Reclamation and funding by private parties received prior to and during the term of this Agreement that offset eligible Project costs, shall be deducted from all

respective cost components. During the reconciliation process, following receipt of such contributions, the Parties shall determine the equitable apportionment of such contributions for capital and/or operational purposes.

Section 6: Record Keeping and Audit

6.1 El Toro shall establish and maintain accounting records of all costs incurred for the construction, operation and maintenance, and replacement parts of the Project as described in Exhibits B and C. Accounting for the Project shall utilize generally accepted accounting practices and be consistent with the terms of this Agreement. El Toro's Project accounting records must clearly distinguish all costs for the Project from El Toro's other water production, treatment, and distribution costs. El Toro's records shall also be adequate to determine Allowable Yield and Recovered Water to accomplish all cost calculations contemplated in this Agreement.

6.2 El Toro shall establish and maintain accounting records of all contributions including grants that offset eligible Project capital costs, operation and maintenance costs, and/or replacement costs, as outlined in Section 5.4.

6.3 El Toro shall collect Recovered Water and Allowable Yield data for each Fiscal Year of Project operation and retain records of that data based on the metering requirements in Section 3.4. In addition, El Toro shall collect and retain records of the total annual amount of water conveyed outside of El Toro's service area using Project facilities.

6.4 Metropolitan shall have the right to audit Project costs and other data relevant to the terms of this Agreement both during the Agreement term and for a period of three years following the termination of this Agreement. Metropolitan may elect to have such audits conducted by its staff or by others, including independent accountants, designated by Metropolitan. El Toro shall make available for inspection to Metropolitan or its designee, upon 30 days advance notice, all records, books and other documents, including all billings and costs incurred by contractors, relating to the construction, operation and maintenance of the Project; any grants and contributions, as described in Exhibits B and C, and capital cost financing. Upon 30 days advance notice and at Metropolitan's request, El Toro shall also allow Metropolitan's staff or its designee to accompany El Toro staff in inspecting El Toro's contractors' records and books for the purpose of conducting audits of Project costs.

6.5 In lieu of conducting its own audit(s), Metropolitan shall have the right to direct El Toro to have an independent audit conducted of all Project costs incurred in any Fiscal Year(s) pursuant to this Agreement. El Toro shall then have an audit performed for said Fiscal Year(s) by an independent certified public accounting firm and provide Metropolitan copies of the audit report within six months after the date of the audit request. The cost of any independent audit performed under this Agreement shall be paid by El Toro and is an allowable Project operation and maintenance cost pursuant to Exhibit C.

6.6 El Toro shall retain an independent auditor satisfactory to Metropolitan to conduct an initial audit of the Project costs and accounting record keeping practices and submit the results to Metropolitan with the first reconciliation data as outlined in Section 5.

6.7 El Toro shall keep all Project records for at least ten consecutive years prior to each cost audit per Section 6. El Toro shall maintain audited records for three years after the audit. El Toro shall keep unaudited Project records for at least three years following the termination of this Agreement.

6.8 If an audit of El Toro's reported Project costs cannot be provided, then those costs are not eligible under this Agreement. Based on the results of any project cost audit, an adjustment for over- or under-payment of Allowable Yield for each applicable Fiscal Year shall be completed by Metropolitan and included in Metropolitan's next invoice issued to El Toro.

Section 7: Rate Structure Integrity

7.1 MWDOC and El Toro agree and understand that Metropolitan's rate structure as of January 1, 2004 ("Existing Rate Structure") provides the revenue necessary to support the development of new water supplies by local agencies through incentive payments in the Local Resources Program (LRP), Conservation Credits Program (CCP), and the Seawater Desalination Program (SDP). In particular, the Water Stewardship Rate is the component of Existing Rate Structure that provides revenue for the LRP, CCP and SDP. Further, El Toro and MWDOC acknowledge that Existing Rate Structure and all components within that rate structure were developed with extensive public input and member agency participation, and that the elements of Existing Rate Structure have been properly adopted in accordance with Metropolitan's rules and regulations.

7.2 (a) El Toro and MWDOC agree that Metropolitan's rates set under the Existing Rate Structure may be reset throughout the term of this Agreement to account for the cost of service, and that El Toro and MWDOC will address any and all future issues, concerns and disputes relating to Existing Rate Structure, through administrative opportunities available to them pursuant to Metropolitan's public board process. As such, El Toro and MWDOC agree if they file or participate in litigation or support legislation to challenge or modify Existing Rate Structure, including changes in overall rates and charges that are consistent with the current cost-of-service methodology, Metropolitan may initiate termination of this Agreement consistent with Section 7.4. below. Metropolitan agrees that any change in Existing Rate Structure, including changes in cost-of-service philosophy or methodology would be enacted only after collaboration and discussion with its member public agencies, and Metropolitan's public board review and approval process.

(b) Notwithstanding the foregoing, El Toro and MWDOC retain the right to file and/or participate in litigation and/or to support legislation without triggering the termination of this Agreement if there are material changes to Existing Rate Structure or changes in cost-of-service methodology used to set rates by future Metropolitan board action. El Toro and MWDOC also retain the right to file and/or support litigation should Metropolitan, in setting rates under Existing Rate Structure, fail to comply with public

notice, open meeting, or other legal requirements associated with the process of setting water rates and related taxes, fees, and charges. El Toro and MWDOC agree that they will not file or participate in litigation, nor will they support legislation affecting Metropolitan's rate structure after any such change in rate structure or violation of the law regarding rate setting processes until, and unless, they have exhausted all administrative opportunities available to them pursuant to Metropolitan's public board process.

7.3 El Toro and MWDOC agree that all users of the Metropolitan conveyance and distribution system should support the LRP, CCP, and SDP, that such projects provide benefits to Metropolitan and the users of the system by making existing distribution and conveyance capacity available for additional delivery, and that under Existing Rate Structure, the Water Stewardship Rate is an element of charges properly adopted by the Metropolitan Board and properly applied to water wheeled through the Metropolitan conveyance and distribution system.

7.4 Should El Toro or MWDOC file or support litigation, or sponsor or support legislation, that would challenge or be adverse to Existing Rate Structure, as described in Paragraph (a) of Section 7.2., Metropolitan's Chief Executive Officer may file a 90-day notice of intent to terminate this Agreement with Metropolitan's Executive Secretary, with copies to all members of Metropolitan's Board of Directors, and contemporaneously provide El Toro and MWDOC with a copy of the notice. Within 30 days of receipt of such notice, El Toro and MWDOC shall have the right to request, in writing, mediation of the dispute by a neutral third party with expertise in finance and rate setting. The mediator shall be selected by agreement of the Parties, or failing agreement within 60 days of such request for mediation, a mediator shall be selected by the Metropolitan Board of Directors from a list of at least four candidates, one each from El Toro and MWDOC, and two of which will be supplied by Metropolitan's Chief Executive Officer. The cost of the mediation shall be borne equally by the Parties. The request for mediation shall also serve to stay the 90-day notice of intent to terminate, but for no more than 90 days beyond the filing of the notice of request for mediation, unless otherwise agreed in writing by the Parties. If mediation does not result in an agreement acceptable to each party to this Agreement within the time provided herein, the notice of intent to terminate shall be reinstated. The Metropolitan Board of Directors shall act to approve or disapprove termination of this Agreement, and all of Metropolitan's obligations hereunder shall terminate if approved, on or before the ninetieth day following filing of the notice to terminate or, if mediation has been requested as described above, the ninetieth day following the request for mediation (or other date agreed in writing by the Parties.)

7.5 Metropolitan, El Toro and MWDOC agree that should litigation or legislation brought forth or sponsored by third parties result in changes to Existing Rate Structure, this Agreement will continue in effect unless mutually agreed in writing by the parties.

7.6 Should Metropolitan and its member agencies agree on an alternative rate and revenue structure that obviates the need for this section on Rate Structure Integrity, this Section shall be amended or deleted to conform to such action.

7.7 Notwithstanding the foregoing, Metropolitan shall have no power or authority under this Section to terminate this Agreement, and Metropolitan's General Manager shall not file a 90-day notice of intent to terminate this Agreement, if MWDOC (but not El Toro) files or participates in any litigation or supporting legislation to challenge or modify Existing Rate Structure, but El Toro transmits in writing to Metropolitan's General Manager within thirty (30) days of request therefore from Metropolitan, stating that El Toro has not participated directly or indirectly in the filing or prosecution of any litigation or the drafting or advocacy of any legislation to challenge or modify Existing Rate Structure, and indicates support for Existing Rate Structure.

Section 8: Term and Amendments

8.1 The Agreement shall commence on the first date herein written and shall terminate 25 years after the date El Toro notifies Metropolitan that the Project has begun operation, subject to provisions outlined in Exhibit D. LRP payments are for up to 15 years after project starts operation but project must continue to produce for 25 years, even after LRP payments are reduced to zero after 15 years, subject to reimbursement provisions outlined in Exhibit F, incorporated herein by this reference. The provisions regarding reconciliation and audit shall remain in effect until three years after Agreement termination.

8.2 This Agreement may be amended at any time by the written mutual agreement executed by each of the Parties.

8.3 In addition to the termination provisions provided for in Section 5.2, Section 7.4, 8.4, and Exhibit D, Metropolitan may terminate this Agreement, upon thirty (30) days notice to El Toro on the occurrence of one the following:

a. A material breach of this Agreement by any party other than Metropolitan; or

b. Metropolitan is not required to make payments to El Toro pursuant to the terms of this Agreement for a five-consecutive year period subsequent to Project operation.

8.4 Effective six (6) months after written notice to the Parties, this Agreement shall terminate with regard to all Parties upon the occurrence of the two events described in Subsection 8.4(a) and Subsection 8.4(b):

a. Metropolitan determines that it will no longer:

i. Provide incentives or other financial support to its member agencies for seawater desalination, water recycling, or groundwater recovery projects through the Local Resources Program, Seawater Desalination Program, or other similar programs; or

ii. Utilize the Water Stewardship Rate or a similar charge to fund the Local Resources Program, Seawater Desalination Program, or other similar programs; or

iii. Include the Water Stewardship Rate as a charge for all water conveyed on the system; and

b. A member of the MWDOC delegation to the Board of Directors of the Metropolitan Water District of Southern California votes in favor of the determination described in Subsection 8.4(a).

8.5 The termination provisions of Section 8.4 shall remain in effect only so long as all Metropolitan Local Resources Program, Seawater Desalination Program, or similar program agreements approved by Metropolitan's Board of Directors after November 10, 2009 contain termination provisions materially in accord with Section 8.4 of this Agreement.

Section 9: Hold Harmless and Liability

9.1 Except for the sole negligence or willful misconduct of Metropolitan, El Toro agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan and its Board of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to El Toro's approval, construction, operation, repair or ownership of the Project, including any use, sale, exchange or distribution of Project water. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability, but shall exclude damages and losses that arise from the sole negligence or willful misconduct of Metropolitan.

9.2 El Toro shall include the following language in any agreement with any consultant or contractor retained to work on the Project:

"Except for the sole negligence or willful misconduct of Metropolitan, (Consultant) agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan and its Board of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to El Toro's approval, construction, operation, repair or ownership of the Project. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability, but shall exclude damages and losses that arise from the sole negligence or willful misconduct of Metropolitan."

Section 10: Notice

Any notice, payment or instrument required or permitted to be given hereunder shall be deemed received upon personal delivery or 24 hours after deposit in any United States post office, first class postage prepaid and addressed to the Party for whom intended, as follows:

If to Metropolitan:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, California 90054-0153
Attention: Manager, Water Resource Management

If to MWDOC:

Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708
Attention: General Manager

If to El Toro:

El Toro Water District
24251 Los Alisos Blvd.
Lake Forest, CA 92630
Attention: _____

Any Party may change such address by notice given to each of the other Parties as provided in this section.

Section 11: Successors and Assigns

The benefits and obligations of this Agreement are specific to the Parties and are not assignable without the express written consent of Metropolitan. Any attempt to assign or delegate this Agreement or any of the obligations or benefits of this Agreement without the express written consent of Metropolitan shall be void and of no force or effect.

Section 12: Severability

The partial or total invalidity of one or more sections of this Agreement shall not affect the validity of this Agreement.

Section 13: No Third Party Beneficiary

This Agreement does not create, and shall not be construed to create any rights enforceable by any person, partnership, corporation, joint venture, limited liability company, or any other form of organization or association of any kind that is not a party to this Agreement.

Section 14: Integration

This Agreement comprises the entire integrated understanding between the Parties concerning the Project, and supersedes all prior negotiations, representations, or agreements.

Section 15: Governing Law

The law governing this Agreement shall be the laws of the State of California and the venue of any action brought hereunder shall be in Los Angeles County, California. All parties shall bear their own costs and attorneys' fees in the event of any such action.

Section 16: Non-Waiver

No delay or failure by any Party to exercise or enforce at any time any right or provision of this Agreement shall be considered a waiver thereof or of such Party's right thereafter to exercise or enforce each and every right and provision of this Agreement. A waiver to be valid shall be in writing and need not be supported by consideration. No single waiver shall constitute a continuing or subsequent waiver.

Section 17: Joint Drafting

All parties have participated in the drafting of this Agreement and have been represented by counsel at all times. The rule of construction that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

Section 18: Entire Agreement

This writing contains the entire agreement of the Parties relating to the subject matter hereof; and the Parties have made no agreements, representations, or warranties either written or oral relating to the subject matter hereof which are not set forth herein.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective as of the date first hereinabove written.

APPROVED AS TO FORM:

Marcia L. Scully
General Counsel

By: _____
Deputy General Counsel

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Jeffrey Kightlinger
General Manager

By: _____
Debra Man, Assistant General Manager and Chief Operating Officer

APPROVED AS TO FORM:

By: _____
General Counsel

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

By: _____
General Manager

APPROVED AS TO FORM:

By: _____
General Counsel

EL TORO WATER DISTRICT

By: _____
General Manager

EXHIBIT A

El Toro Recycled Water System Expansion Phase II Project

PROJECT DESCRIPTION

Overview

The proposed El Toro Recycled Water System Expansion Phase II Project (Project) will be owned and operated by El Toro Water District (El Toro). The Project will expand El Toro's existing recycled water distribution system by approximately 28,500 feet. The project will deliver up to 350 acre-feet per year (AFY) of recycled water to the City of Laguna Woods and within the El Toro's service area.

Project Facilities

The Project (shown in Figure 1) consists of two components:

West Side System Expansion: Extends the existing distribution system to the District's southwest boundary. It is approximately 20,600 feet of distribution pipeline. This will increase recycled water deliveries to the Laguna Woods Village in the City of Laguna Woods by 240 acre-feet per year (AFY).

East Side System Expansion: Extends the distribution system constructed in Phase I Project East Side System within the confines of the portion of the Laguna Woods Village Community bounded by El Toro Road and Avenida de la Carlota. It is approximately 7,900 feet of distribution pipeline. This will increase recycled water deliveries to the Laguna Woods Village in the City of Laguna Woods by 110 AFY.

Existing Projects

El Toro owns and operates an existing recycled water system consisting of a secondary and tertiary wastewater reclamation plant, distribution system, and storage (Existing Project). The Existing Project has a capacity of 1,175 AFY and is currently serving the Laguna Woods Village golf course, various landscaped areas, homeowners associations, school, and on-site process and irrigation uses within the water recycling plant's treatment facilities. There is now in effect an LRP agreement No. 123037 for the Existing project. Existing Project is not part of this agreement.

Source of Water

Source water for the Project will be tertiary treated water from the El Toro Water Recycling Plant.

End Users

The Project will serve recycled water to customers in El Toro's service area including the East and West sides of the Laguna Woods Village Community.

Points of Connection

Project facilities begin at the connection to the existing recycled water distribution pipeline and end at the following points of connection:

- End Users
- Sewer, storm drain, channel and potable system interties

Figure 1 (need a simplified map)

EXHIBIT B

ANNUALIZED CAPITAL COMPONENT

1. The Annualized Capital Component shall be computed using only costs incurred by El Toro for the Project. The Annualized Capital Component shall be computed using costs for the following:

   a. Design (including preliminary design) and construction management services.

   b. Construction of Project facilities, more particularly described in Exhibit A.

   c. Agency administration of the Project design, construction, and start-up, not to exceed three (3) percent of construction costs unless otherwise approved in writing by Metropolitan.

   d. Permits, including required data collection.

   e. Land, right-of-way and easements for the Project described in Exhibit A.

   f. Environmental documentation and mitigation measures directly related to the implementation or operation of the project and required to comply with applicable environmental permits and laws, including but not limited to the California Environmental Quality Act, National Environmental Policy Act, and the California and Federal Endangered Species Acts. Environmental documentation costs shall commence with the Notice of Preparation (NOP) and conclude with the filing of the Notice of Determination. Environmental documentation costs incurred prior to the NOP that are directly related to the environmental clearance of the Project may also be eligible, subject to review and approval by Metropolitan.

   g. All contributions as outlined in Section 5.4 of this Agreement shall be treated as negative capital cost values for the purpose of computing the Annualized Capital Component.

   h. The on-site retrofit costs, if paid by El Toro.

2. Cost of the following items shall not be used to calculate the Annualized Capital Component:

   a. Storm drains, sewer collection systems, and treatment and distribution facilities beyond the Project's points of connection

   b. Existing facilities, land, right-of-way, and easements

   c. Burbank recycled water facilities

   c. Feasibility studies

d. Deposit of any reserve funds required as a condition of financing

e. Payments made to another department or element of El Toro, unless otherwise approved in writing by Metropolitan

f. Public outreach, education, and water marketing activities including but not limited to preparing brochures and handout materials, training, meetings, and workshops

g. All others costs not specified in Section 1 of this Exhibit, unless otherwise approved in writing by Metropolitan

3. Annualized Capital Cost (ACCost) in dollars per year shall be computed using the following procedure:

a. For fixed-interest rate financing:

$$ACCost = CRF_1 \times P_1 + CRF_2 \times P_2 + ... + CRF_j \times P_j$$

Where:

P_j is each portion of incurred capital cost for Project with a distinct financing arrangement.

CRF_j is the capital recovery factor for each distinct financing arrangement, as follows:

$$CRF_j = [i \times (1+i)^n] / [(1+i)^n-1]$$

where:

i is the interest rate (%).

n is the term of financing (in years) commencing in the first Fiscal Year of Project operation. For all capital financing, cash expenditures, and grants and contributions received after the Project begins operation, annual payments shall be calculated, using above process, beginning in the Fiscal Year the costs occur.

j is the number of each separate financing element.

In the first Fiscal Year and Fiscal Year n+1 of production of Allowable Yield, each amortization for the calculation of ACCost shall be prorated by the number of days needed to achieve exactly n years of amortization following the first day of production of Allowable Yield.

b. For variable-interest rate financing, annual payments shall be computed based on the actual payments made in the applicable Fiscal Year according to El Toro's financing documents. Any principal payments toward the Project capital cost

before the Project operation will be treated as cash. El Toro shall provide Metropolitan with the accumulated paid principal pursuant to Section 5.1.

c. For fixed-interest rate financing with a non-uniform annual payment schedule, an economically-equivalent uniform annual payment schedule shall be calculated based on an "Internal Rate of Return" analysis to establish the annualized capital cost.

d. Project capital costs not covered by a financing arrangement described above and all grants and contributions as defined in Section 5.3 shall be amortized over 25 years at an interest rate equal to the lesser of:

a) Metropolitan's most recent weighted cost of long-term debt on June 30 in the year the capital expenditure occurred; or

b) The Fiscal Year average of the 25-bond Revenue Bond Index (RBI) as published in the Bond Buyer, or such other index that may replace the RBI, over the most recent Fiscal Year prior to the date the replacement cost was incurred.

All grants or contributions shall be amortized as negative capital cost values beginning in the year that money was received.

e. After the first Fiscal Year of operation, only refinancing changes which lower the Annualized Capital Component shall be included in the Annualized Capital Component calculation of each subsequent Fiscal Year.

f. If the Project capital cost is part of a broad financing arrangement, annual payments shall be calculated by prorating the annual payments of the broad financing using the ratio of the Project capital cost to the initial principal of the broad financing arrangement.

4. The Annualized Capital Component (ACCom) in dollars per acre-foot for purposes of determining the Project Unit Cost each Fiscal Year shall be calculated using the following formula:

$$ACCom = ACCost / Recovered\ Water$$

EXHIBIT C

OPERATION AND MAINTENANCE COMPONENT

1. The Operation and Maintenance Component shall be computed using only costs incurred by El Toro for the Project during the applicable Fiscal Year. The Operation and Maintenance Component shall be computed using only the following incurred costs:

   a. Professional consulting services for Project operation, maintenance and audit, excluding daily Project operation.

   b. El Toro paid salaries only for plant operators and distribution system maintenance staff directly related to the operation and production of Allowable Yield will be eligible up to the following amount:

   ($0) X (CPI / 249.936)

   Where, CPI is the All Urban Consumers Consumer Price Index published by the U.S. Bureau of Labor Statistics in July for Los Angeles, Riverside and Orange County, CA for July in the applicable Fiscal Year and 249.936 is the CPI published for July 2016.

   c. Chemicals and supplies for Project operation and maintenance.

   d. Net electrical energy (recovered energy shall be deducted from energy purchased) for Project operations. Metropolitan shall not pay for electrical energy cost if El Toro fails to install electrical metering devices.

   e. Contractor services and supplies for Project facilities, operation, maintenance and repair to maintain reliable system operation and achieve regulatory compliance.

   f. Monitoring required by permits, including water quality sampling and analysis of Recycled Water produced by the Project.

   g. All contributions as outlined in Section 5.4 of this Agreement shall be treated as negative operation and maintenance cost values for the purpose of computing the Operation and Maintenance Component.

   h. Replacement costs of Project parts.

2. Costs of the following items shall not be used to calculate the Operation and Maintenance Component:

   a. Operation and maintenance of any facilities beyond the Project's points of connection.

   b. Payments made to another department or element of El Toro, unless otherwise approved in writing by Metropolitan.

c. Public outreach, education, and water marketing activities including but not limited to preparing brochures and handout materials, training, meetings, and workshops.

d. Fines, penalties, settlements, or judgments due to Project operation.

e. All others costs not specified in Section 1 of this Exhibit, unless otherwise approved in writing by Metropolitan.

3. The Annualized Operation and Maintenance Component (O&MC) in dollars per acre-foot for purposes of determining the actual Project Unit Cost each Fiscal Year shall be calculated using the following formula:

O&MC = (Actual Annual Cost of O&M) / (Recovered Water)

EXHIBIT D

PERFORMANCE PROVISIONS

1. The following performance provisions apply:

   a. Metropolitan will terminate this Agreement if construction has not commenced within two years after Agreement execution. As opposed to Provision 1b below, there is no established appeal process for this outcome.

   b. Metropolitan will terminate this Agreement if Allowable Yield is not delivered within four years after Agreement execution. The Project sponsor(s) may appeal this decision to Metropolitan's Board of Directors.

   c. If the Allowable Yield during Fiscal Years 4 through 7 after Agreement execution does not reach the target yield of 50% of the Ultimate Yield, then Metropolitan will reduce the Ultimate Yield by the target shortfall using the highest Allowable Yield produced in that four year period. For example, the Ultimate Yield of a project with the following performance will be revised from 350 to 300 AFY for Scenario 1 while there would be no adjustment under Scenario 2:

      Project Ultimate Yield = 350 AFY

	Scenario 1	Scenario 2
Fiscal Year	Allowable Yield (AFY)	Allowable Yield (AFY)
4	60	60
5	80	90
6	90	175
7	125	200

      50% of the Ultimate Yield = 0.50 x 350 = 175 AFY

      Scenario 1: Shortfall = 175 - 125 = 50 AFY
      Revised Ultimate Yield = 350 - 50 AFY = 300 AFY

      Scenario 2: Since, the Allowable Yield in the Fiscal Year 6 is 175 AFY, no adjustment is required. Ultimate Yield remains at 350 AFY.

   d. If the Allowable Yield during Fiscal Years 8 through 11 after Agreement execution does not reach the target yield of 75 percent of the Ultimate Yield (or the Revised Ultimate Yield), then Metropolitan will reduce the Ultimate Yield (or the Revised Ultimate Yield) by the target shortfall using the highest Allowable Yield produced in that period. For Example, the Ultimate Yield of the project in this example with the following performance will be reduced to 255 AFY for Scenario 1 and while there would be no adjustment under Scenario 2:

	Scenario 1	Scenario 2
Fiscal Year	Allowable Yield (AFY)	Allowable Yield (AFY)
8	150	210
9	160	250
10	170	275
11	180	280

Scenario 1: Revised Ultimate Yield = 300 AFY (see above calculations in 1c)
75% of Ultimate Yield = 0.75 x 300 = 225 AFY
Shortfall = 225 – 180 = 45 AFY
Revised Ultimate Yield = 300 – 45 = 255 AFY

Scenario 2: Ultimate Yield = 350 AFY
75% of ultimate Yield = 0.75 x 350 = 263 AFY
Since, the Allowable Yield in the Fiscal Year 10 is greater than 263 AFY, no adjustment is required.

e. If the Allowable Yield during Fiscal Years 12 through 15 after Agreement execution (and every four-year period thereafter) does not reach the target yield of 75 percent of the Ultimate Yield (or revised Ultimate Yield), then Metropolitan will reduce the Ultimate Yield (or the Revised Ultimate Yield) by the target shortfall using the highest Allowable Yield produced in that period. The adjustment will be made using the same methodology shown in the above examples.

EXHIBIT E

MWD Administrative Code Section 4401 (c)

§ 4401. Rates

(c) For purposes of agreements existing under the Local Resource Program, Local Project Program, Groundwater Recovery Program and other similar programs, references to the "full service water rate," "full service treated water rate," "treated non-interruptible water rate" or "other prevailing rate" or to the "reclaimed water rate" or "recycled service rate" shall be deemed to refer to the sum of the System Access Rate, Water Stewardship Rate, System Power Rate, the expected weighted average of Tier1 Supply Rate and Tier 2 Supply Rate (equal to the estimated sales revenues expected from the sale of water at the Tier 1 and Tier 2 Supply Rates divided by the total District sales in acre-feet expected to be made at the Tier 1 and Tier 2 Supply Rates), a Capacity Charge expressed on a dollar per acre-foot basis and Treatment Surcharge.

(The text in this exhibit cannot be modified. It is a quote taken from MWD's Admin Code)

EXHIBIT F

PAYMENT AND REIMBURSEMENT PROVISIONS

In addition to the performance provisions in Exhibit D, the following performance provisions apply. If El Toro fails to comply with this provision, Metropolitan, in its sole discretion, may require reimbursement for a portion of the previous LRP payments toward the Project as outlined below.

1. Agreement term is 25 years after the project starts operation
2. For operational years 1 through 15, LRP payments will be up to $475/AF, calculated annually per Section 1.4.
3. For operational years 16 through 25, the LRP payments will be zero.
4. Project must produce and use at least a minimum amount of recycled water (Baseline), as defined below, in the years 16 through 25.
5. Unless approved by Metropolitan in writing, the Baseline, in AFY, is the average of project production during years 1 through 15, calculated in year 16 of operation.
6. If Baseline production is not achieved, El Toro shall reimburse Metropolitan for the shortfall in that year as follows:

   Reimbursement ($) = $135/AF x Shortfall (AF)

7. Reimbursement calculations will be completed during annual Reconciliation Process, as outlined in Section 5 for each operational year of 16 through 25.
8. Maximum Reimbursement would be equal to the difference between the total payments under options 1 and 2 during the first 15 years, calculated in year 16 of operation.

Example for year 20

Baseline = 250 AF (calculated in year 16)

Maximum Reimbursement = $26,000 (calculated in year 16)

Total reimbursements to date = $20,000 (some of reimbursements in years 16 thru19)

Remaining reimbursement = $26,000 - $20,000 = $6,000

Actual project production in year 20 = 200 AF

Shortfall = 250 - 200 = 50 AF

Reimbursement in year 20 = $135/AF x 50 AF = $6,750

Since the remaining reimbursement is only $6,000, reimbursement in year 20 is $6,000.

Since the Maximum Reimbursement is achieved, there will be no more calculations for years 21 through 25.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Item No. 5-7

ACTION ITEM
November 16, 2016

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Dick, Hinman, Finnegan)

Robert Hunter
General Manager

Staff Contact: Keith Lyon

SUBJECT: **LRP Agreement between Metropolitan, MWDOC and Santa Margarita Water District for the Lake Mission Viejo Advanced Purification Water Treatment Facilities Project.**

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to execute the final Local Resources Program agreement with Metropolitan Water District of Southern California and Santa Margarita Water District substantially in the form as attached for the Lake Mission Viejo Advanced Purification Water Treatment Facilities Project, subject to review and approval by Legal Counsel of any final agreement changes.

COMMITTEE RECOMMENDATION

Committee will review this item on November 16, 2016 and make a recommendation to the Board.

SUMMARY

In March 2016, Santa Margarita Water District (SMWD) submitted a Local Resources Program (LRP) application through MWDOC to Metropolitan Water District (MET) for the Lake Mission Viejo Advanced Purification Water Treatment Facilities (APWTF) Project. MET staff reviewed the application, and developed a LRP agreement (attached) for consideration by both MWDOC and SMWD prior to consideration by MET's Board. As the MET member agency, MWDOC's approval is required before MET's Board may consider the Project; the MET Board approval is scheduled for the December 2016 MET Board meeting.

Budgeted (Y/N): N	Budgeted amount: n/a	Core _X_	Choice __
Action item amount: none	Line item:		
Fiscal Impact (explain if unbudgeted):			

SMWD's APWTF will provide treated recycled water to Lake Mission Viejo to refill evaporation that will equally reduce SMWD's demand for MET treated Full service water. Estimated annual yield is about 300 AF, but will vary based on evaporation rates.

DETAILED REPORT

Lake Mission Viejo is owned and operated by the Lake Mission Viejo Association (LMVA) which is located in the City of Mission Viejo and SMWD's service area. Currently, evaporation from the Lake is refilled by LMVA purchasing MET treated water from SMWD. The Lake Mission Viejo Advanced Purification Water Treatment Facilities (APWTF) Project will provide treated recycled water to refill the Lake, which will equally reduce SMWD's demand for MET treated full service water.

The APWTF will consist of micro screens followed by a combination of microfiltration or ultrafiltration and reverse osmosis (UF/RO or MF/RO). Then, the water will receive additional disinfection by ultraviolet irradiation (UV). Chemicals will be introduced to adjust pH for the removal of ammonia to reduce the nitrogen loading to the Lake. Source water to the APWTF will be provided from a combination of recycled waters from SMWD's Oso Creek WRP, the 3A WRP, Barrier Water (treated captured surface runoff), and recycled water stored in Upper Oso Reservoir.

In early 2016, SMWD was putting together the project details, the financing plan, the engineering plans and completing CEQA for the Lake Mission Viejo Project. MWDOC had previously held meetings with MET and SMWD staff in 2015 to discuss the LRP process relative to a number of proposals being considered, including the Lake Mission Viejo Project. Because of these prior discussions, SMWD was aware that MET would not proceed with any work on an LRP Agreement until such time as the CEQA process had been completed. The SMWD Board approved the CEQA process on February 18, 2016. SMWD staff then began completing the documentation required to submit to MET for an LRP Agreement.

Because this project was different from a typical water purification project, the "demand" being satisfied was Lake Mission Viejo evaporation make-up; which was currently supplied using imported potable water from MET, MWDOC staff had verified with MET staff that the project would meet the full intent of the LRP Program. On March 18, 2016, MWDOC received an email confirmation that MET had received the LRP package submittal from SMWD/MWDOC for the Lake Mission Viejo Project and indicated that:

> "SMWD may proceed with the project construction. However, such construction is at SMWD's sole financial risk and Metropolitan will not be obligated to make any payments unless and until our Board's approval and execution of an agreement for funding the Project."

Start of construction at this point in time meant ordering the equipment for the water treatment process to fast-track the construction due to the visibility of the project given the drought situation.

In the LRP application, SMWD selected LRP incentive Option 2, which provides a higher incentive amount (up to $475/AF) for a shorter period (15 years instead of 25 years). The agreement term will be 25 years, and Project production is required to continue after the

initial 15 years even though no LRP financial incentives will be provided by MET during the last 10 years of the Agreement term

MET staff will recommend approval of the Project by MET's Board during its December 13 Board meeting contingent on both the MWDOC and SMWD Board's taking action on the Draft Agreement prior to December 13. As the MET Member Agency, MWDOC must approve the agreement before the project can be considered by MET's Board of Directors. SMWD's Board approval of the LRP Agreement is scheduled for November.

The LRP Agreement follows the standard MET template, but includes two additions due to recent changes:

1. Section 2.4 has been added in response to a requirement for MET to comply with the Patriot Act, and the regulations administered by the Office of Foreign Assets Control of the US Department of Treasury related to bond issuance.

2. Exhibit F is new as a means to ensure that Project production will continue during the last 10 years of the LRP Agreement. SMWD selected LRP Financial Incentive Option 2, which can be up to $475/AF for the first 15 years, with a 25-year Agreement term. The purpose of Exhibit F is to ensure that the Project will continue producing during the last 10 years of the 25-year term, or the agency will be required to refund to MET a portion of LRP Financial Incentives received during the first 15 years.

Staff recommends the Board of Directors authorize the General Manager to execute the final LRP Agreement with MET and SMWD substantially in the form as attached for SMWD's Lake Mission Viejo Advanced Purification Water Treatment Facilities Project, subject to review and approval by Legal Counsel of any final agreement changes.

AGREEMENT NO. 157434
LAKE MISSION VIEJO ADVANCED PURIFICATION
WATER TREATMENT FACILITIES PROJECT
2014 LOCAL RESOURCES PROGRAM AGREEMENT
BETWEEN
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
THE MUNICIPAL WATER DISTRICT OF ORANGE COUNTY, AND
SANTA MARGARITA WATER DISTRICT

Draft 11/18/16

(Note: Need a simple map/schematic for Exhibit A.)

AGREEMENT NO. 157434
LAKE MISSION VIEJO ADVANCED PURIFICATION
WATER TREATMENT FACILITIES PROJECT
2014 LOCAL RESOURCES PROGRAM AGREEMENT
BETWEEN
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY, AND
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AGREEMENT NO. 157434
LAKE MISSION VIEJO ADVANCED PURIFICATION
WATER TREATMENT FACILITIES PROJECT
2014 LOCAL RESOURCES PROGRAM AGREEMENT
BETWEEN
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA,
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY, AND
SANTA MARGARITA WATER DISTRICT

THIS AGREEMENT (Agreement) is made and entered into as of _____ by and between The Metropolitan Water District of Southern California (Metropolitan), Municipal Water District of Orange County (MWDOC), and Santa Margarita Water District (SMWD). Metropolitan, MWDOC, and SMWD may be collectively referred to as "Parties" and individually as "Party".

RECITALS

A. Metropolitan's Board of Directors, at its October 2014 meeting, established terms and conditions for the 2014 Local Resources Program (LRP) for local resource development projects within Metropolitan's service area for the purposes of improving regional water supply reliability. The 2014 LRP Program provides three LRP incentive payment structure options to choose from: (1) sliding scale incentives up to $340/AF over 25 years, (2) sliding scale incentives up to $475/AF over 15 years, or (3) fixed incentive up to $305/AF over 25 years. Under option 2, project must continue to produce for 25 years, even when LRP payments are reduced to zero after 15 years. If an agency fails to comply with this provision, Metropolitan may, at its sole discretion, require reimbursement for a portion of the previous LRP payments toward the project.

B. SMWD has chosen option 2 for this Project (defined below).

C. Metropolitan was incorporated under the Metropolitan Water District Act (Act) Statutes 1969, ch.209, as amended, [§§109.1 et seq. of the Appendix to the West's California Water Code] to transport, store and distribute water in the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura, within the State of California.

D. The Act empowers Metropolitan to acquire water and water rights within or without the state; develop, store and transport water; provide, sell and deliver water at wholesale for municipal and domestic uses and purposes; set the rates for water; and acquire, construct, operate and maintain any and all works, facilities, improvements and property necessary or convenient to the exercise of the powers granted by the Act.

E. MWDOC, as a member public agency of Metropolitan under the Act, is a wholesale purchaser within its service area of water developed, stored, and distributed by Metropolitan.

F. SMWD provides retail water and recycled water services within its service area.

G. Metropolitan's mission is to provide its service area with adequate and reliable water to meet present and future needs in an environmentally and economically responsible way.

H. SMWD seeks to enhance its local water supplies and reduce reliance on imported water by providing a direct replacement of potable water with recycled water to fill the demand of Lake Mission Viejo and other beneficial uses the District may develop in the future.

I. SMWD is constructing facility known as the "Lake Mission Viejo Advanced Purification Water Treatment Facilities" (Project) to deliver up to 300 acre-feet per year of advanced treated recycled water to fill Lake Mission Viejo, and requires Metropolitan's financial incentives to complete and operate the Project.

J. Metropolitan, MWDOC, and SMWD have determined that it is mutually beneficial for local water projects originating in the service area of SMWD to be developed as a supplement to Metropolitan's imported water supplies in order to meet future water needs.

K. Metropolitan in accordance with the LRP desires to assist in increasing distribution of recycled water by providing a financial incentive to SMWD to implement the Project.

L. MWDOC and SMWD believe that Metropolitan's continued financial contribution toward the cost of the Project will make Project operation economically viable, and is committed to implementation of the Project.

M. Metropolitan's LRP and the provisions for financial incentives are premised upon, and require verification of, actual costs for delivering recycled water from the Project.

N. The Parties believe the development of recycled water by the Project will benefit the local community within SMWD, MWDOC, and the region served by Metropolitan.

NOW, THEREFORE, in consideration of the promises and covenants hereinafter set forth, the Parties do agree as follows:

Section 1: Definitions

The following words and terms, unless otherwise expressly defined in their context, shall be defined to mean:

1.1 "Allowable Yield" shall mean the amount of Recycled Water delivered to End Users by SMWD from the Project in a Fiscal Year that is eligible to receive Metropolitan's financial assistance. Allowable Yield shall be used for non-potable uses through direct deliveries to End Users. Allowable Yield shall not exceed Ultimate Yield and shall exclude Recycled Water that Metropolitan reasonably determines will not reduce MWDOC's or SMWD's demand for Metropolitan's imported water. Unless otherwise approved in writing by Metropolitan, Allowable Yield shall exclude: (1) Recycled water provided by existing projects, (2) Allowable Yield from other projects with active or terminated LRP or Local Projects Program agreements; (3) groundwater, surface water,

or potable water deliveries to supplement the Recycled Water system; and (4) disposed recycled water.

1.2 "End User" shall mean Lake Mission Viejo that purchases Allowable Yield furnished by this Project within SMWD's service area.

1.3 "Estimated LRP Contribution" shall mean the advanced financial contribution in dollars per acre-foot, not to exceed $475 per acre-foot, Metropolitan pays for Allowable Yield to SMWD for monthly billing purposes until the Final LRP Contribution is calculated pursuant to procedures in Section 5. LRP payments are for up to 15 years after project starts operation but project must continue to produce for 25 years, even after LRP payments are reduced to zero after 15 years, subject to reimbursement provisions outlined in Exhibit F, incorporated herein by this reference.

1.4 "Final LRP Contribution" shall mean the financial contribution, not to exceed $475 per acre-foot, by Metropolitan to the Project for Allowable Yield. The Final LRP Contribution for the Project is equal to the Project Unit Cost minus Metropolitan's prevailing full service treated water rate as defined in Exhibit E attached hereto and incorporated herein by this reference.

1.5 "Fiscal Year" shall mean a Metropolitan Fiscal Year which begins on July 1 and ends on June 30 of the following calendar year.

1.6 "Project" shall mean the Lake Mission Viejo Advanced Purification Water Treatment Facilities, as defined in Exhibit A attached hereto and incorporated herein by this reference, being developed by SMWD to deliver the Ultimate Yield. SMWD shall notify Metropolitan prior to making any changes to the Project that requires new environmental documentation other than an addendum to the existing environmental documentation. Metropolitan shall inform SMWD of Metropolitan's decision to include or exclude the Project change to this Agreement.

1.7 "Project Unit Cost" shall mean the actual cost to distribute an acre-foot of Recycled Water by the Project and is comprised of an Annualized Capital Component and an Operation and Maintenance Component, as specified in Exhibits B and C attached hereto and incorporated herein by this reference.

1.8 "Recycled Water" shall mean treated municipal wastewater which, subject to regulatory requirements, is suitable for beneficial uses.

1.9 "Recovered Water" shall mean all types of water including Recycled Water and groundwater, or other water delivered for beneficial use to any users by the Project in a Fiscal Year.

1.10 "Ultimate Yield" is 300 acre-feet per Fiscal Year and subject to reduction provisions outlined in Exhibit D, incorporated herein by this reference.

Section 2: Representations and Warranties

2.1 SMWD warrants that it is able and has a right to sell Allowable Yield from the Project.

2.2 SMWD warrants that neither it nor any of its agents discriminate against employees or against any applicant for employment because of ancestry, creed, religion, age, sex, color, national origin, denial of family and medical care leave, marital status, medical condition, mental or physical disability (including HIV and AIDS), and further warrants that it requires all contractors and consultants performing work on the Project to comply with all laws and regulations prohibiting discrimination against employees or against any applicant for employment because of ancestry, creed, religion, age, sex, color, national origin, denial of family and medical care leave, marital status, medical condition, mental or physical disability (including HIV and AIDS).

2.3 SMWD warrants that it has or will comply with the provisions of the California Environmental Quality Act for each and all components of the Project facilities.

2.4 SMWD represents and warrants that both 1) SMWD and 2) to SMWD's knowledge, its directors, officers, employees, subsidiaries and sub-consultants, are not engaged in any business transactions or other activities prohibited by any laws, regulations or executive orders relating to terrorism, trade embargoes or money laundering ("Anti-Terrorism Laws"), including Executive Order No. 13224 on Terrorist Financing, effective September 24, 2001 (the "Executive Order"), the Patriot Act, and the regulations administered by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of Treasury, including those parties named on OFAC's Specially Designated Nationals and Blocked Persons List. SMWD is in compliance with the regulations administered by OFAC and any other Anti-Terrorism Laws, including the Executive Order and the Patriot Act. In the event of any violation of this section, Metropolitan shall be entitled to immediately terminate this Agreement and take such other actions as are permitted or required to be taken under law or in equity.

Section 3: Ownership and Responsibilities

3.1 SMWD shall be the sole owner of Project facilities. Metropolitan shall have no ownership right, title, security interest or other interest in the Project facilities.

3.2 SMWD shall be solely responsible for all design, environmental compliance, right-of-way acquisitions, permits, construction, and cost of the Project and all modifications thereof.

3.3 SMWD shall be solely responsible for operating and maintaining the Project, in accordance with all applicable local, state, and federal laws. Metropolitan shall have no rights, duties or responsibilities for operation and maintenance of Project facilities.

3.4 SMWD shall install, operate, and maintain metering devices for the purpose of measuring the quantity of Recovered Water and Allowable Yield delivered to each End User.

3.5 SMWD shall also provide electrical metering devices to accurately measure the energy used for the Project to determine incurred operation and maintenance costs. Metropolitan shall not pay for electrical energy costs if SMWD fails to install electrical metering devices.

3.6 SMWD shall at all times during the term of this Agreement, use its best efforts to operate the Project facilities to maximize Allowable Yield on a sustained basis.

3.7 SMWD shall assist Metropolitan in its effort to forecast future Project production and cost.

3.8 SMWD shall notify and provide Metropolitan with a copy of relevant agreements and payments if SMWD decides to convey water using Project facilities to any party that is not an End User.

Section 4: Invoicing Process

4.1 SMWD shall notify Metropolitan in writing not less than 30 days prior to the start of Project operation. Before the first invoice, MWDOC, SMWD, and Metropolitan shall meet to coordinate the agreement administration requirements and to determine the Estimated LRP Contribution based on historical cost data and expected Project activities. After the first year of operation, the Estimated LRP Contribution will be determined during the annual reconciliation process pursuant to Section 5.

4.2 After the start of Project operation, SMWD shall invoice Metropolitan monthly for the Estimated LRP Contribution based upon Allowable Yield delivered during the previous month. Metropolitan shall pay SMWD for invoiced Estimated LRP Contribution by means of a credit included on the next monthly water service invoice issued to MWDOC in accordance with Metropolitan's Administrative Code.

4.3 Pursuant to Metropolitan's Administrative Code, invoices for Estimated LRP Contribution must be received by Metropolitan before 3:30 p.m. on the third working day after the end of the month to receive credit for any preceding month on the next monthly water service invoices issued to MWDOC. Metropolitan will not pay for any invoiced Estimated LRP Contribution received more than six months following the end of any month in which a credit is claimed, and the Recycled Water claimed in any such late invoice shall not be included in the Allowable Yield.

4.4 Metropolitan, MWDOC, and SMWD have entered into agreements for development of local water resources projects in addition to this Agreement. Each agreement contains specific terms and conditions to determine project yield, payment process, and project performance and any adjustments to contractual yield and incentive payments. Unless approved in writing by Metropolitan, these agreements are independent from each other and, therefore, the yield produced under one agreement shall not be used to fulfill the performance requirements under other agreements. These provisions shall also apply to all future incentive agreements between Metropolitan, MWDOC, and SMWD.

Section 5: Reconciliation Process

5.1 After the start of Project operation and by December 31 of each year, SMWD shall provide Metropolitan with the following reconciliation data for the previous Fiscal Year: (a) records of Recovered Water and Allowable Yield; (b) supporting documentation of the actual cost of the Project required to perform the calculations prescribed in Exhibits B and C; (c) records of water deliveries to end users; (d) terms and schedule of payments of the Project's financing instruments; (e) a description of any changes to the Project's financing instruments; and (f) all contributions pursuant to Section 5.4.

5.2 If reconciliation data is not submitted by December 31 in accordance with Section 5.1, Metropolitan will assess a late penalty charge to SMWD as prescribed in Metropolitan's Administration Code, currently set at $2,500 in Section 4507. Metropolitan may suspend its payment of Estimated LRP Contribution if SMWD fails to provide reconciliation data by the ensuing April 1. During the suspension period, SMWD shall continue to invoice Metropolitan for the Estimated LRP Contribution based upon the Allowable Yield for water accounting purposes. Metropolitan will resume payment of the monthly Estimated LRP Contribution once complete data is received and the corresponding reconciliation is complete pursuant to Section 5.3. In the event SMWD fails to provide reconciliation data by December 31 of the following Fiscal Year, which is 18 months after the end of the Fiscal Year for which a reconciliation is required, this Agreement shall automatically terminate without notice or action by any Party and SMWD shall repay Metropolitan all Estimated LRP Contributions for which no reconciliation data was provided within 90 days of termination.

5.3 Within 180 days after Metropolitan receives complete data from SMWD, pursuant to Section 5.1, Metropolitan shall calculate the Final LRP Contribution for the Fiscal Year. The Final LRP Contribution shall then apply retroactively to all Allowable Yield for the applicable Fiscal Year. An adjustment shall be computed by Metropolitan for over- or under-payment for the Allowable Yield and included on the next monthly water service invoice issued to MWDOC. As part of this reconciliation, Metropolitan shall also consult with SMWD to determine the Estimated LRP Contribution for the following year based on historic cost data and expected Project activities.

5.4 The Parties agree that all contributions other than LRP incentives under this Agreement and contributions by MWDOC, including but not limited to grants provided by the U.S. Bureau of Reclamation and funding by private parties received prior to and during the term of this Agreement that offset eligible Project costs, shall be deducted from all respective cost components. During the reconciliation process, following receipt of such contributions, the Parties shall determine the equitable apportionment of such contributions for capital and/or operational purposes.

Section 6: Record Keeping and Audit

6.1 SMWD shall establish and maintain accounting records of all costs incurred for the construction, operation and maintenance, and replacement parts of the Project as described in Exhibits B and C. Accounting for the Project shall utilize generally accepted

accounting practices and be consistent with the terms of this Agreement. SMWD's Project accounting records must clearly distinguish all costs for the Project from SMWD's other water production, treatment, and distribution costs. SMWD's records shall also be adequate to determine Allowable Yield and Recovered Water to accomplish all cost calculations contemplated in this Agreement.

6.2 SMWD shall establish and maintain accounting records of all contributions including grants that offset eligible Project capital costs, operation and maintenance costs, and/or replacement costs, as outlined in Section 5.4.

6.3 SMWD shall collect Recovered Water and Allowable Yield data for each Fiscal Year of Project operation and retain records of that data based on the metering requirements in Section 3.4. In addition, SMWD shall collect and retain records of the total annual amount of water conveyed outside of SMWD's service area using Project facilities.

6.4 Metropolitan shall have the right to audit Project costs and other data relevant to the terms of this Agreement both during the Agreement term and for a period of three years following the termination of this Agreement. Metropolitan may elect to have such audits conducted by its staff or by others, including independent accountants, designated by Metropolitan. SMWD shall make available for inspection to Metropolitan or its designee, upon 30 days advance notice, all records, books and other documents, including all billings and costs incurred by contractors, relating to the construction, operation and maintenance of the Project; any grants and contributions, as described in Exhibits B and C, and capital cost financing. Upon 30 days advance notice and at Metropolitan's request, SMWD shall also allow Metropolitan's staff or its designee to accompany SMWD staff in inspecting SMWD's contractors' records and books for the purpose of conducting audits of Project costs.

6.5 In lieu of conducting its own audit(s), Metropolitan shall have the right to direct SMWD to have an independent audit conducted of all Project costs incurred in any Fiscal Year(s) pursuant to this Agreement. SMWD shall then have an audit performed for said Fiscal Year(s) by an independent certified public accounting firm and provide Metropolitan copies of the audit report within six months after the date of the audit request. The cost of any independent audit performed under this Agreement shall be paid by SMWD and is an allowable Project operation and maintenance cost pursuant to Exhibit C.

6.6 SMWD shall retain an independent auditor satisfactory to Metropolitan to conduct an initial audit of the Project costs and accounting record keeping practices and submit the results to Metropolitan with the first reconciliation data as outlined in Section 5.

6.7 SMWD shall keep all Project records for at least ten consecutive years prior to each cost audit per Section 6. SMWD shall maintain audited records for three years after the audit. SMWD shall keep unaudited Project records for at least three years following the termination of this Agreement.

6.8 If an audit of SMWD's reported Project costs cannot be provided, then those costs are not eligible under this Agreement. Based on the results of any project cost audit, an

adjustment for over- or under-payment of Allowable Yield for each applicable Fiscal Year shall be completed by Metropolitan and included in Metropolitan's next invoice issued to SMWD.

Section 7: Rate Structure Integrity

7.1 MWDOC and SMWD agree and understand that Metropolitan's rate structure as of January 1, 2004 ("Existing Rate Structure") provides the revenue necessary to support the development of new water supplies by local agencies through incentive payments in the Local Resources Program (LRP), Conservation Credits Program (CCP), and the Seawater Desalination Program (SDP). In particular, the Water Stewardship Rate is the component of Existing Rate Structure that provides revenue for the LRP, CCP and SDP. Further, SMWD and MWDOC acknowledge that Existing Rate Structure and all components within that rate structure were developed with extensive public input and member agency participation, and that the elements of Existing Rate Structure have been properly adopted in accordance with Metropolitan's rules and regulations.

7.2 (a) SMWD and MWDOC agree that Metropolitan's rates set under the Existing Rate Structure may be reset throughout the term of this Agreement to account for the cost of service, and that SMWD and MWDOC will address any and all future issues, concerns and disputes relating to Existing Rate Structure, through administrative opportunities available to them pursuant to Metropolitan's public board process. As such, SMWD and MWDOC agree if they file or participate in litigation or support legislation to challenge or modify Existing Rate Structure, including changes in overall rates and charges that are consistent with the current cost-of-service methodology, Metropolitan may initiate termination of this Agreement consistent with Section 7.4. below. Metropolitan agrees that any change in Existing Rate Structure, including changes in cost-of-service philosophy or methodology would be enacted only after collaboration and discussion with its member public agencies, and Metropolitan's public board review and approval process.

(b) Notwithstanding the foregoing, SMWD and MWDOC retain the right to file and/or participate in litigation and/or to support legislation without triggering the termination of this Agreement if there are material changes to Existing Rate Structure or changes in cost-of-service methodology used to set rates by future Metropolitan board action. SMWD and MWDOC also retain the right to file and/or support litigation should Metropolitan, in setting rates under Existing Rate Structure, fail to comply with public notice, open meeting, or other legal requirements associated with the process of setting water rates and related taxes, fees, and charges. SMWD and MWDOC agree that they will not file or participate in litigation, nor will they support legislation affecting Metropolitan's rate structure after any such change in rate structure or violation of the law regarding rate setting processes until, and unless, they have exhausted all administrative opportunities available to them pursuant to Metropolitan's public board process.

7.3 SMWD and MWDOC agree that all users of the Metropolitan conveyance and distribution system should support the LRP, CCP, and SDP, that such projects provide benefits to Metropolitan and the users of the system by making existing distribution and

conveyance capacity available for additional delivery, and that under Existing Rate Structure, the Water Stewardship Rate is an element of charges properly adopted by the Metropolitan Board and properly applied to water wheeled through the Metropolitan conveyance and distribution system.

7.4 Should SMWD or MWDOC file or support litigation, or sponsor or support legislation, that would challenge or be adverse to Existing Rate Structure, as described in Paragraph (a) of Section 7.2., Metropolitan's Chief Executive Officer may file a 90-day notice of intent to terminate this Agreement with Metropolitan's Executive Secretary, with copies to all members of Metropolitan's Board of Directors, and contemporaneously provide SMWD and MWDOC with a copy of the notice. Within 30 days of receipt of such notice, SMWD and MWDOC shall have the right to request, in writing, mediation of the dispute by a neutral third party with expertise in finance and rate setting. The mediator shall be selected by agreement of the Parties, or failing agreement within 60 days of such request for mediation, a mediator shall be selected by the Metropolitan Board of Directors from a list of at least four candidates, one each from SMWD and MWDOC, and two of which will be supplied by Metropolitan's Chief Executive Officer. The cost of the mediation shall be borne equally by the Parties. The request for mediation shall also serve to stay the 90-day notice of intent to terminate, but for no more than 90 days beyond the filing of the notice of request for mediation, unless otherwise agreed in writing by the Parties. If mediation does not result in an agreement acceptable to each party to this Agreement within the time provided herein, the notice of intent to terminate shall be reinstated. The Metropolitan Board of Directors shall act to approve or disapprove termination of this Agreement, and all of Metropolitan's obligations hereunder shall terminate if approved, on or before the ninetieth day following filing of the notice to terminate or, if mediation has been requested as described above, the ninetieth day following the request for mediation (or other date agreed in writing by the Parties.)

7.5 Metropolitan, SMWD and MWDOC agree that should litigation or legislation brought forth or sponsored by third parties result in changes to Existing Rate Structure, this Agreement will continue in effect unless mutually agreed in writing by the parties.

7.6 Should Metropolitan and its member agencies agree on an alternative rate and revenue structure that obviates the need for this section on Rate Structure Integrity, this Section shall be amended or deleted to conform to such action.

7.7 Notwithstanding the foregoing, Metropolitan shall have no power or authority under this Section to terminate this Agreement, and Metropolitan's General Manager shall not file a 90-day notice of intent to terminate this Agreement, if MWDOC (but not SMWD**)** files or participates in any litigation or supporting legislation to challenge or modify Existing Rate Structure, but SMWD transmits in writing to Metropolitan's General Manager within thirty (30) days of request therefore from Metropolitan, stating that SMWD has not participated directly or indirectly in the filing or prosecution of any litigation or the drafting or advocacy of any legislation to challenge or modify Existing Rate Structure, and indicates support for Existing Rate Structure.

Section 8: Term and Amendments

8.1 The Agreement shall commence on the first date herein written and shall terminate 25 years after the date SMWD notifies Metropolitan that the Project has begun operation, subject to provisions outlined in Exhibit D. LRP payments are for up to 15 years after project starts operation but project must continue to produce for 25 years, even after LRP payments are reduced to zero after 15 years, subject to reimbursement provisions outlined in Exhibit F, incorporated herein by this reference. The provisions regarding reconciliation and audit shall remain in effect until three years after Agreement termination.

8.2 This Agreement may be amended at any time by the written mutual agreement executed by each of the Parties.

8.3 In addition to the termination provisions provided for in Section 5.2, Section 7.4, 8.4, and Exhibit D, Metropolitan may terminate this Agreement, upon thirty (30) days notice to SMWD on the occurrence of one the following:

a. A material breach of this Agreement by any party other than Metropolitan; or

b. Metropolitan is not required to make payments to SMWD pursuant to the terms of this Agreement for a five-consecutive year period subsequent to Project operation.

8.4 Effective six (6) months after written notice to the Parties, this Agreement shall terminate with regard to all Parties upon the occurrence of the two events described in Subsection 8.4(a) and Subsection 8.4(b):

a. Metropolitan determines that it will no longer:

i. Provide incentives or other financial support to its member agencies for seawater desalination, water recycling, or groundwater recovery projects through the Local Resources Program, Seawater Desalination Program, or other similar programs; or

ii. Utilize the Water Stewardship Rate or a similar charge to fund the Local Resources Program, Seawater Desalination Program, or other similar programs; or

iii. Include the Water Stewardship Rate as a charge for all water conveyed on the system; and

b. A member of the MWDOC delegation to the Board of Directors of the Metropolitan Water District of Southern California votes in favor of the determination described in Subsection 8.4(a).

8.5 The termination provisions of Section 8.4 shall remain in effect only so long as all Metropolitan Local Resources Program, Seawater Desalination Program, or similar

program agreements approved by Metropolitan's Board of Directors after November 10, 2009 contain termination provisions materially in accord with Section 8.4 of this Agreement.

Section 9: Hold Harmless and Liability

9.1 Except for the sole negligence or willful misconduct of Metropolitan, SMWD agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan and its Board of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to SMWD's approval, construction, operation, repair or ownership of the Project, including any use, sale, exchange or distribution of Project water. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability, but shall exclude damages and losses that arise from the sole negligence or willful misconduct of Metropolitan.

9.2 SMWD shall include the following language in any agreement with any consultant or contractor retained to work on the Project:

"Except for the sole negligence or willful misconduct of Metropolitan, (Consultant) agrees at its sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan and its Board of Directors, officers, representatives, agents and employees from and against any and all claims and liability of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or the environment, or water quality problems) that arise out of or relate to SMWD's approval, construction, operation, repair or ownership of the Project. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorney fees, administrative and overhead costs, engineering and consulting fees and all other costs related to or arising out of such claim of liability, but shall exclude damages and losses that arise from the sole negligence or willful misconduct of Metropolitan."

Section 10: Notice

Any notice, payment or instrument required or permitted to be given hereunder shall be deemed received upon personal delivery or 24 hours after deposit in any United States post office, first class postage prepaid and addressed to the Party for whom intended, as follows:

If to Metropolitan:

The Metropolitan Water District of Southern California
Post Office Box 54153
Los Angeles, California 90054-0153
Attention: Manager, Water Resource Management

If to MWDOC:

Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92708
Attention: General Manager

If to SMWD:

Santa Margarita Water District
26111 Antonio Parkway
Rancho Santa Margarita, CA 92688
Attention: _____

Any Party may change such address by notice given to each of the other Parties as provided in this section.

Section 11: Successors and Assigns

The benefits and obligations of this Agreement are specific to the Parties and are not assignable without the express written consent of Metropolitan. Any attempt to assign or delegate this Agreement or any of the obligations or benefits of this Agreement without the express written consent of Metropolitan shall be void and of no force or effect.

Section 12: Severability

The partial or total invalidity of one or more sections of this Agreement shall not affect the validity of this Agreement.

Section 13: No Third Party Beneficiary

This Agreement does not create, and shall not be construed to create any rights enforceable by any person, partnership, corporation, joint venture, limited liability company, or any other form of organization or association of any kind that is not a party to this Agreement.

Section 14: Integration

This Agreement comprises the entire integrated understanding between the Parties concerning the Project, and supersedes all prior negotiations, representations, or agreements.

Section 15: Governing Law

The law governing this Agreement shall be the laws of the State of California and the venue of any action brought hereunder shall be in Los Angeles County, California. All parties shall bear their own costs and attorneys' fees in the event of any such action.

Section 16: Non-Waiver

No delay or failure by any Party to exercise or enforce at any time any right or provision of this Agreement shall be considered a waiver thereof or of such Party's right thereafter to exercise or enforce each and every right and provision of this Agreement. A waiver to be valid shall be in writing and need not be supported by consideration. No single waiver shall constitute a continuing or subsequent waiver.

Section 17: Joint Drafting

All parties have participated in the drafting of this Agreement and have been represented by counsel at all times. The rule of construction that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

Section 18: Entire Agreement

This writing contains the entire agreement of the Parties relating to the subject matter hereof; and the Parties have made no agreements, representations, or warranties either written or oral relating to the subject matter hereof which are not set forth herein.

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement effective as of the date first hereinabove written.

APPROVED AS TO FORM:

Marcia L. Scully
General Counsel

By: _____
Deputy General Counsel

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Jeffrey Kightlinger
General Manager

By: _____
Debra Man, Assistant General Manager and Chief Operating Officer

APPROVED AS TO FORM:

By: _____
General Counsel

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

By: _____
General Manager

APPROVED AS TO FORM:

By: _____
General Counsel

SANTA MARGARITA WATER DISTRICT

By: _____
General Manager

EXHIBIT A

LAKE MISSION VIEJO ADVANCED PURIFICATION WATER TREATMENT FACILITIES

Project Description

Overview

Lake Mission Viejo (Lake) is a 125 acre, 3,650 acre-foot (AF) man-made recreational lake that is owned and operated by Lake Mission Viejo Association (LMVA). The lake is filled using precipitation, groundwater, and potable water purchased from Santa Margarita Water District (SMWD), which is imported water purchased from Metropolitan Water District. The Lake Mission Viejo Advanced Purification Water Treatment Facilities (Project) will be owned and operated by SMWD. The Project is able to produce up to 600 acre-feet per year (AFY) of advanced treated recycled water. However, only 300 acre-feet per year of the recycled water, reflected in this agreement, is to replace imported water demand to fill up Lake Mission Viejo.

Project Facilities

The Project includes an advance recycled water treatment plant, which would be located at the SMWD's Finisterra Recycled Water pump Station site. The plant with a design capacity of 600 AFY would include micro screens, microfiltration or ultrafiltration, reverse osmosis, ultraviolet irradiation, and chemical pH adjustment to reduce nitrogen loading to the lake. No storage feature is included in the plant because it is designed to provide peak summer demand to the lake. The brine from the plant will be discharged either into an existing 12-inch sewer line, through a dedicated brine line that will convey the brine downstream of the plant, or SMWD to construct a brine concentrator to reduce water content of the brine.

Source of Water

Source water for the facility will be tertiary treated recycled water from SMWD's Oso Creek Water Reclamation Plant, Chiquita Water Reclamation Plant, or the Moulton Niguel Water District 3A Water Reclamation Plant.

Points of Connection

Project facilities begin at the connection to the existing recycled water distribution pipeline and end at the following points of connection:

- Existing inlet to Lake Mission Viejo
- Sewer, storm drain, channel and potable system interties

Figure 1 (need a simplified map)

EXHIBIT B

ANNUALIZED CAPITAL COMPONENT

1. The Annualized Capital Component shall be computed using only costs incurred by SMWD for the Project. The Annualized Capital Component shall be computed using costs for the following:

   a. Design (including preliminary design) and construction management services.

   b. Construction of Project facilities, more particularly described in Exhibit A.

   c. Agency administration of the Project design, construction, and start-up, not to exceed three (3) percent of construction costs unless otherwise approved in writing by Metropolitan.

   d. Permits, including required data collection.

   e. Land, right-of-way and easements for the Project described in Exhibit A.

   f. Environmental documentation and mitigation measures directly related to the implementation or operation of the project and required to comply with applicable environmental permits and laws, including but not limited to the California Environmental Quality Act, National Environmental Policy Act, and the California and Federal Endangered Species Acts. Environmental documentation costs shall commence with the Notice of Preparation (NOP) and conclude with the filing of the Notice of Determination. Environmental documentation costs incurred prior to the NOP that are directly related to the environmental clearance of the Project may also be eligible, subject to review and approval by Metropolitan.

   g. All contributions as outlined in Section 5.4 of this Agreement shall be treated as negative capital cost values for the purpose of computing the Annualized Capital Component.

   h. The on-site retrofit costs, if paid by SMWD.

2. Cost of the following items shall not be used to calculate the Annualized Capital Component:

   a. Storm drains, sewer collection systems, and treatment and distribution facilities beyond the Project's points of connection

   b. Existing facilities, land, right-of-way, and easements

   c. Burbank recycled water facilities

   c. Feasibility studies

d. Deposit of any reserve funds required as a condition of financing

e. Payments made to another department or element of SMWD, unless otherwise approved in writing by Metropolitan

f. Public outreach, education, and water marketing activities including but not limited to preparing brochures and handout materials, training, meetings, and workshops

g. All others costs not specified in Section 1 of this Exhibit, unless otherwise approved in writing by Metropolitan

3. Annualized Capital Cost (ACCost) in dollars per year shall be computed using the following procedure:

a. For fixed-interest rate financing:

$$ACCost = CRF_1 \times P_1 + CRF_2 \times P_2 + ... + CRF_j \times P_j$$

Where:

P_j is each portion of incurred capital cost for Project with a distinct financing arrangement.

CRF_j is the capital recovery factor for each distinct financing arrangement, as follows:

$$CRF_j = [i \times (1+i)^n] / [(1+i)^n-1]$$

where:

i is the interest rate (%).

n is the term of financing (in years) commencing in the first Fiscal Year of Project operation. For all capital financing, cash expenditures, and grants and contributions received after the Project begins operation, annual payments shall be calculated, using above process, beginning in the Fiscal Year the costs occur.

j is the number of each separate financing element.

In the first Fiscal Year and Fiscal Year n+1 of production of Allowable Yield, each amortization for the calculation of ACCost shall be prorated by the number of days needed to achieve exactly n years of amortization following the first day of production of Allowable Yield.

b. For variable-interest rate financing, annual payments shall be computed based on the actual payments made in the applicable Fiscal Year according to SMWD's financing documents. Any principal payments toward the Project capital cost

before the Project operation will be treated as cash. SMWD shall provide Metropolitan with the accumulated paid principal pursuant to Section 5.1.

c. For fixed-interest rate financing with a non-uniform annual payment schedule, an economically-equivalent uniform annual payment schedule shall be calculated based on an "Internal Rate of Return" analysis to establish the annualized capital cost.

d. Project capital costs not covered by a financing arrangement described above and all grants and contributions as defined in Section 5.3 shall be amortized over 25 years at an interest rate equal to the lesser of:

a) Metropolitan's most recent weighted cost of long-term debt on June 30 in the year the capital expenditure occurred; or

b) The Fiscal Year average of the 25-bond Revenue Bond Index (RBI) as published in the Bond Buyer, or such other index that may replace the RBI, over the most recent Fiscal Year prior to the date the replacement cost was incurred.

All grants or contributions shall be amortized as negative capital cost values beginning in the year that money was received.

e. After the first Fiscal Year of operation, only refinancing changes which lower the Annualized Capital Component shall be included in the Annualized Capital Component calculation of each subsequent Fiscal Year.

f. If the Project capital cost is part of a broad financing arrangement, annual payments shall be calculated by prorating the annual payments of the broad financing using the ratio of the Project capital cost to the initial principal of the broad financing arrangement.

4. The Annualized Capital Component (ACCom) in dollars per acre-foot for purposes of determining the Project Unit Cost each Fiscal Year shall be calculated using the following formula:

$$ACCom = ACCost / Recovered\ Water$$

EXHIBIT C

OPERATION AND MAINTENANCE COMPONENT

1. The Operation and Maintenance Component shall be computed using only costs incurred by SMWD for the Project during the applicable Fiscal Year. The Operation and Maintenance Component shall be computed using only the following incurred costs:

   a. Professional consulting services for Project operation, maintenance and audit, excluding daily Project operation.

   b. SMWD paid salaries only for plant operators and distribution system maintenance staff directly related to the operation and production of Allowable Yield will be eligible up to the following amount:

   ($TBD) X (CPI / 249.936

   Where, CPI is the All Urban Consumers Consumer Price Index published by the U.S. Bureau of Labor Statistics in July for Los Angeles, Riverside and Orange County, CA for July in the applicable Fiscal Year and 249.936 is the CPI published for July 2016.

   c. Chemicals and supplies for Project operation and maintenance.

   d. Net electrical energy (recovered energy shall be deducted from energy purchased) for Project operations. Metropolitan shall not pay for electrical energy cost if SMWD fails to install electrical metering devices.

   e. Contractor services and supplies for Project facilities, operation, maintenance and repair to maintain reliable system operation and achieve regulatory compliance.

   f. Monitoring required by permits, including water quality sampling and analysis of Recycled Water produced by the Project.

   g. All contributions as outlined in Section 5.4 of this Agreement shall be treated as negative operation and maintenance cost values for the purpose of computing the Operation and Maintenance Component.

   h. Replacement costs of Project parts.

2. Costs of the following items shall not be used to calculate the Operation and Maintenance Component:

   a. Operation and maintenance of any facilities beyond the Project's points of connection.

   b. Payments made to another department or element of SMWD, unless otherwise approved in writing by Metropolitan.

c. Public outreach, education, and water marketing activities including but not limited to preparing brochures and handout materials, training, meetings, and workshops.

d. Fines, penalties, settlements, or judgments due to Project operation.

e. All others costs not specified in Section 1 of this Exhibit, unless otherwise approved in writing by Metropolitan.

3. The Annualized Operation and Maintenance Component (O&MC) in dollars per acre-foot for purposes of determining the actual Project Unit Cost each Fiscal Year shall be calculated using the following formula:

O&MC = (Actual Annual Cost of O&M) / (Recovered Water)

EXHIBIT D

PERFORMANCE PROVISIONS

1. The following performance provisions apply:

   a. Metropolitan will terminate this Agreement if construction has not commenced within two years after Agreement execution. As opposed to Provision 1b below, there is no established appeal process for this outcome.

   b. Metropolitan will terminate this Agreement if Allowable Yield is not delivered within four years after Agreement execution. The Project sponsor(s) may appeal this decision to Metropolitan's Board of Directors.

   c. If the Allowable Yield during Fiscal Years 4 through 7 after Agreement execution does not reach the target yield of 50% of the Ultimate Yield, then Metropolitan will reduce the Ultimate Yield by the target shortfall using the highest Allowable Yield produced in that four year period. For example, the Ultimate Yield of a project with the following performance will be revised from 300 to 250 AFY for Scenario 1 while there would be no adjustment under Scenario 2:

      Project Ultimate Yield = 300 AFY

	Scenario 1	Scenario 2
Fiscal Year	Allowable Yield (AFY)	Allowable Yield (AFY)
4	60	60
5	80	90
6	90	160
7	100	110

      50% of the Ultimate Yield = 0.50 x 300 = 150 AFY

      Scenario 1: Shortfall = 150 - 100 = 50 AFY
      Revised Ultimate Yield = 300 - 50 AFY = 250 AFY

      Scenario 2: Since, the Allowable Yield in the Fiscal Year 6 is 160 AFY, no adjustment is required. Ultimate Yield remains at 300 AFY.

   d. If the Allowable Yield during Fiscal Years 8 through 11 after Agreement execution does not reach the target yield of 75 percent of the Ultimate Yield (or the Revised Ultimate Yield), then Metropolitan will reduce the Ultimate Yield (or the Revised Ultimate Yield) by the target shortfall using the highest Allowable Yield produced in that period. For Example, the Ultimate Yield of the project in this example with the following performance will be reduced to 190 AFY for Scenario 1 and while there would be no adjustment under Scenario 2:

	Scenario 1	Scenario 2
Fiscal Year	Allowable Yield (AFY)	Allowable Yield (AFY)
8	100	100
9	90	160
10	110	230
11	120	300

Scenario 1: Revised Ultimate Yield = 250 AFY (see above calculations in 1c)
75% of Ultimate Yield = 0.75 x 250 = 188 AFY
Shortfall = 188 – 120 = 60 AFY
Revised Ultimate Yield = 250 – 60 = 190 AFY

Scenario 2: Ultimate Yield = 320 AFY
75% of ultimate Yield = 0.75 x 320 = 240 AFY
Since, the Allowable Yield in the Fiscal Year 11 is greater than 188 AFY, no adjustment is required.

e. If the Allowable Yield during Fiscal Years 12 through 15 after Agreement execution (and every four-year period thereafter) does not reach the target yield of 75 percent of the Ultimate Yield (or revised Ultimate Yield), then Metropolitan will reduce the Ultimate Yield (or the Revised Ultimate Yield) by the target shortfall using the highest Allowable Yield produced in that period. The adjustment will be made using the same methodology shown in the above examples.

EXHIBIT E

MWD Administrative Code Section 4401 (c)

§ 4401. Rates

(c) For purposes of agreements existing under the Local Resource Program, Local Project Program, Groundwater Recovery Program and other similar programs, references to the "full service water rate," "full service treated water rate," "treated non-interruptible water rate" or "other prevailing rate" or to the "reclaimed water rate" or "recycled service rate" shall be deemed to refer to the sum of the System Access Rate, Water Stewardship Rate, System Power Rate, the expected weighted average of Tier1 Supply Rate and Tier 2 Supply Rate (equal to the estimated sales revenues expected from the sale of water at the Tier 1 and Tier 2 Supply Rates divided by the total District sales in acre-feet expected to be made at the Tier 1 and Tier 2 Supply Rates), a Capacity Charge expressed on a dollar per acre-foot basis and Treatment Surcharge.

(The text in this exhibit cannot be modified. It is a quote taken from MWD's Admin Code)

EXHIBIT F

PAYMENT AND REIMBURSEMENT PROVISIONS

In addition to the performance provisions in Exhibit D, the following performance provisions apply. If SMWD fails to comply with this provision, Metropolitan, in its sole discretion, may require reimbursement for a portion of the previous LRP payments toward the Project as outlined below.

1. Agreement term is 25 years after the project starts operation
2. For operational years 1 through 15, LRP payments will be up to $475/AF, calculated annually per Section 1.4.
3. For operational years 16 through 25, the LRP payments will be zero.
4. Project must produce and use at least a minimum amount of recycled water (Baseline), as defined below, in the years 16 through 25.
5. Unless approved by Metropolitan in writing, the Baseline, in AFY, is the average of project production during years 1 through 15, calculated in year 16 of operation.
6. If Baseline production is not achieved, El Toro shall reimburse Metropolitan for the shortfall in that year as follows:

   Reimbursement ($) = $135/AF x Shortfall (AF)

7. Reimbursement calculations will be completed during annual Reconciliation Process, as outlined in Section 5 for each operational year of 16 through 25.
8. Maximum Reimbursement would be equal to the difference between the total payments under options 1 and 2 during the first 15 years, calculated in year 16 of operation.

<u>Example for year 20</u>

Baseline = 250 AF (calculated in year 16)

Maximum Reimbursement = $26,000 (calculated in year 16)

Total reimbursements to date = $20,000 (some of reimbursements in years 16 thru 19)

Remaining reimbursement = $26,000 - $20,000 = $6,000

Actual project production in year 20 = 200 AF

Shortfall = 250 - 200 = 50 AF

Reimbursement in year 20 = $135/AF x 50 AF = $6,750

Since the remaining reimbursement is only $6,000, reimbursement in year 20 is $6,000.

Since the Maximum Reimbursement is achieved, there will be no more calculations for years 21 through 25.

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GENERAL MANAGER'S REPORT OF STAFF ACTIVITIES NOVEMBER 2016

Managers' Meeting	MWDOC held its Managers' meeting on October 20, 2016 at its office in Fountain Valley. In attendance were Michael Grisso (Buena Park); Howard Johnson (Brady); Paul Shoenberger and Phil Lauri (Mesa); Steffen Catron (Newport Beach); Andy Brunhart (SCWD); Art Valenzuela (Tustin); Dennis Cafferty (ETWD); Eric Bauman (San Juan Capistrano); Mike Dunbar (EBSD); Matt Collings (MNWD); Lisa Ohlund (EOCWD); Steve Conklin (YLWD); Mark Sprague (Fountain Valley); Paul Cook and Paul Weghorst (IRWD); Hector Ruiz (TCWD); Dave Rebensdorf (San Clemente); Jose Diaz (Orange): Dan Ferons (SMWD); David Spitz (Seal Beach); Brian Ragland (Huntington Beach); Cel Pasillas (Garden Grove); and Karl Seckel; Charles Busslinger; Keith Lyon; Heather Baez; Melissa Baum-Haley; Kevin Hostert; Jonathan Volzke; and myself of staff. The agenda included the following: 1. OC Flood Control District Encroachment Process 2. State Water Use Regulations Update 3. Orange County Emergency Services Agreement 4. OC Water Reliability Study Final Report 5. MWDOC's 2017 Legislative Policy Principles The next meeting is scheduled for November 17, 2016.
Environmental Leaders	Director Sat Tamaribuchi and Karl and I continued planning the second meeting of Environmental Leaders to discuss the Bay-Delta fisheries habitat issues and seek support for the Tunnel and Eco-Restore projects in the Delta. A Delta tour and discussion was held in September; a second meeting is planned for December 8. The effort is being coordinated with OC Coastkeeper and a number of the other "Keeper" organizations or associated entities they work with throughout the state.
American Association of University Women	Director Susan Hinman and Karl and I participated in an hour-long presentation to the American Association of University Women in San Juan Capistrano.

MET ITEMS CRITICAL TO ORANGE COUNTY	
MET's Water Supply Conditions	October 1, 2016 marked the beginning of the Water Year 2017. While it is not possible to accurately say whether water year 2017 will be wet or dry, we can expect that on average future droughts will become increasingly challenging due to the expected warmer temperatures. However, as of October 24, 2016, the 2017 Water Year has begun with 7.3 inches of accumulated precipitation at the 8-station index, resulting in 300% of normal. While Lake Shasta is at 59% capacity, which is 99% of normal, and Lake Orville is at 44% capacity, which is 72% of normal; San Luis Reservoir remains at 26% of capacity. The low San Luis Reservoir level is a result of two factors. Water is being delivered to the Delta, instead of San Luis, to benefit Salmon which are in need of colder water. Additionally, water is being diverted to assist with salt water intrusion in the Delta. On the Colorado River reservoir front, as of October 3, 2016, the water level at Lake Mead was at 1,075.36 ft. with 9.63 MAF of storage, or 37% of capacity. The water level at Lake Powell was at 3,610.92 ft. with 12.82 million acre-feet of storage, or 53% of capacity. The total system storage was at 30.17 MAF, or 51% of capacity, which is about 121,000 AF less than this time last year. With expected SWP and Colorado River deliveries reaching 2.11 Million AF for 2016 and MET demands totaling 1.75 MAF, MET anticipates it will increase its dry-year storage from 900 TAF to 1.3 MAF.
MET's Finance and Rate Issues	**<u>MET Financial Report</u>** At the October MET Finance and Insurance Committee, MET staff presented its quarterly financial review for the first quarter of FY2016-17. At the end of the first quarter, the cumulative water sales through September were 127.5 thousand acre-feet (TAF) (21%) lower than budgeted and 83.2 TAF (15%) lower than the five year average. While the monthly sales are tracking under budget, they are higher than this point last year. Sales at the end of the second quarter will give greater insight on "Budget to Actual" estimates. Of note, a $36 million credit was received for the State Water Contract. Nonetheless, the current State Water Project budget projections remain on target.

Colorado River Issues	**<u>Metropolitan Submits its 2017 Colorado River Water Request</u>** On September 15, MET submitted its annual Colorado River Water request to the Bureau of Reclamation (Reclamation). MET's 2017 water request included its basic apportionment and an estimate of water supplies made available by MET's Imperial Irrigation District (IID) Conservation Program, the PVID fallowing program, the IID-San Diego County Water Authority transfer and exchange program, and water conserved by the All-American and Coachella Canals. The total initial estimate of water available to Metropolitan in 2017 is 960,000 acre-feet. This figure does not represent any agricultural adjustments, which could be positive or negative, nor storing or taking delivery of any Intentionally Created Surplus (ICS) supplies to or from Lake Mead. If additional Colorado River supplies are needed in 2017, MET could take delivery of ICS or develop additional water management programs with its partners along the Colorado River. **<u>Proposed Lower Basin Drought Contingency Plan Refined</u>** In the summer of 2016, Lake Mead reached its lowest level since it was initially filled in the 1930s. Recent studies project an increased risk of Lake Mead falling to critically low levels, which could put all Colorado River water users in the Lower Basin at risk for water curtailments and supply uncertainty. To address this increased risk, representatives of the Reclamation, Arizona, California, Nevada, and water agencies within those states, including MET, developed a proposal to reduce the likelihood of Lake Mead falling to elevation 1,020 feet and to develop operational tools to provide greater flexibility to meet water supply needs. The proposed Lower Colorado River Basin Drought Contingency Plan (Plan) includes increasing but manageable reductions in water deliveries to each state within the Lower Basin in the event that Lake Mead continues to decline. It also includes provisions to help MET fill its Colorado River Aqueduct when needed to meet demands in its service area. As part of the incentive for California to participate, the proposed Plan includes increased flexibility to meet water supply needs. Implementation of the proposed Plan would significantly reduce the risk of Lake Mead reaching critically low levels within the next 10 years, which would significantly reduce the risk of potential water curtailments to California water agencies, including MET, and provide stability on the Colorado River to continue to implement water management

Colorado River Issues (Continued)	programs to meet MET's needs. The Plan would also confirm that MET has the ability to store and take delivery of ICS, bank water from Nevada, and explore binational opportunities to augment its water supplies. These programs have provided significant benefit to MET during California's ongoing drought, and lay the framework for MET to meet its Board-adopted policy principle of filling the Colorado River Aqueduct in years needed to meet its service area's water demands.
Bay-Delta/State Water Project Issues (continued)	**California WaterFix Petition Hearings** In September and October, the California WaterFix petition hearings before the State Water Resources Control Board (SWRCB) continued. Part 1 of the hearings addresses the effects of the project on legal users of water. The first segment (Part 1A) is the presentation of the project by the California Department of Water Resources (DWR) and Reclamation, and all parties have the opportunity to cross examine DWR and Reclamation witnesses. Part 1A of the WaterFix change petition hearing completed on September 27, 2016. On October 7, 2016, the State Water Board hearing officers for the California WaterFix Project water right change petition hearing issued a ruling addressing written testimony outside the scope of Part 1 of the hearing and other procedural matters. The October 7th ruling is posted on the State Water Board's website at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix The second segment, Part 1B, which began October 20, 2016, is the presentation of evidence by all opponents where they describe their potential alleged injury resulting from the proposed project. DWR and Reclamation will have the opportunity to cross-examine the evidence presented by the project opponents.
Bay Delta/State Water Project Issues	The Record of Decision (ROD), Notice of Determination (NOD), and Biological Opinion (Bio Op), are unlikely to be completed by the end of Calendar Year 2016. Part 2 of the hearings will commence only following the completion of the ROD/NOD and Bio Op. Part 2 is now scheduled to begin no sooner than Spring 2017 and will consider the effects of the project on fish and wildlife and review "appropriate flow" criteria.

Bay Delta/State Water Project Issues (Continued)	<u>California WaterFix Petition Hearings Schedule:</u>
	• Filed Petition — Aug 2015
	• Part 1
	  o Filed Written Testimony — May 2016
	  o Presentation of Testimony — Jul-Sep 2016
	  o Protestants Filed Testimony — Sep 2016
	  o Presentation of Protestant Testimony — Oct 2016
	• Initiation of Part 2 — After ROD/NOD & Bio Op, 2017
	
	<u>Delta Flood Emergency Management Plan</u>
	The United States Army Corps of Engineers (USACE) indicated that their approach for deploying emergency contract services during flood emergencies of the type following a major earthquake in the Delta is to solicit contracts through verbal proposals with work start up within a day of the emergency event. USACE also maintains nationwide emergency contracts that can be further deployed in short timeframes. These processes are effective in deploying emergency services to proper locations and at adequate resource levels.
	
	DWR calibration and validation of the Emergency Response Tool (ERT) for purposes of estimating real time repair and response to levee failure scenarios in the Delta has been delayed. After conducting representative ERT runs to validate times of repair and initiation of emergency freshwater pathway operations, the DWR Flood Emergency Management Office advises that the Delta Flood Emergency Management Plan will be able to be finalized by January 2017.
	
	California Office of Emergency Services (Cal OES) reported that the draft Northern California Flood Catastrophic Response Plan will be released several months after a unified federal review. As part of this process, Cal OES performed a water security evaluation to confirm adequate water depths and channel geometry for transit of various types of emergency vessels.

ENGINEERING & PLANNING	
Baker Treatment Plant	On October 25, the Baker Treatment Plant dedication ceremony took place. Director Sat Tamaribuchi and Karl, Heather, Kevin, Charles and Keith attended. The plant is scheduled to go on line in December.

Doheny Desalination Project	South Coast Water District is continuing to move the project forward and to look for potential partners and grant funding as they initiate the CEQA process. MWDOC is working on the decommissioning and removal of the test facilities at Doheny State Park. Plans, specifications, permitting and coordination with State Parks for the decommissioning work have been completed, plans and specifications have been prepared, bids are due on November 28 and staff will bring back a recommendation for an award of the contract in December with a start date in January. The Engineers estimate for the work is $370,000. MWDOC recently discussed with Jeff Mosher reviving the NWRI schedule with a Science Advisory Panel to review both the SJBA and the South Coast Water District Foundational Action Program Studies. Hopefully this effort will be launched very soon.
Poseidon Resources Ocean Desalination Project in Huntington Beach	OCWD is currently working on preparation of the CEQA documentation for the Poseidon Project. Work continues on the project integration into the water supplies for OC. Poseidon is continuing to work with the Coastal Commission for project approval and with the Santa Ana Regional Water Quality Control Board for the NPDES discharge permit.
Orange County Reliability Study	CDM-Smith has provided a final Technical Executive Summary to MWDOC which is being circulated for comments. Staff is in the process of drafting the short Elected Officials briefing summary for review by the MWDOC Board.
OC-28 Flow Metering Issue with MET	During June, July and August 2016, OCWD observed significant differences between MET's metering of connection OC-28 and OCWD's metering of the flows into OCWD's system of MET untreated Full service water. Over about a 3-month period, the differences between MET's and OCWD's metering could sum to around 750 AF (about 8% of total deliveries). Karl, Keith and Kevin met with Scott Nygren, Don Houlihan, John Vandengergh and Bill Dunivin from OCWD, and Sergio Escalante, Glen Wilkins, Ron Taraporewalla and Marty Smith from MET regarding potential metering differences between MET's OC-28 connection and OCWD's meters of MET untreated Full service deliveries. The OCWD observed discrepancies were shared with MET, and then MET, MWDOC & OCWD met to review the data already available, how MET's OC-28 & OC-28A connections operate, and how OCWD's groundwater recharge system is operated and metered. The next step is for MET staff to compile all related data and info, and

OC-28 Flow Metering (Continued)	develop a draft plan for a controlled flow test of MET's OC-28 connection and OCWD's system metering that will be reviewed with the group. A flow test will be scheduled, and the group will reconvene to review all pertinent data to try to determine what caused the observed discrepancies.
Service Connection CM-1 Cost Issues with MET	In September, Laguna Beach CWD began receiving groundwater from Newport Beach; this operation necessitated a shutdown of service connection CM-1 which is at the end of MET's Orange County Feeder. Shutting off the flows results in water getting stagnant and losing its chlorine residual making it undeliverable to customers. Since September, Kevin, Karl, and Keith have coordinated between MET, Newport Beach and Laguna Beach CWD for periodic "flushing" of the line prior to the water quality getting too bad for delivery. The operation requires the groundwater deliveries to be shut down; Newport Beach opens up service connection CM-8 for about 10 cfs for 2 hours to clear part of the line and take water into Big Canyon Reservoir; then LBCWD opens up CM-1 at 10 cfs for 2 hours to take water into their reservoir system. Following the high rate of deliveries, the groundwater deliveries are resumed. The above operation is only a temporary one. Discussions with MET have centered on a permanent "fix" at CM-1 whereby a "low flow" connection can be constructed which will allow a small about of MET water to be delivered concurrent with groundwater deliveries; the low flow is anticipated at 0.5 to 1 cfs which should be sufficient to keep the Orange County Feeder water quality at acceptable levels. MET has prepared drawings and a cost estimate of $93,000 for the low flow connection. LBCWD does not believe they should be responsible for the full costs and MET does not believe they should be responsible for any costs. The issue may be the only location in the MET service area where a MET pipeline joins a local pipeline at a service connection that essentially cannot be shut down for more than 10 days at a time. Discussions have been initiated with MET on the responsibility for the costs. It should be noted that the ultimate cost of the small connection may be more than $93,000 if the connection needs to be automated. Discussions regarding the design, operations and costs will continue.
UCI Water	Karl attended a UCI Emerging Leaders in Science and Society (ELISS) Fellows Local Forum titled "Seeking Resilience: A discussion on the future of Southern California's water System." The forum was hosted by three UCI Graduate Students who are part of a five campus National effort to stimulate discussions from multiple communities to identify opportunities for innovation in water systems. The purpose is to identify key trends, opportunities and challenges and lead to a series of proposals at both the local and national levels.

San Juan Basin Authority	Director Susan Hinman and Charles Busslinger attended the San Juan Basin Authority Board meeting in October. Among the items discussed was an exploration of expansion of Authority membership. The Authority Board passed a motion to create an ad hoc committee to consider recruiting additional members headed by Authority Vice President Wayne Rayfield and Authority Alternate Director Chuck Gibson. Additionally the Authority Board acted to approve a recruitment for an Authority Administrator as a contract position. The Board also received and filed a letter from the City of San Juan Capistrano Public Works and Utilities Director Steve May, confirming the cessation of groundwater pumping from the basin by the City through the end of November 2016 in order to allow the basin additional time to recover and ensure continued compliance with the provisions of their permit.
Lake Mission Viejo Water Purification Project	Director Jeff Thomas and Jonathan, Karl, Charles and Kevin attended the SMWD Lake Mission Viejo Water Purification Project dedication.
Society for Marketing Professional Services	Director Jeff Thomas and Karl participated in a Society for Marketing Professional Services luncheon meeting on water issues and reliability. The SMPS is the only marketing organization dedicated to creating business opportunities in the architectural, engineering and construction industry.
OC Flood Control District	Karl, Heather and John Lewis have continued to pursue opposition to the terms and conditions proposed by the OC Flood Control District for new encroachment permits for crossing of Flood Control property. Flood control is fee based on current market real estate values, a 7% return and 35 year agreements. This is one of a number of County Initiatives to raise revenue. Meetings have been held with all five of the Board of Supervisors to make them aware of our opposition and the reasons why. A meeting is scheduled with OCFCD on November 14 and the item is currently scheduled to go to the Board of Supervisors on November 22.
CDR Open House	Karl represented MWDOC at the Center for Demographic Research 20-year celebration and dedication of their new offices at Cal State Fullerton. The meeting was well attended by elected and County officials including Bill Gayk, the original founder of the CDR.
San Juan Watershed Project	Karl and Charles met with Dan Ferons and Don Bunts from SMWD to discuss upcoming issues with the San Juan Watershed Project to examine opportunities to move the project forward along with the Doheny Desalination Project.

OCWD Producers Meeting	The June 30, 2016 Accumulated Overdraft (379,000 AF); RO Brines Treatment Study; Cadiz Project; OCWD Alternative to a GW Sustainability Plan; a GW Remediation Projects update; the proposed OC County fees; ACWA's comment letter about the State water use regulations; and a report about GSWC's newest well were discussed when Keith, Charles, Kevin and Melissa attended the October Producers meeting
MET's 6-day Shutdown of Connection OC-59	Keith, Kevin and Colin participated in a conference call regarding MET's planned shutdown of the Rialto Pipeline. The Pipeline will be shut down Nov 14 – 19 for inspection of pre-stressed concrete pipe and replacement of a couple of small valves. During the shutdown, OCWD's connection OC-59 will be unavailable, however connection OC-28 will continue to be available for untreated Full service recharge deliveries.
EMERGENCY PREPAREDNESS	
Coordination with Member Agencies	The WEROC quarterly emergency coordinators meeting was on November 1 at MWDOC. The group was provided updates on the fuel trailer project, an initiative on the use of alternative fuel vehicles for emergency response, and AlertOC implementation needs. Additionally, they discussed this year's exercise lessons, an exercise schedule for 2017 based on an unknown water contaminant, and progress on the county-wide Water and Commodity Planning effort. Staff from South Coast and Laguna Beach County Water Districts shared lessons learned in testing their water outage plans. The President of TransFueler (the contractor for the fuel trailers) provided training to the staff of the 6 agencies who will be receiving the fuel trailers. The training included operational and safety concepts. Additionally, the first fuel trailer was on hand as part of the training. The agency staff was able to test and operate components of the fuel trailer to ensure understanding of operations, but also to provide TransFueler with feedback on the trailer design. There were some minor suggestions, but overall the agencies were very happy with the product. Moulton Niguel Water District took home the first trailer and will be field testing it to make sure the trailer works as expected.
Fall Exercise Activities	The fall exercise was held on September 29 and provided a good learning experience for all participants. The participating water utilities provided feedback during the WEROC Quarterly meeting and Kelly Hubbard will be

Fall Exercise Activities (Continued)	meeting with the County Operational Area staff to discuss issues and lessons learned. Once this second meeting occurs, staff will putting together an After-Action report that will be shared with the Board.
Coordination with the County of Orange	At the newly built Disney EOC in Anaheim, Kelly attended the October Orange County Emergency Management Organization (OCEMO) meeting. Attendees were provided a tour of the EOC and an overview of the resiliency concepts that were built into the new facility. Additionally, the County of Orange Public Works presented on a new County contract for disaster debris removal. All OC government agencies can create cooperative agreements with the approved vendor based on the County public works bid process. Debris removal is a significant hurdle in disaster recovery and often requires a contractor to help manage the response in order to meet FEMA guidelines for reimbursement. Agencies must also have debris management plans for reimbursement of these costs. In Anaheim, Kelly attended the Urban Area Security Initiative (UASI) meeting. The group was reviewing grant proposals for 2017 grant funding. The committee will vote on the proposed projects on November 9.
Coordination with Outside Agencies	Kelly spoke at the American Red Cross Sea to Desert Region Disaster Preparedness Academy in Anaheim on Disaster Risk Assessments for Emergency Plans. The Academy is a 1 day training for residents, volunteers and emergency managers to enhance their emergency preparedness. Kelly attended an Earthquake Preparedness Initiative seminar hosted by the Southern California Association of Governments (SCAG), in coordination with the newly formed Dr. Lucy Jones Center for Science and Society, at the Discovery Science Center. The meeting was largely an introduction to a new effort Dr. Lucy Jones is leading to discuss policy and earthquake resilience. Many of the concepts of concern she mentioned were related to water utility resilience. This is the first in a series of meetings and efforts to change earthquake resilience through policy. Kelly will continue to liaison with the Center to ensure representation from water utilities.
WEROC Emergency Operations Center (EOC) Readiness	Power Plus provided routine generator maintenance service, including a load bank test at the North EOC. The WEROC radio test was conducted from the North EOC. There were some interference issues for some agencies, but the interferences did not

EOC Readiness (Continued)	have a clear pattern to indicate if there is a specific problem with any particular pieces of equipment. A MET staff member with radio communications expertise offered to listen in to the next WEROC radio exercise and provide some input on possible reasons for the interference if it occurs again.
CESA Conference	In San Diego, Kelly attended the California Emergency Services Association (CESA) annual conference. This is the only conference for emergency management professionals in the State of California. In addition to the conference sessions, Kelly attended the pre-conference training session on Disaster Finance provided by one of the top experts in the nation on Stafford Act Disaster Funding.
IAEM Conference	In Savannah, Georgia, Kelly also attended the International Association of Emergency Managers (IAEM) conference. The conference was an excellent learning opportunity and even resulted in some applicants for the WEROC Coordinator position that is open for application. Kelly received her Certified Emergency Manager (CEM) certificate at a special dinner at the conference recognizing all new CEM individuals. This certification is a significant career achievement demonstrating knowledge of, expertise in, and contribution to the field of Emergency Management. It is internationally recognized.
WATER USE EFFICIENCY	
California Urban Water Conservation Council	On October 19, Joe Berg chaired the Plenary meeting of the California Urban Water Conservation Council (CUWCC) via webinar with more than 90 members participating. The focus of the meeting was to present a progress report to the full membership on the transition of the organization to a member services based organization. The next meeting is scheduled for December 7, 2016 in the Sacramento area. On November 2, Joe chaired the Finance and Governance Committee at the CUWCC's office in Sacramento. In addition to CUWCC staff, members from MWDOC, East Bay MUD, MET, Pacific Institute, and Bay Institute participated in the meeting whose focus was to discuss necessary changes to the bylaws to allow for the transition of the organization to a member services based organization.
Urban Advisory Group	On October 20, Joe participated in the Urban Advisory Group (UAG) meeting hosted by the California Department of Water Resources (DWR) and State Water Resources Control Board (SWRCB) at the West Sacramento Civic Center Galleria. This meeting focused on proposals

Urban Advisory Group (Continued)	from state agencies to implement Executive Order B-37-16. UAG member input centered on refinements to water shortage contingency planning and long-term efficiency standards. The next meeting will be via webinar on November 18, 2016. On November 8, DWR and SWRCB staff visited Orange County to provide a workshop on proposals to implement the Emergency Regulations. This workshop gave all retail agencies in Orange County an opportunity to learn, firsthand, about the current proposals.
California-Nevada American Water Works Association	In San Diego on October 24-26, Joe attended the Fall Conference of the California-Nevada American Water Works Association where he provided a presentation summarizing MWDOC's water loss control efforts in preparation for compliance with SB 555. On November 1, MWDOC hosted the Early Adopter Training for the California-Nevada AWWA Water Loss Control Technical Assistance Program. Ten agencies attended this training.

Metropolitan Water Conservation Work Group Meeting	On October 20, Andrew Kanzler attended MET's Water Use Efficiency Workgroup meeting. Approximately 30 member agencies participated in the meeting. Agenda items included:
	
	• MET Conservation Board Presentations for October
	  o Conservation Overview
	  o Conservation Report
	  o IRP Committee
	• Turf Removal and Rain Barrel Research Update
	• Sustainable Landscape Program
	• MET Programs Update
	  o Region-wide RFP
	  o Member Agency Administered Programs
	  o WSIP
	• Landscape Workshops and Survey Update
	• Member Agency Roundtable
	
	The next meeting is scheduled for November 17, 2016 at MET.

OC Water Use Efficiency Coordinators Workgroup	On November 3, Beth Fahl, Steve Hedges, Sarah Rae, Jessica Lieuw, Rachel Waite, Andrew, and Joe hosted the Orange County Water Use Efficiency Coordinators Workgroup Meeting. The meeting was held at MWDOC, and approximately 20 agencies participated. Highlights on the agenda included:

OC Water Use Efficiency Coordinators Workgroup (Continued)	• MWDOC Updates
	• Agency Roundtable/Problem Solving Roundtable
	  o Agency Drought Response Update
	• Executive Order B-37-16 Update
	• Public Affairs/Marketing Update
	  o Ideas for the 2017 Water Expo
	• Metropolitan Update
	  o Conservation Overview
	  o Conservation Report
	  o MET Programs Update
	  ▪ Region-wide Program
	  ▪ Member Agency Administered
	  ▪ WSIP
	• Water Use Efficiency Programs Update
	  o Umbrella Agreement
	  ▪ Amendment 1
	  o Turf Removal Program
	  o Smart Timer Grant Funding
	
	The next meeting is scheduled for December 1, 2016 at Newport Beach.

PUBLIC/GOVERNMENT AFFAIRS	
Member Agency Relations	Jonathan and Laura prepared a resolution for South Coast Water District Director Dietmeier on his retirement. Heather attended the MWDOC Member Agency Managers' meeting to provide a copy of MWDOC's Legislative Policy Principles and to ask for feedback and/or input. It was followed up with a reminder email two weeks later. Heather gave a presentation on the Governor's Executive Order B-37-16, implementing permanent conservation regulations, to the El Toro Water District Board. Tiffany, Jonathan, Bryce, Laura and Heather hosted the Governmental Affairs and Public Affairs Workgroup meeting at MWDOC. Tiffany participated on a panel of judges to identify winners of the "Mesa Water Matters" video contest..

Member Agency Relations (Continued)	Jonathan and Laura published the October edition of eCurrents. The story on MWDOC retiring its retirement debt was the most popular in the edition, by click-throughs. Laura staffed the ISDOC meeting on behalf of MWDOC and represented MWDOC at Stormwater meetings.
Community Relations	In San Diego, Heather attended the CSDA Conference and sat in on various sessions related to water and/or policy. Heather attended the "2017 Women to Watch" luncheon where Director Linda Ackerman and East Orange County Water District's General Manager, Lisa Ohlund were honored. Directors Barbre and Thomas and Heather and Ivan attended the Southern California Water Committee's Annual Dinner and Meeting. Heather attended the ACWA Region 10 event on "Advanced Water Purification" in Vista. Tiffany attended the "Women in Water" breakfast meeting featuring guest speaker Kathy Tiegs, President of ACWA. MWDOC Director Susan Hinman was also honored. The event was hosted by Mesa Water District.
Education	Jonathan and Laura attended a water-education forum sponsored by the Department of Water Resources at Chino Basin. Laura attended a second day of the conference at Jet Propulsion Laboratory in Pasadena. Jonathan and the education contractors gave a presentation on the water education programs to Mesa Water directors during a board workshop. Laura attended to note their comments. Laura organized a meeting between Director Tamaribuchi and the education contractors and Jonathan.
Media Relations	Jonathan wrote a news release on MWDOC retiring its retirement debt. He placed the news release on the ACWA home page and guided its pickup by BC Water News. Jonathan wrote a news release on Director Hinman's retirement event and distributed it to news outlets as well as posting it on the ACWA homepage. It is also on the MWDOC home page.

Media Relations (Continued)	Jonathan wrote a news release on Directors Opposing Prop. 53 and distributed it to news outlets as well as posting it on the Voice of OC homepage. It is also on the MWDOC home page. Jonathan wrote a news release on OC's October water usage and distributed it to news outlets. It is also on the MWDOC home page. Jonathan wrote a news release on the distribution of the OCAR door hangers, distributed it and posted it the ACWA homepage. It is also on the MWDOC home page. Jonathan reached out to the new OC Register environment/water reporter and set up a meeting with her and Bryce.
Special Projects	Laura conducted an online satisfaction survey of Realtors who used the MWDOC/OCAR door hangars to continue to improve the pilot project. Jonathan wrote an RFP for the whiteboard CHOICE program, distributed proposals to four member agencies for review and wrote the staff report for Board selection of a vendor. Jonathan wrote an RFP for OC Water Magazine CHOICE offering, distributed proposals to four member agencies for review and wrote the staff report for Board selection of a vendor. Tiffany and Bryce are currently working on itineraries, trip logistics, guest and Director requirements for the following inspection trips: 1. November 18, Director Dick, JPL/Diemer 2. January 20-21, Director McKenney, CRA/Hoover 3. Coordinating TBD dates for Infrastructure one-day, DVL one-day. 4. Finalized June 23-25 CRA date for Director Ackerman Tiffany and Bryce met with Fred O'Callaghan with JPL to finalize a schedule for the November 18 JPL/Diemer trip. Jonathan and Laura launched the Boy Scout merit badge program and Laura created a registration portal for the Scout program. More than 30 Scouts are signed up for the first clinic, on December 3, at El Toro Water District. Others are already signed up for a February 11 clinic at OCWD. Tiffany staffed Director Dick's State Water Project/Agriculture Trip.

Special Projects (Continued)	Tiffany and Heather staffed Director Ackerman's State Water Project trip. Director Hinman and Charles were also on the trip. Laura attended various MWDOC database and Laserfiche trainings. Tiffany organized a review panel of 8 MWDOC representatives and led the first meeting to determine a shortlist of vendors who will continue on to the interview process regarding the redesign of the agency's website www.mwdoc.com. 10 proposals were reviewed and scored, 3 vendors will continue forward in the process. Tiffany will be contacting vendors to set up interviews and will organize the next meeting of the review panel to determine individual department needs, concerns and suggestions prior to conducting interviews. Laura continued work on the weekly email sprinkler notifications and held a conference call with the vendor to work out bugs in the system. Tiffany has been preparing a community events action plan which will determine criteria for MWDOC participation by identifying purpose, strategy, goals and ROI. Jonathan and Tiffany met with Steve Greyshock to discuss an action plan for a MWDOC/ACCOC Water 101 booklet. Maribeth, Tiffany, Laura and Ivan planned and presented Director Hinman's retirement lunch. Bryce took photos during the event. Heather coordinated the proclamations from elected state and county officials. Jonathan and Laura coordinated local proclamations. Jonathan and Laura prepared the MWDOC resolution for Director Hinman on her retirement. Jonathan attended two records/documents retention workshops Jonathan attended a WEROC seminar. Tiffany met with Damon Micalizzi at YLWD to discuss current issues and upcoming projects. Tiffany and Bryce are preparing graphic materials for WEROC and the agency water trailers.

Special Projects (Continued)	Heather released the RFP for County Advocacy Services. Proposals are due by November 22 and will come before the Board for selection in December. Heather organized a DC luncheon planning meeting with our partner agencies and set timelines for the briefing book. Tiffany prepared an image for the USB drive given out to all DC luncheon attendees. This is an ongoing effort and future planning meetings will occur. Heather coordinated with WACO speaker, John Kingsbury, who traveled from Sacramento. She also attended a dinner the evening before WACO, and staffed the meeting the following morning.
Legislative Affairs	Heather coordinated the coalition letter to the Director of Orange County Public Works on the proposed Orange County Flood Control District license fee. Early signatories were Irvine Ranch Water District, City of Anaheim Public Works and Santa Margarita Water District. Input from all four agencies' attorneys was incorporated. A second letter with ten additional signatories was updated and sent to the Board of Supervisors in advance of the meetings with their staff. Heather and Melissa attended the MET member agencies legislative coordinators annual planning meeting. Heather participated in the ACWA Region 10 State Legislative Committee conference call in advance of the ACWA legislative planning meeting.
Water Summit	Directors Osborne and Thomas and Jonathan and Tiffany met with the OC Water Summit Ad Hoc Committee. Jonathan secured NBC weathercaster and comedian, Fritz Coleman, to serve as emcee.

pat meszaros
9/11/16

ITEM NO. 7

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
- Susan Hinman

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