

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

Jointly with the

PLANNING & OPERATIONS COMMITTEE

November 14, 2016, 8:30 a.m.

MWDOC Conference Room 101

P&O Committee:

Director L. Dick, Chair

Director S. Hinman

Director J. Finnegan

Staff: R. Hunter, K. Seckel, J. Berg,

H. De La Torre, K. Davanaugh,

Ex Officio Member: W. Osborne

MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

PUBLIC COMMENTS - Public comments on agenda items and items under the jurisdiction of the Committee should be made at this time.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - Determine there is a need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda. (Requires a unanimous vote of the Committee)

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

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ACTION ITEMS

1. APPROVE RECOMMENDATIONS IN THE EMERGENCY OPERATIONS CENTER (EOC) ASSESSMENT STUDY AND STAFF ACTIONS
2. EXECUTION AND IMPLEMENTATION OF WATER USE EFFICIENCY GRANT AGREEMENTS
3. LRP AGREEMENT BETWEEN METROPOLITAN, MWDOC AND EL TORO WATER DISTRICT FOR THE EL TORO RECYCLED WATER SYSTEM EXPANSION PHASE II PROJECT

4. LRP AGREEMENT BETWEEN METROPOLITAN, MWDOC AND SANTA MARGARITA WATER DISTRICT FOR THE LAKE MISSION VIEJO ADVANCED PURIFICATION WATER TREATMENT FACILITIES PROJECT
5. VENDOR SELECTION FOR PRODUCTION OF CHOICE WHITEBOARD VIDEOS
6. VENDOR SELECTION FOR PRODUCTION OF CHOICE OC WATER MAGAZINE

DISCUSSION

7. UPDATE REGARDING MWDOC/ANAHEIM AND MWDOC/SANTA ANA AGREEMENTS ON SHARED SERVICES
8. PRESENTATION BY IRWD REGARDING THE PALO VERDE IRRIGATION DISTRICT LAND PROJECT (approximate presentation time: 15 minutes)

INFORMATION ITEMS (The following items are for informational purposes only – background information is included in the packet. Discussion is not necessary unless a Director requests.)

9. SOLE SOURCE CONTRACT WITH CV STRATEGIES
10. 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
11. REVIEW OF ISSUES RELATED TO CONSTRUCTION PROGRAMS, WATER USE EFFICIENCY, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, DISTRICT FACILITIES, and MEMBER-AGENCY RELATIONS

ADJOURNMENT

NOTE: At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated, and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

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

discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.



ACTION ITEM
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 recommends (To be determined at Committee Meeting)

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



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.

Clarix Strategy Team

William Lim
Brent Woodworth
Cullen Armét

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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.

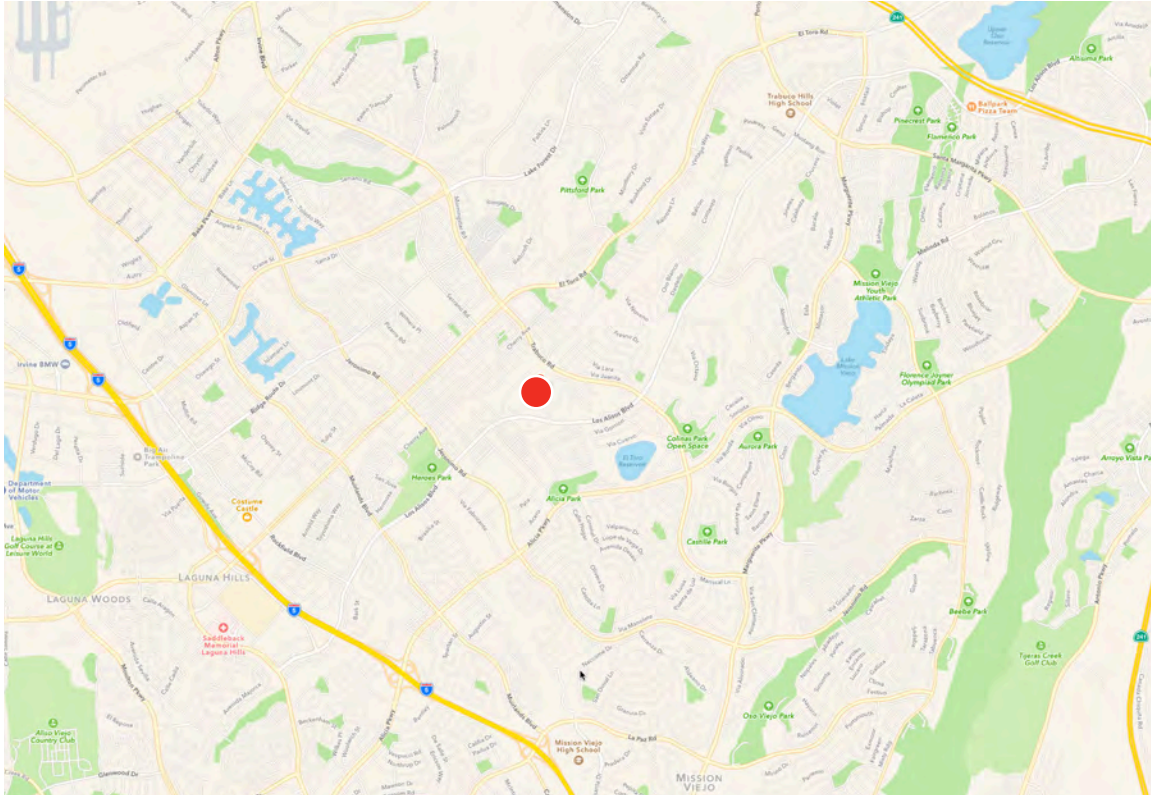


Figure 2: South EOC Location

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.

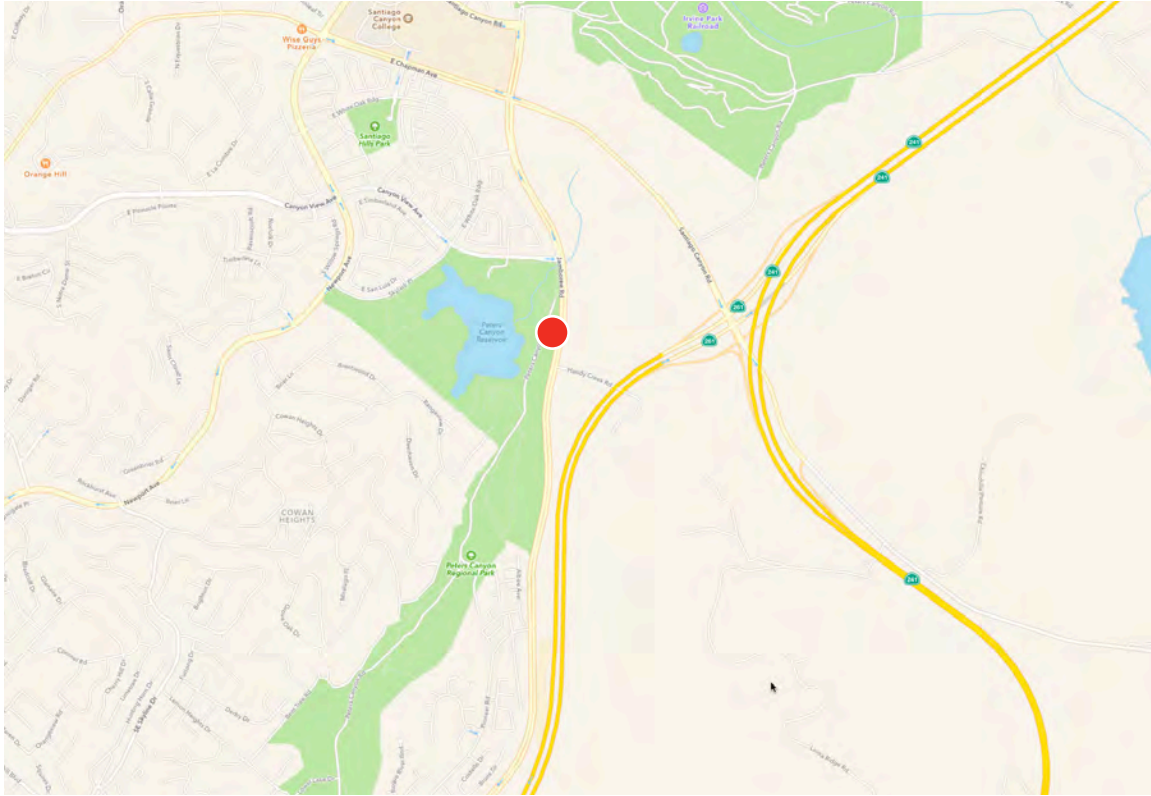


Figure 5: North EOC Location

Source: Apple Maps

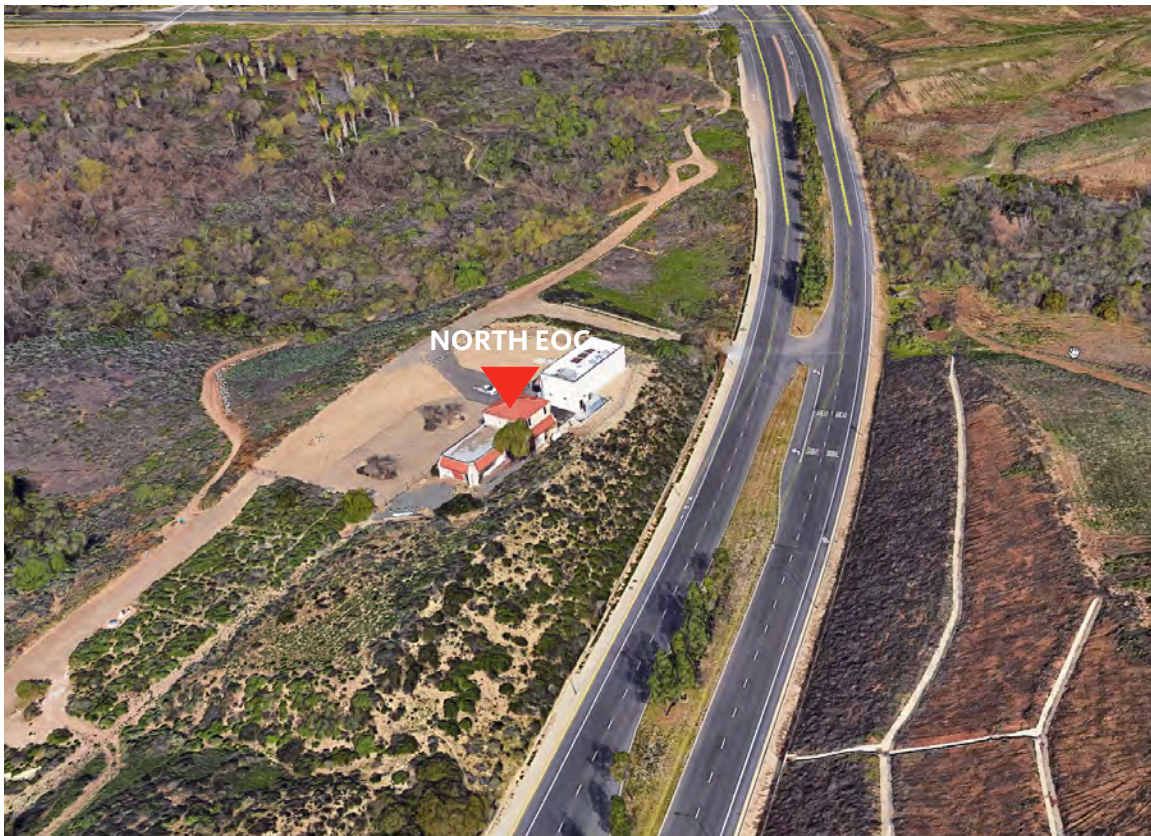


Figure 6: North EOC Aerial View

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.

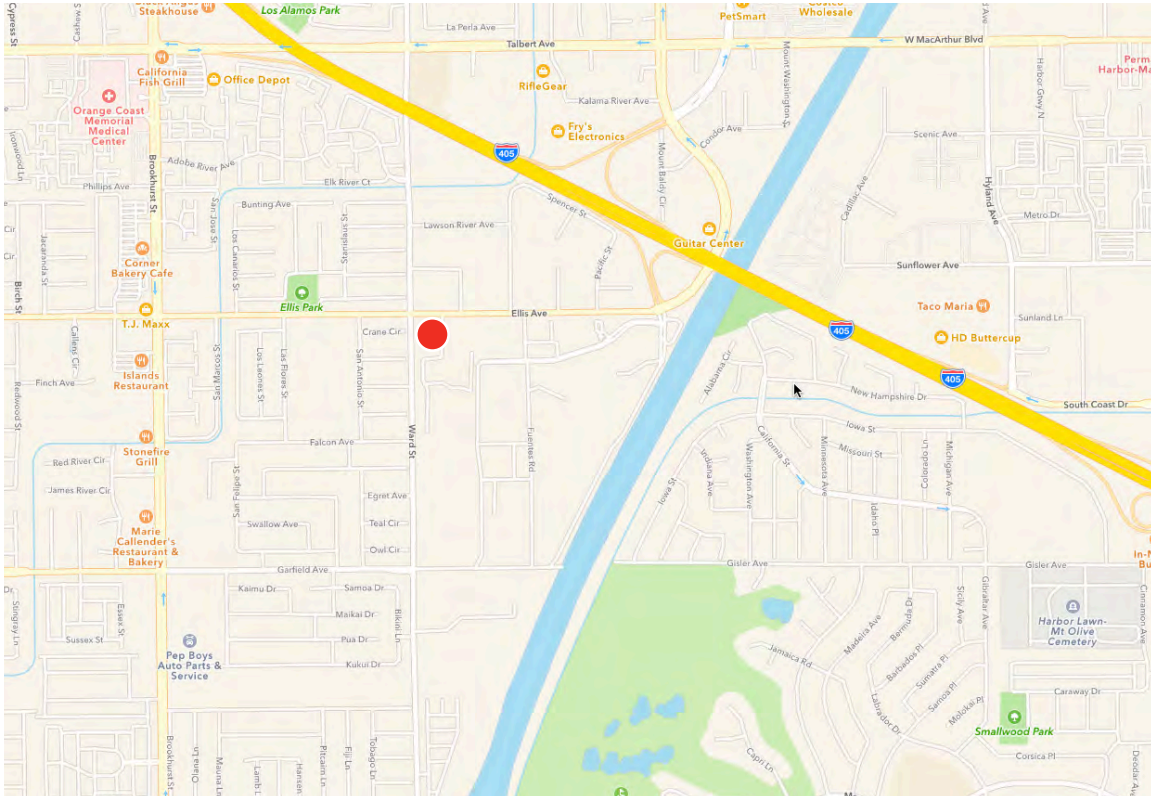


Figure 8: MWDOC Administration Building Location

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	<ul style="list-style-type: none"> Not felt except by a very few under especially favorable conditions
II	<ul style="list-style-type: none"> Felt only by a few persons at rest, especially on upper floors of buildings
III	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Felt by nearly everyone At night, many awakened Some dishes, windows broken Unstable objects overturned
VI	<ul style="list-style-type: none"> Felt by all, many frightened Some heavy furniture moved, a few instances of fallen plaster Damage slight
VII	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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+	<ul style="list-style-type: none"> 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

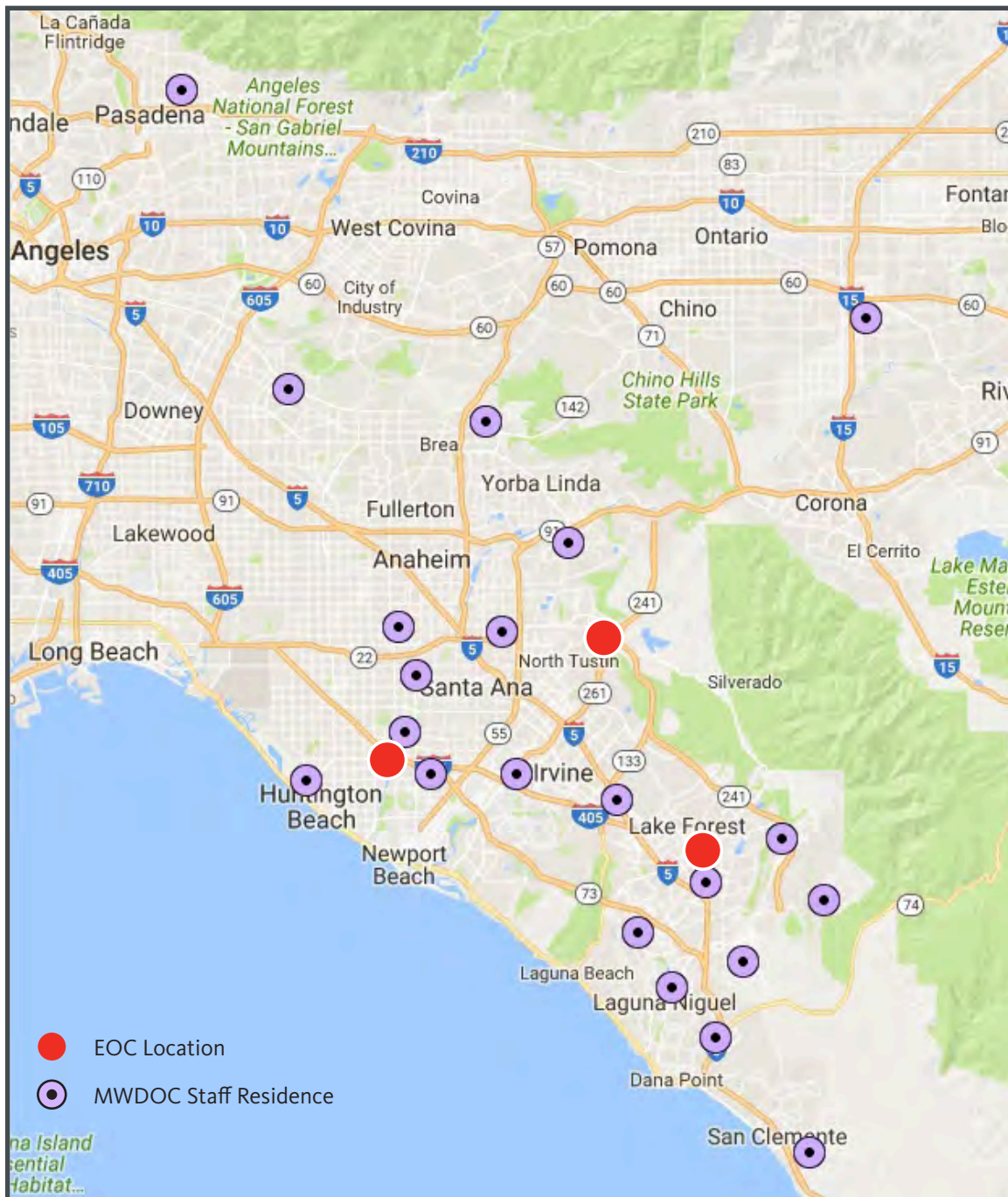


Figure 10: Residential Locations of MWDOC Staff

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, we recommend that MWDOC uses the South EOC site as its primary EOC location 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 a 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

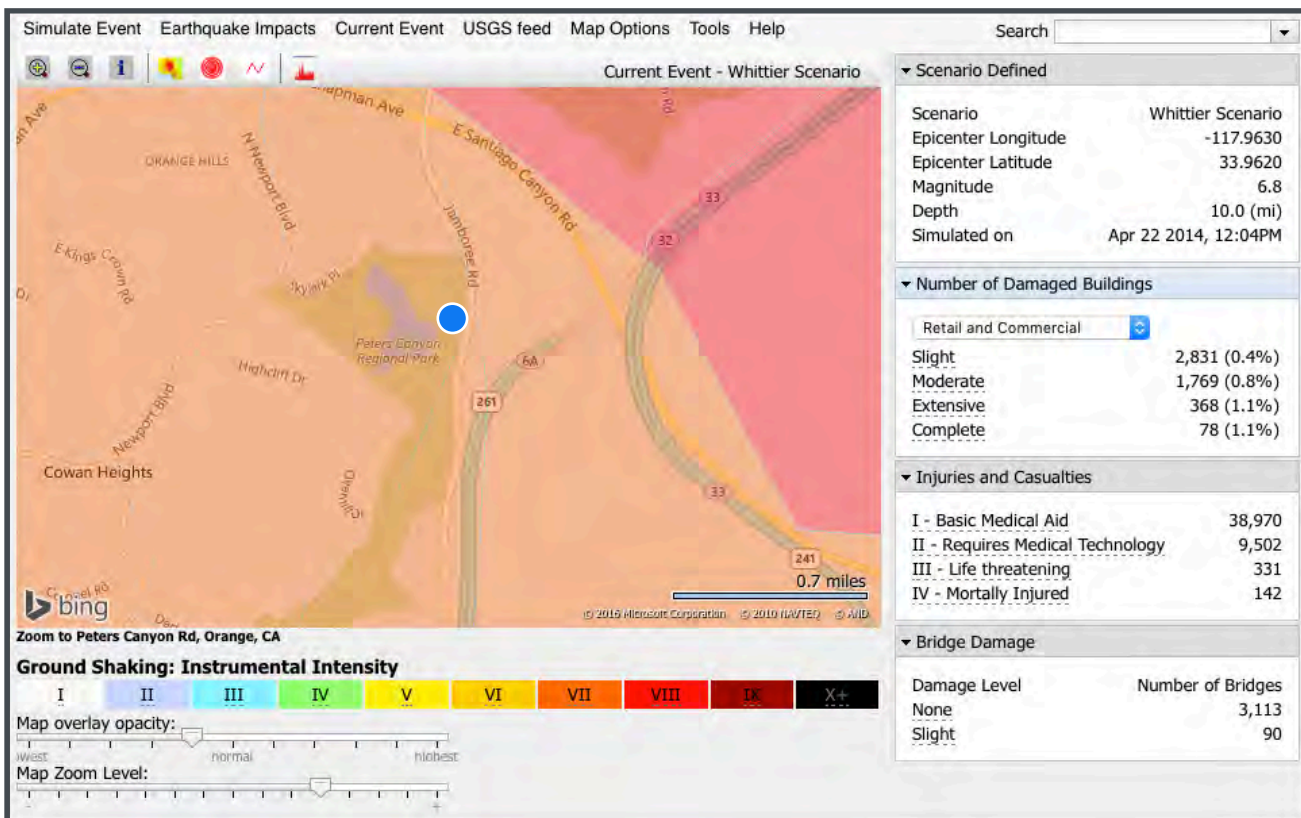
1. EARTHQUAKE ANALYSIS

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.

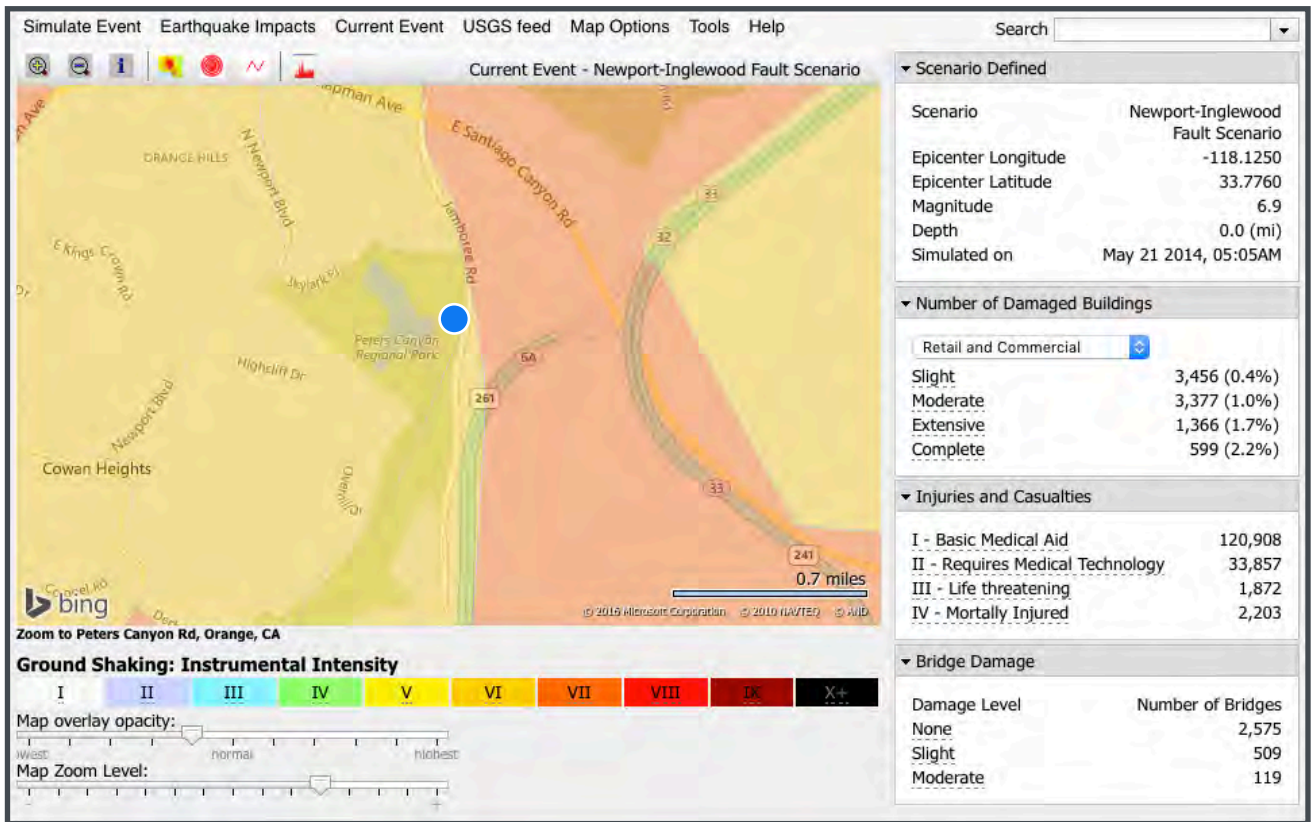
1. Whittier Earthquake (Magnitude 6.8)
2. Newport Inglewood Earthquake (Magnitude 6.9)
3. San Andreas Earthquake – Shake Out Scenario (Magnitude 7.8)

NORTH EOC SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY
Whittier (6.8)	VII
Newport-Inglewood (6.9)	VI
San Andreas (7.8)	VI

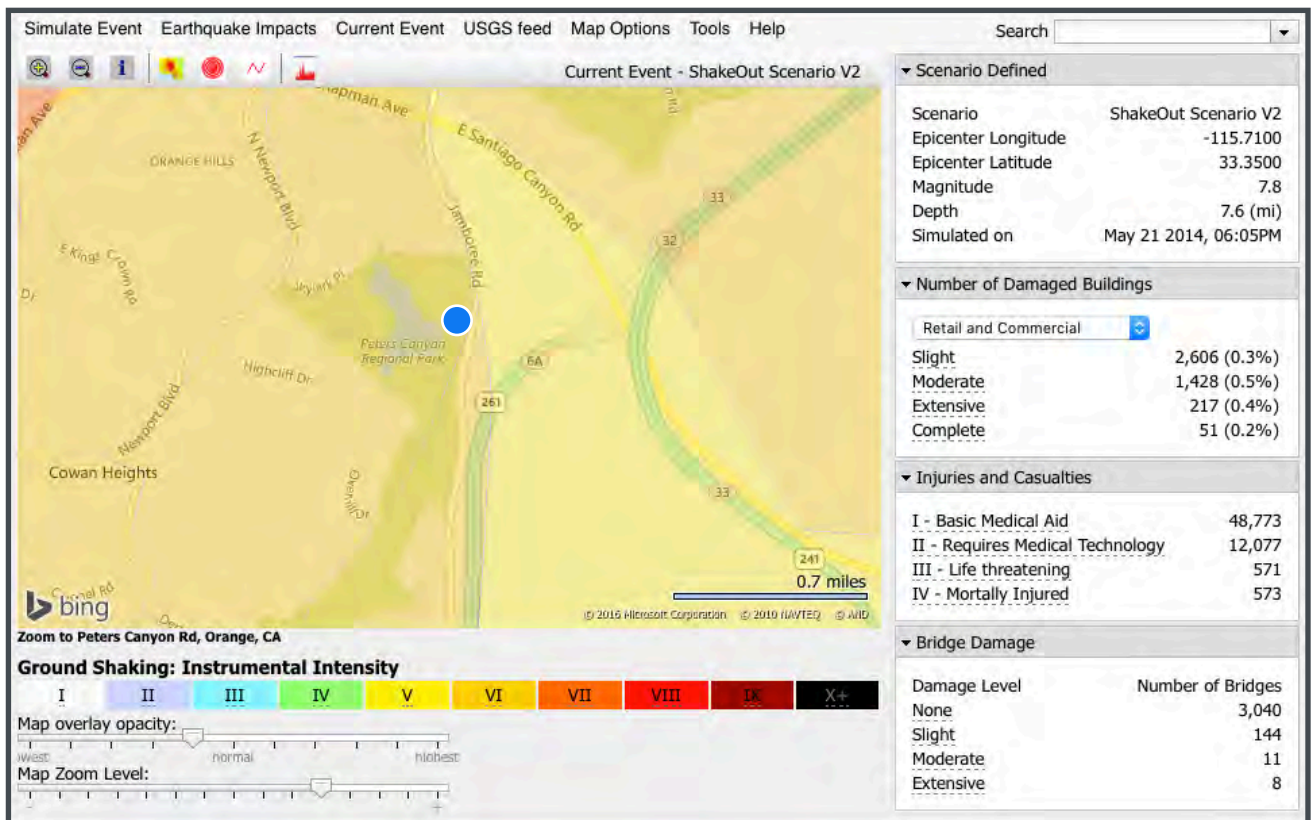
NORTH EOC - WHITTIER EARTHQUAKE



NORTH EOC - NEWPORT-INGLEWOOD EARTHQUAKE



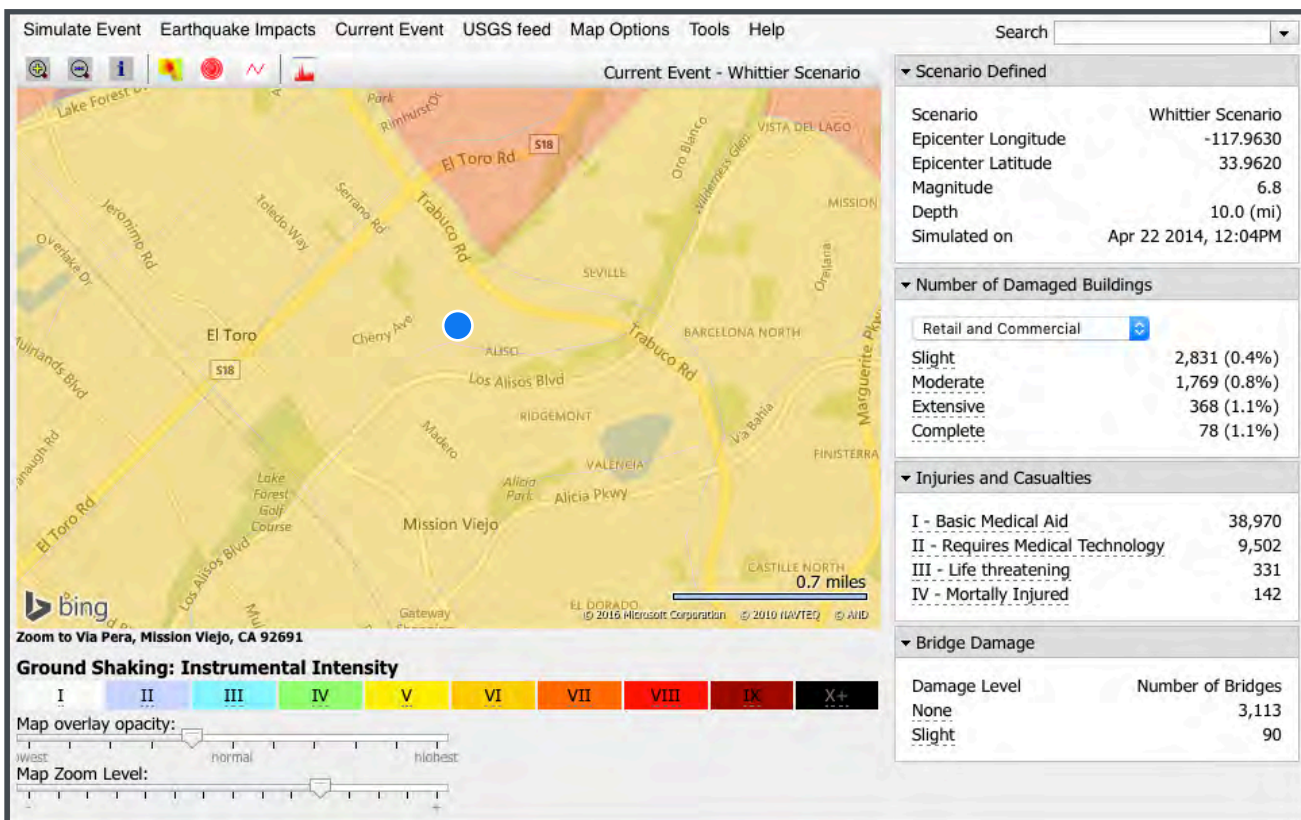
NORTH EOC - SAN ANDREAS EARTHQUAKE



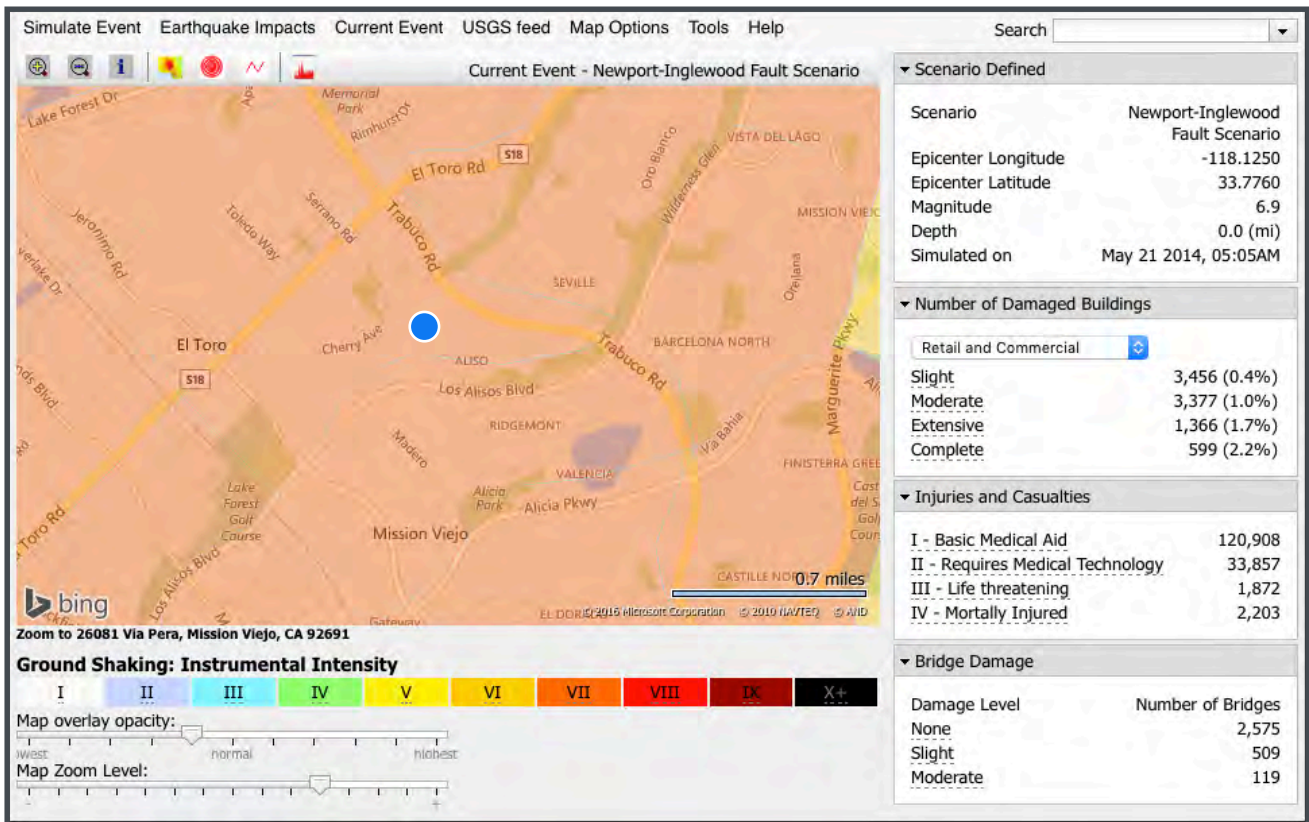
1. EARTHQUAKE ANALYSIS

SOUTH EOC SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY
Whittier (6.8)	VI
Newport-Inglewood (6.9)	VIII
San Andreas (7.8)	V

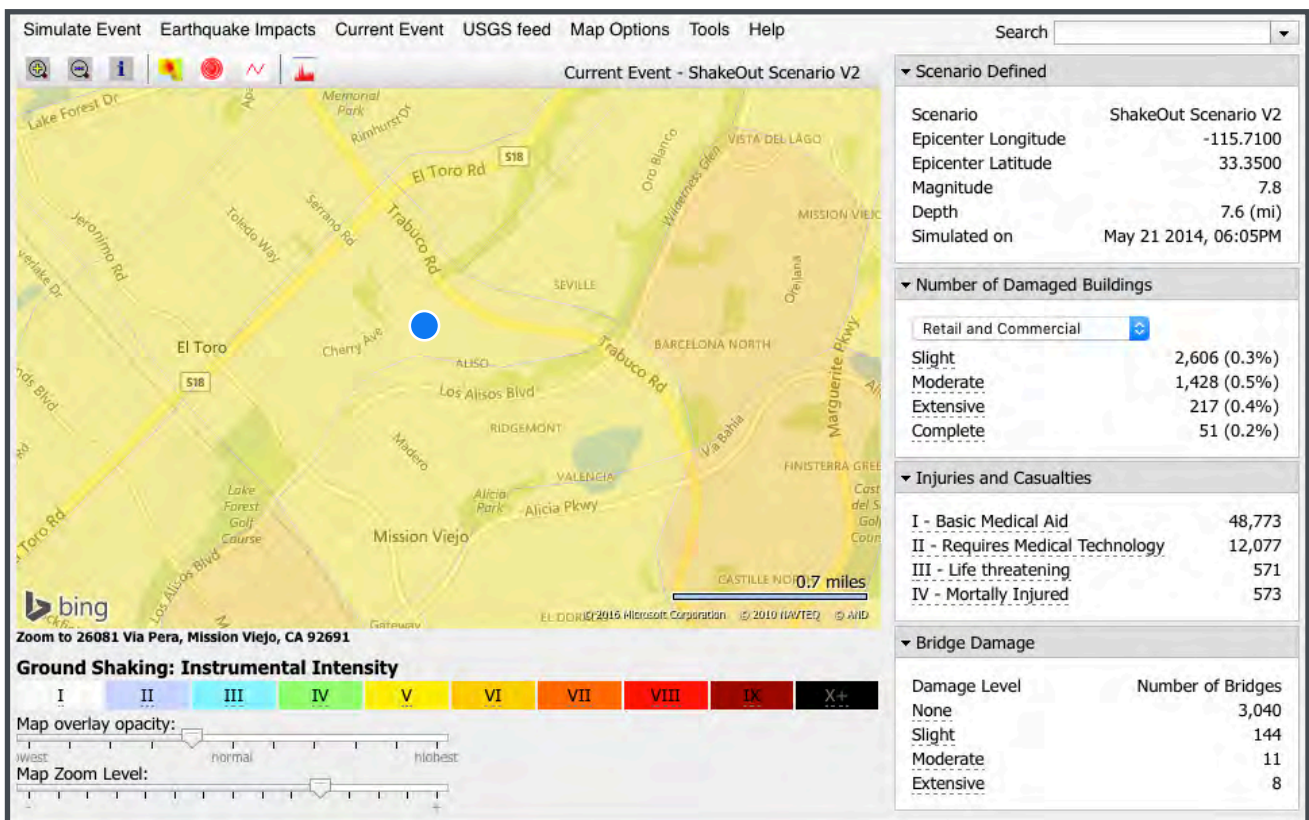
SOUTH EOC - WHITTIER EARTHQUAKE



SOUTH EOC - NEWPORT-INGLEWOOD EARTHQUAKE



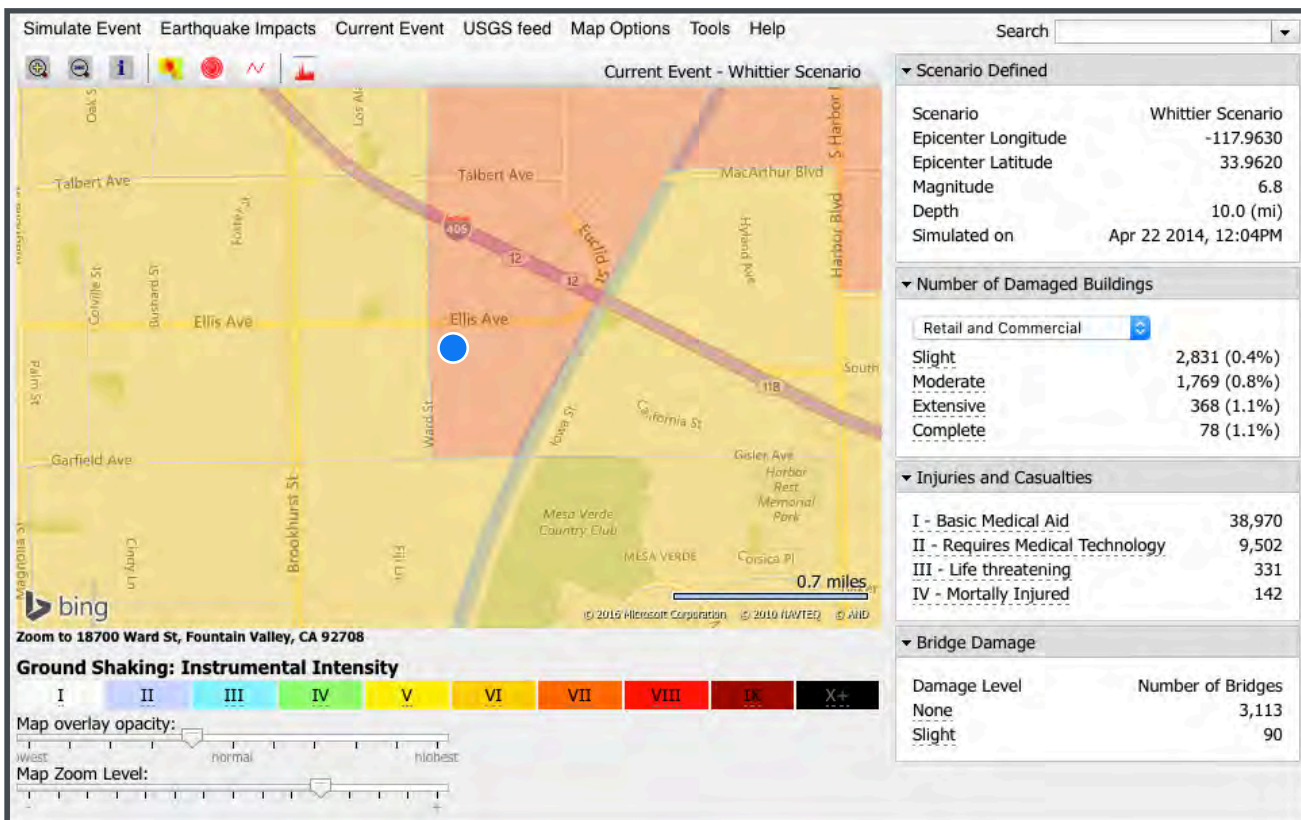
SOUTH EOC - SAN ANDREAS EARTHQUAKE



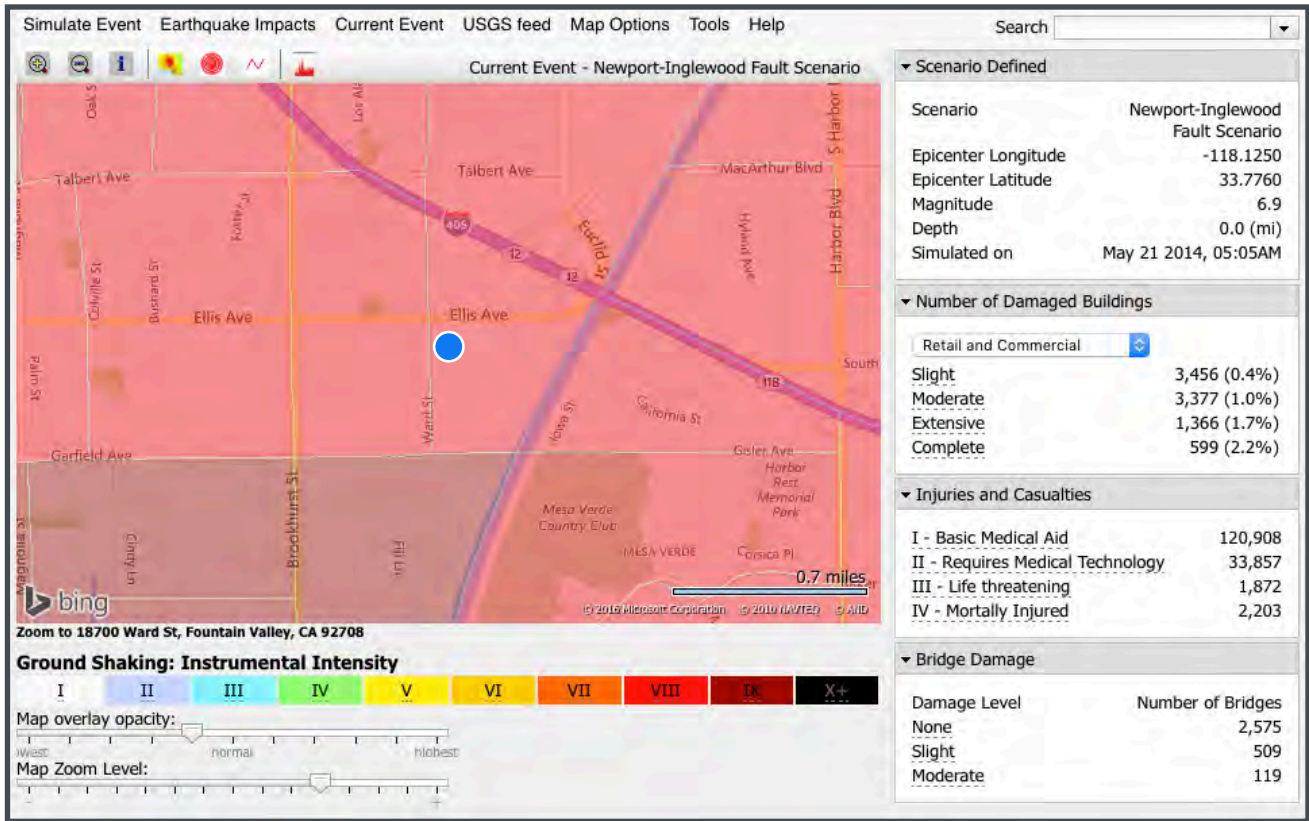
1. EARTHQUAKE ANALYSIS

MWDOC ADMINISTRATION BUILDING SEISMIC EVENT	GROUND SHAKING INSTRUMENTAL INTENSITY
Whittier (6.8)	VII
Newport-Inglewood (6.9)	VIII
San Andreas (7.8)	IX

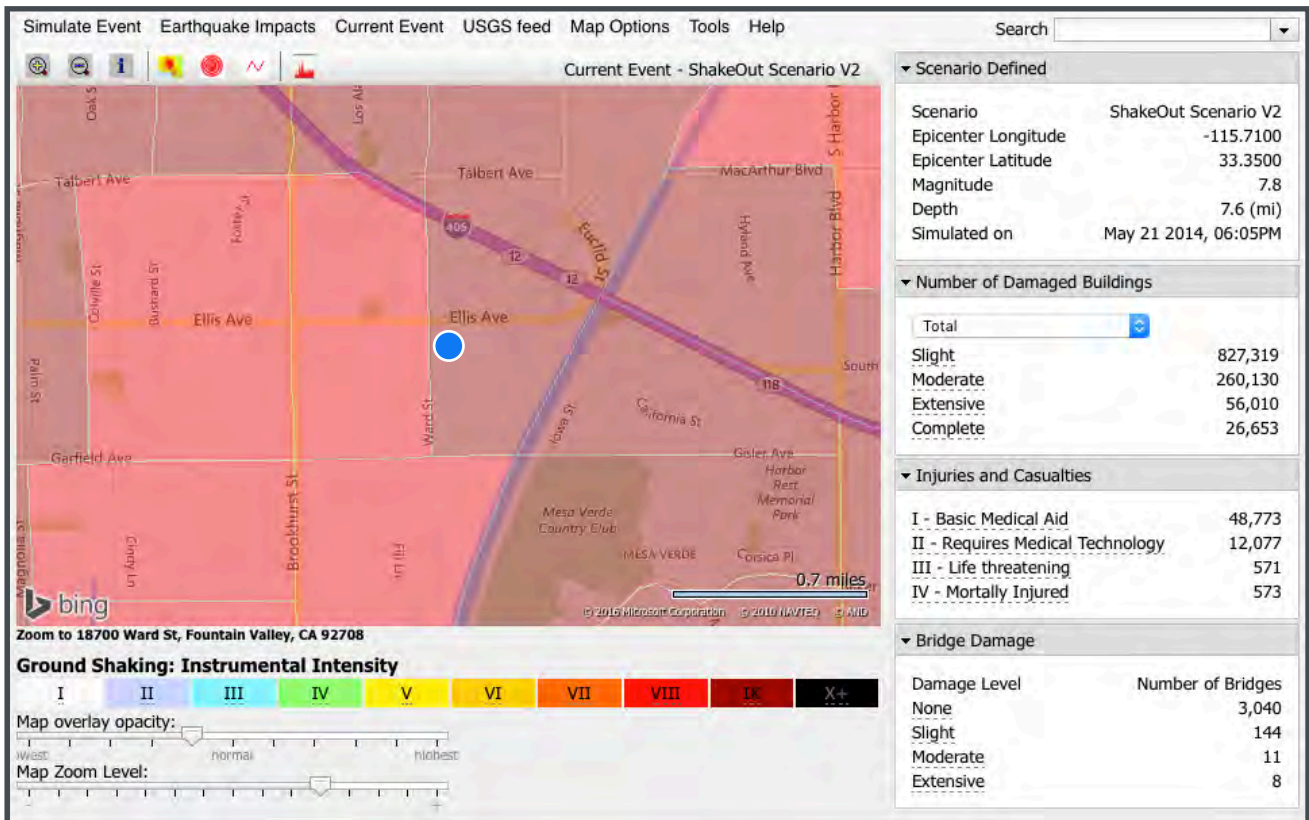
MWDOC ADMINISTRATION BUILDING - WHITTIER EARTHQUAKE



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 Defibrillator	\$2,066

*The labor costs identified are estimated costs



2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
7	8	9	10	11	12	13	14	15	16	17	18	19	20
\$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
					\$27,000								
\$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	\$18,314	\$18,805	\$19,309	\$19,826	\$20,358	\$20,903	\$21,463	\$22,039	\$22,629	\$23,236	\$23,858	\$24,498
	\$30,000												
\$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

 EOC Location
 MWDOC Staff Residence



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 recommends (To be determined at Committee Meeting)

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 <u> X </u>
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.

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
ASSISTANCE AGREEMENT**

1A. AGREEMENT NUMBER R16AP00111		1B. MOD NUMBER		2. TYPE OF AGREEMENT <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> COOPERATIVE AGREEMENT		3. CLASS OF RECIPIENT 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 #:	
				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		13. REQUISITION NUMBER 0020107921			
Total Estimated Amount of Agreement		\$972,450		\$299,934		14A. ACCOUNTING AND APPROPRIATION DATA Fund: 16XR0680A1 WBS: RY.30180006.MWOCA00			
This Obligation		\$972,450		\$298,934					
Previous Obligation		\$0		\$0					
Total Obligation		\$972,450		\$298,934		14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680			
Cost-Share %		76%		24%					
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 <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Wilson Orvis 303-445-2444					

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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's water consumption data, and develop the draft and final report. If a consultant is hired to aid in 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 interest 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. II.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.

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.

12. REPAYMENT OF ADVANCES. 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:
- 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
 - 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.
- 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.
 - Accountability Report: Grantee shall submit, on a quarterly basis, an Accountability Report by individual Local Project Sponsor that at a minimum:
 - 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.
 - A funding plan which shows how the remaining advanced funds will be expended.
 - Provides an accounting of distributing the advanced funds to the appropriate Local Project Sponsor.
 - Documents that the funds were spent on eligible reimbursable costs.
 - Documentation that the funds were placed in a non-interest bearing account, including the dates of deposits and withdrawals from that account.
 - 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

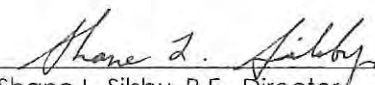
IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement.

STATE OF CALIFORNIA,
DEPARTMENT OF WATER RESOURCES


Arthur Hinojosa, P.E., Chief
Division of Integrated Regional Water Management

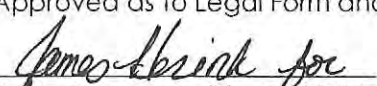
Date 9-19-16

COUNTY OF ORANGE


Shane L. Silsby, P.E., Director
Orange County Public Works

Date 09/01/2016

Approved as to Legal Form and Sufficiency


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-S37) 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:

- 404 Nationwide 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 (ft²)) 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 ft² 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/ft² of non-functional turfgrass removed. This funding allows for an additional \$0.50/ft² 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 Administration	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	Start	End Date
Crown Valley Park Channel Entry Improvements Project	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	Start Date	End Date
Strategic Turfgrass Removal & Design Assistance Program		
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 grants for 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):	



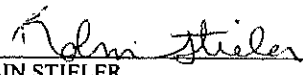
CHAIRMAN

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_goma.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?



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 recommends (To be determined at Committee Meeting)

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 provide 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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Exhibits

- Exhibit A (Project Description)
- Exhibit B (Annualized Capital Component)
- Exhibit C (Operation and Maintenance Component)
- Exhibit D (Performance Provisions)
- Exhibit E (MWD Administrative Code Section 4401(c))
- Exhibit F (Payment and Reimbursement Provisions)

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:

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Marcia L. Scully
General Counsel

Jeffrey Kightlinger
General Manager

By: _____
Deputy General Counsel

By: _____
Debra Man, Assistant General Manager
and Chief Operating Officer

APPROVED AS TO FORM:

MUNICIPAL WATER DISTRICT OF
ORANGE COUNTY

By: _____
General Counsel

By: _____
General Manager

APPROVED AS TO FORM:

EL TORO WATER DISTRICT

By: _____
General Counsel

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:

$$ACCost = CRF_1 \times P_1 + CRF_2 \times P_2 + \dots + CRF_j \times P_j$$

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:

$$\text{ACCom} = \text{ACCost} / \text{Recovered Water}$$

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:

$$(\$0) \times (\text{CPI} / 249.936)$$

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:

$$\text{O\&MC} = (\text{Actual Annual Cost of O\&M}) / (\text{Recovered Water})$$

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 = $0.50 \times 350 = 175$ 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 = $0.75 \times 300 = 225$ AFY
Shortfall = $225 - 180 = 45$ AFY
Revised Ultimate Yield = $300 - 45 = 255$ AFY

Scenario 2: Ultimate Yield = 350 AFY
75% of ultimate Yield = $0.75 \times 350 = 263$ 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:

$$\text{Reimbursement (\$)} = \$135/\text{AF} \times \text{Shortfall (AF)}$$

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 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.



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 recommends (To be determined at Committee Meeting)

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
SANTA MARGARITA WATER DISTRICT

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Exhibits

- Exhibit A (Project Description)
- Exhibit B (Annualized Capital Component)
- Exhibit C (Operation and Maintenance Component)
- Exhibit D (Performance Provisions)
- Exhibit E (MWD Administrative Code Section 4401(c))
- Exhibit F (Payment and Reimbursement Provisions)

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:

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Marcia L. Scully
General Counsel

Jeffrey Kightlinger
General Manager

By: _____
Deputy General Counsel

By: _____
Debra Man, Assistant General Manager
and Chief Operating Officer

APPROVED AS TO FORM:

MUNICIPAL WATER DISTRICT OF
ORANGE COUNTY

By: _____
General Counsel

By: _____
General Manager

APPROVED AS TO FORM:

SANTA MARGARITA WATER DISTRICT

By: _____
General Counsel

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:

$$\text{ACCost} = \text{CRF}_1 \times P_1 + \text{CRF}_2 \times P_2 + \dots + \text{CRF}_j \times P_j$$

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:

$$\text{CRF}_j = [i \times (1+i)^n] / [(1+i)^n - 1]$$

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:

$$\text{ACCom} = \text{ACCost} / \text{Recovered Water}$$

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:

$$(\$TBD) \times (CPI / 249.936)$$

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:

$$\text{O\&MC} = (\text{Actual Annual Cost of O\&M}) / (\text{Recovered Water})$$

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 = $0.50 \times 300 = 150$ 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 = $0.75 \times 250 = 188$ AFY
Shortfall = $188 - 120 = 60$ AFY
Revised Ultimate Yield = $250 - 60 = 190$ AFY

Scenario 2: Ultimate Yield = 320 AFY
75% of ultimate Yield = $0.75 \times 320 = 240$ 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:

$$\text{Reimbursement (\$)} = \$135/\text{AF} \times \text{Shortfall (AF)}$$

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 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.



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 recommends (To be determined at Committee Meeting)

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 its 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)
22611 Revere Rd.
Mailing Address: 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'

10-26-16

Signature

Date

Kimberly Porrazzo

Printed/Typed Name

General Information

Tax/Legal Status of Business:

☐ Corporation ☐ Sole Proprietorship ☒ Partnership LLC
☐ Public ☐ Not for Profit ☐ Other _____

Date business established: January 21, 2014

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

46-4524071

Federal Taxpayer ID Number: _____

----- 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



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 recommends (To be determined at Committee Meeting)

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 its 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

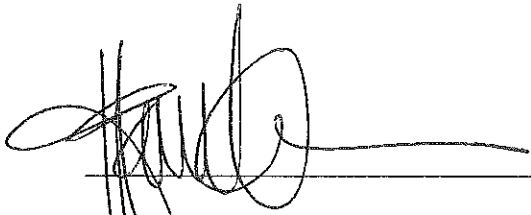
Title: SCNG Custom Content Manager

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
Heidi Lawrence

10.28.16

Date

Printed/Typed Name

General Information

Tax/Legal Status of Business:

☒ Corporation ☐ Sole Proprietorship ☐ Partnership
☒ 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 as 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.



DISCUSSION ITEM

November 14, 2016

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

FROM: Robert Hunter
General Manager

Staff Contact: Karl Seckel

SUBJECT: AGREEMENTS FOR SHARED PROGRAMS AND SERVICES WITH ANAHEIM, SANTA ANA AND FULLERTON

STAFF RECOMMENDATION

Staff recommends the Committee receives and files the report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

MWDOC works closely with the cities of Anaheim, Fullerton and Santa Ana in various activities and has found it to be beneficial to pursue joint funding of many of these activities over the years. In 2013, staff and legal counsel developed the first “master” Agreement for Shared Programs and Services with the City of Anaheim. Having such a “master” Agreement in place has streamlined participation, billing and invoices for the services between the two agencies. The Anaheim Agreement has worked out so well, staff and legal counsel developed a “master” Agreement with the City of Santa Ana, which was just executed in September.

More recently, the City of Anaheim requested an expansion of the 2013 “master” Agreement in that it had run its full course of financial authorization. The attached agreement for Anaheim is similar in form to that recently executed with the City of Santa Ana and is an update and expansion of the Agreement entered into about 5 years ago. Staff expects in the near future to enter into a “master” agreement with the City of Fullerton.

Budgeted (Y/N): Yes	Budgeted amount: As a cost recovery	Core ✓	Choice ✓
Action item amount: Variable		Line item:	
Fiscal Impact (explain if unbudgeted): These agreements allow for streamlining of participation by the Three Cities over the typical course of five years, with the potential for extensions if the funding commitment has not been exhausted.			

The Anaheim Agreement (and the Santa Ana Agreement) covers cost-sharing of the following activities:

- Water Use Efficiency (WUE)
- Shared Consulting Services (this was drafted to allow flexibility in covering such items as the Urban Water Management Plans and the Water Loss Control process including meter testing and leak detection and other issues that might arise)
- Participation in the School Program
- Participation in WEROC

The following should be noted for the Anaheim Agreement:

- The term of the Agreement extends to August 31, 2019 ("Initial Term") and the Parties may mutually agree in writing to extend this Agreement for two (2) additional one year terms.
- From Anaheim's perspective, the Agreement has a spending cap \$213,888.95, which consists of \$200,000 in NEW efforts and authority to pay a current invoice of \$13,888.95.
- The City or MWDOC may terminate this Agreement in its entirety at any time upon thirty (30) days written notice to the other Party; termination prior to the ending term of the agreement requires a reconciliation process for any funds committed up to the point of termination.

Attached is a copy of the DRAFT Agreement; the City of Anaheim is currently reviewing the updated terms and conditions provided in this draft prior to finalizing it for execution.

Also attached is the Executed version of the Santa Ana Agreement.

As we enter into each of these agreements from time to time, the terms and conditions are updated to reflect the current menu of items being offered under the contracts.

MWDOC/ANAHEIM AGREEMENT FOR SHARED PROGRAMS AND SERVICES

THIS AGREEMENT (the "Agreement") is made as of _____, 2016, by and between the Municipal Water District of Orange County ("MWDOC") and the City of Anaheim ("City") to provide for participation by the City in various programs and services administered by MWDOC, as described herein. The City and MWDOC are referred to jointly as "Parties" and individually as "Party."

RECITALS

WHEREAS, the Parties are both member agencies of the Metropolitan Water District of Southern California ("Metropolitan") and have many common interests related to water activities, programs and organizations within Orange County; and

WHEREAS, the Parties share many water planning characteristics, including location, climate history, demographics, water sources, water supplies and demand management measures; and

WHEREAS, the Parties share a long and successful history of collaborating on water resource activities, planning analysis and reports, water use efficiency programs, and other joint efforts; and

WHEREAS, the Parties desire to cooperate and pool resources to obtain economies of scale on joint studies and programs, share information developed independently, simplify the process of implementing water use efficiency measures, and maximize grant funding for all of these activities; and

WHEREAS, the Parties have prepared this Agreement to address the common goal of consolidating and streamlining the contracting procedures required for MWDOC's administration of, and the City's participation in, the programs and services referenced herein;

NOW, THEREFORE, the Parties agree as follows:

1. Water Use Efficiency Programs ("WUE Programs")

1.1 Notice Procedures

1.1.1 Subject to the limitations set forth in this section, the Parties shall work together to make WUE Programs available to water users throughout the City's water service area. In general, the City will have access to the same "choice" WUE Programs that are currently available to MWDOC member agencies. Within thirty (30) days of the Effective Date, MWDOC shall send a notice to City listing all available WUE Programs and the requirements for each along with enrollment forms for participation in those WUE Programs. Thereafter, MWDOC shall provide a notice with this information for every upcoming fiscal year at the time of MWDOC's budget preparation or within 30 days of new information being made available to MWDOC by Metropolitan. The notices to be provided by MWDOC shall be referred herein as the WUE Program Notice. MWDOC shall also provide City with any other information or documents, including any additional terms and conditions, which are required for participation

in WUE Programs or reasonably requested by the City in connection with WUE Programs. For each fiscal year, the City shall review the WUE Program Notice and choose the WUE Programs and the level of its participation that the City deems beneficial. In connection with the foregoing, the City will notify MWDOC in writing ("WUE Participation Notice") about the limit of the City's financial participation in any WUE Program and its level of participation for each fiscal year.

1.1.2 If a new WUE Program is introduced or a material amendment is made to an existing WUE Program during a fiscal year, MWDOC shall provide City with a written notice thereof ("Amended WUE Program Notice") as soon as reasonably possible prior to the date the new program or amendment is scheduled to commence. Within 30 days of receiving the Amended WUE Program Notice, City will notify MWDOC in writing whether the City will participate in the new or amended WUE Program and the level of its participation ("Amended WUE Participation Notice").

1.1.3 Except to the extent of the elections made in the WUE Participation Notice and the Amended WUE Participation Notice, the City shall have no obligation to participate in any WUE Program, including, but not limited to, any obligation to provide financial contribution to such program.

1.1.4 City understands that specific requirements and terms of conditions may apply to each WUE Program that the City choosing to participate in and agreeing to such requirements and terms and conditions is a prerequisite to City's participation in such WUE Programs.

1.1.5 City understands that by entering into this Agreement it agrees to pay MWDOC for its proportionate share of MWDOC's costs for administering MWDOC's WUE Program based on and to the extent of City's level of participation as more particularly described in Section 1.9. If City elects to participate in any or all MWDOC WUE Programs, MWDOC will invoice the City for such administrative costs as described in Section 1.9.

1.1.6 In the event the WUE Program is terminated early, City is responsible for payment of any funding contributions required by the WUE Program that that were initiated prior to the effective date of the termination. For purposes of this Agreement, an application is deemed initiated when an application has been received by Metropolitan's rebate vendor, EGIA, by MWDOC, or a reservation has been made within any of MWDOC's online application portals that is pursuant to any of the WUE programs described within this Agreement.

1.1.7 Notwithstanding any other provision of this Agreement, MWDOC providing funds for any of the MWDOC WUE Programs is conditioned upon the availability of funds and MWDOC is under no obligation to provide funding to City for any WUE Program if MWDOC determines, in its own discretion, that such funding is exhausted, reduced, eliminated, or unavailable from any funding source, for any reason.

1.2 WUE Programs

1.2.1 Subject to the limitations set forth herein, the Parties agree that the WUE Programs chosen by the City for participation in the City's WUE Participation Notice or Amended WUE Participation Notice addressed separately below, shall be made available throughout the City's water service area for the Term, without the need for a separate agreement between the Parties in addition to this Agreement.

1.2.2 At the time this Agreement is made, the WUE Programs listed in Exhibit A are available to the City from MWDOC, do not require local match funding from the City or any other contribution from the City, and are administered so that the ultimate decision to participate and seek a rebate or other program funding is made by the end water user. Within 30 days of the Effective Date, as required above for City's participation in any WUE Program, MWDOC shall provide the WUE Program Notice.

1.2.3 Subject to Section 1.1 above and except as otherwise provided herein,, MWDOC will provide the City with support for these programs in the form of access to marketing materials and staff support. City agrees to assist in the marketing of WUE Programs it participates in under this Agreement.

1.3 Grant Funding

1.3.1 Subject to any grant requirements and conditions, Grant funding obtained by MWDOC for WUE Programs may be made available to end water users within the City's water service area. In order for City to be eligible to receive such grant funds from MWDOC, City must comply with any terms and conditions of the grant program and required by MWDOC. The administration of any MWDOC grant funding will be on a program by program basis, contingent upon the terms and conditions of each program.

1.4 MWDOC-Administered Programs.

1.4.1 From time to time, funding may be made available from Metropolitan for MWDOC to operate a customized local water conservation incentive program or programs ("MWDOC Administered" or "MAA Program") in its service area, with access to the Metropolitan Base Incentives for such. As City is also a Metropolitan member agency, in order for MWDOC to administer the MAA Program for City, City would be required to apply to Metropolitan separately for funding. MWDOC would administer the Program for City and invoice City for activity in City's service area. City would reimburse MWDOC for any activity and then City would be responsible for seeking and securing reimbursement directly from Metropolitan. City subject to terms and conditions of program.

1.5 Supplemental Funding

1.5.1 If City elects to provide supplemental funding or enhanced incentives for a WUE Program provided under this Agreement, City is responsible for tracking the use of and the remaining availability of such supplemental funds. MWDOC will assist in every reasonable

way, but the ultimate responsibility for tracking all City funding is the responsibility of City and City is responsible for any overuse of City funding. Supplemental funding designations should be indicated in the WUE Participation Notice. In the event any City provided funding for any WUE Program is exhausted, and City does not elect to add additional funding or transfer available funding from another WUE Program, MWDOC will discontinue offering the additional rebate funding for that Program in City's service area.

1.5.2 1.5.2 City may also choose to provide additional supplemental funding of its own to augment the Metropolitan Base Incentives offered through SoCal Water\$mart. City will coordinate any such supplemental funding directly with Metropolitan.

1.6 Installation Verification and Inspection

1.6.1 City shall be responsible for conducting installation verifications/inspections of items and devices installed, distributed, and/or rebated by City or MWDOC under City or MWDOC Administered Programs to ensure compliance with program requirements, and/or for paying all costs associated with this verification/inspection. Installation verification/inspection measures must be designed to ensure that materials, installation verifications/inspections of eligible program items and devices, and services meet requirements established by Metropolitan and MWDOC, which requirements will be provided to City in MWDOC's Inspection and Verification Procedures document.

1.6.2 In connection with any selected WUE Programs that require installation verifications/inspection and to ensure compliance with program requirements, City may elect to (1) conduct its own installation verifications/inspections by either utilizing its in-house staff or contracting with a third party vendor of its choice; or (2) utilize MWDOC's installation verification/inspection contractor to conduct the installation verification/ inspections. If City elects to utilize MWDOC's verification/inspection vendor, City may elect to contract directly with MWDOC's verification/inspection vendor. MWDOC shall invoice the City monthly for any such inspection costs. In addition to the direct costs to MWDOC, reasonable staff time and overhead attributable to the verification/inspection services may be invoiced to the City.

1.6.3 Notwithstanding any other provision in this Agreement, City understands and agrees that if City utilizes MWDOC's verification/inspection vendor that MWDOC is in no way liable or responsible for the acts or omissions of such vendor and makes no representations or warranties regarding the quality of such vendor's work. City's sole recourse as to any action, claims or damages arising out of the acts or omissions of MWDOC's verification/inspection vendor is with the vendor and not with MWDOC.

1.6.4 MWDOC reserves the right to conduct installation verification/inspection of items and devices within City's service area.

1.6.5 City acknowledges that any item or device receiving funding from Metropolitan may be subject to an installation verification/inspection to be performed by Metropolitan, or its agent(s), at Metropolitan's discretion.

1.6.6 City shall promptly refund to MWDOC any amounts paid under any WUE Program for installed or distributed items or devices, including any grant funds, in the event MWDOC or Metropolitan establishes via installation verification/inspection and/or audit that the program items or devices were not installed in compliance with the requirements established by Metropolitan and MWDOC pursuant to this Agreement.

1.6.7 “Items” and “devices” includes, but is not limited to, plumbing fixtures, irrigation devices, turf (removal and replacement), and any other items, devices or materials that are installed in connection with a WUE Program covered by this Agreement.

1.6.8 At the time this Agreement is made, both the Turf Removal Program and the Spray to Drip Rebate Program require inspection services from the City, as described in MWDOC’s Inspection and Verification Procedures document.

1.7 Program With Matching Contribution Requirement

1.7.1 From time to time, WUE Programs may be developed that require a matching contribution from City in order for City to participate in such WUE Programs.

1.7.2 The amount of local match funding required for a particular device will be determined by the availability of other funding, and the City’s share of the local matching fund will be set forth in the WUE Programs Notice.

1.8 WUE Program Cost Allocation and Invoicing

1.8.1 During its annual budget process, MWDOC shall allocate to the City a proportionate share of MWDOC’s estimated WUE Program costs (“Choice Costs”). This share is determined by calculating the percentage of total outside funding provided during the previous year to WUE Program participants within the City’s service area. That percentage is then applied to MWDOC’s total WUE “choice” program budget, including personnel and overhead costs. City shall have no obligation to pay for Choice Costs or participate in any WUE Program above the amount specified by the City in the WUE Participation Notice or Amended WUE Participation Notice.

1.8.2 For those programs listed in the WUE Participation Notice or Amended WUE Participation Notice, MWDOC shall invoice the City for Choice Costs, which does not include the WUE Program administration and funding costs described below in Section 1.8.4, no later than September 30 of each year, and the City shall pay the amount due within thirty (30) days of receipt of the invoice. MWDOC must be notified of any disputed invoice within 30 days of receipt. An invoice template is shown in Exhibit B, which is attached hereto and incorporated by reference.

1.8.3 A reconciliation of actual WUE Program costs will be performed at the end of each year during MWDOC’s budget process and reflected in the invoice sent to the City the following year.

1.8.4 MWDOC shall invoice the City on a monthly basis for any incentive funding and program administration costs incurred for participation in any WUE Program. These costs are separate from the Choice Costs.

2. Shared Consulting Services

The Parties shall continue to participate in and fund collective efforts in planning, research, policy development and other activities that require engagement of an outside consultant. MWDOC shall provide the City a copy of each consultant's proposal for review and comments. For each consultant so engaged, the City will notify MWDOC in writing if it elects to participate in the consulting services and the limit of its financial participation. The City shall have no obligation to pay for any consultant unless City has agreed to participate in writing.

2.1 Water Resource Planning

2.1.1 Subject to this first paragraph of this Section 2, the Parties may participate, without the need for an additional agreement, in joint activities and studies designed to ensure water supply and system reliability, including water reliability analyses, water supply and demand projections, master planning for water use efficiency, water system loss analysis and leak detection studies, preparation of urban water management plans and studies related to water transfers, water recycling, groundwater recovery, and water storage programs.

2.1.2 The Parties may participate, without the need for an additional agreement, in joint activities and studies related to system reliability efforts for emergency response.

2.1.3 These and other joint activities and studies related to water resource planning are basic and recurring functions for both MWDOC and the City, and the City's Public Utilities General Manager shall have discretion to authorize participation by the City in consulting contracts administered by MWDOC by giving written notice to MWDOC, provided the Agreement Limit (defined below) has not been reached.

2.2 Strategic Services

2.2.1 The Parties may participate, without the need for additional agreement, in consulting agreements administered by MWDOC for the purpose of providing strategic services to one or more Metropolitan member agencies.

2.2.2 A Metropolitan Member Agency Managers' Workgroup ("Workgroup") consisting of representatives from a number of Metropolitan member agencies, including MWDOC and the City, from time to time requires consulting services on water resource issues. To meet this need for consulting services, MWDOC will engage a consultant and administer a professional services agreement pursuant to its procurement procedures and the MWDOC Administrative Code, except that MWDOC will seek input and concurrence from the City and other agencies in the Workgroup prior to the final authorization of an agreement with the consultant. The final decision to hire a particular consultant lies with MWDOC, except that the

City shall have no obligation to pay for consultant unless City has agreed to participate as set forth in the first paragraph of this Section 2.

2.2.3 In the event the Workgroup decides to engage an additional or different consultant, MWDOC shall comply with the first paragraph of this Section 2 by providing City with copies of each consultant's proposal for review and comments.

2.3 Award and Administration of Consultant Agreements

2.3.1 When programs or services administered by MWDOC require MWDOC to engage a consultant, MWDOC will use its standardized professional services agreement as a form and will modify it as required for each particular engagement. MWDOC will award the agreement pursuant to its own Administrative Code and procedures, except as noted in this Agreement.

2.3.2 For each professional services agreement, MWDOC will determine appropriate insurance requirements. When MWDOC requires a consultant's insurer to name MWDOC, its directors, officers, agents, employees, attorneys, consultants and volunteers as additional insureds, the same requirement will be made for the City and its Council, officers, agents, employees, attorneys, consultants and volunteers. Other protections in MWDOC's insurance requirements, including waiver of subrogation rights, will also be extended to the City when practicable.

2.3.3 MWDOC shall administer such professional services agreements and coordinate all aspects of the proposed work. MWDOC shall communicate with the City regularly and upon request regarding the status of the agreement and the work for each professional services agreement in which the City has elected to participate.

2.3.4 MWDOC shall invoice the City for the City's share of total costs anticipated for each professional services agreement in which the City has elected to participate, as contemplated in this Agreement. Such invoices shall be mailed by the 10th day of each month for the preceding month and shall be paid by the City within 30 days.

2.3.5 MWDOC shall inform the City on a timely basis of any proposed extra work under any professional service agreement being administered by MWDOC that would result in an increase in the City's payment under this Agreement. MWDOC shall seek input and written concurrence from the City and any other participating agencies prior to the authorization of extra work by the consultant. For the purpose of this section only, an e-mail from MWDOC staff to City staff, with an e-mail response from City staff, shall satisfy MWDOC's obligation to seek written concurrence.

2.3.6 MWDOC will be responsible for paying consultants directly.

2.4 Water Loss Control Technical Assistance

2.4.1 MWDOC has entered into a professional services agreement with Water Systems Optimization, Inc. ("WSO") for WSO to provide water loss control technical assistance to MWDOC's member agencies ("WSO Services") and such is also available to City. If City elects to participate in the WSO Services, City will be required to execute an agreement with MWDOC for such in substantially the same form as the sample agreement attached as Exhibit C.

2.4.2 MWDOC has entered into a technical services agreement with McCall's Meters, Inc. and with Westerly Meter Service Company to provide meter testing accuracy services. If City elects to participate in these services, City will be required to execute an agreement with MWDOC for such in substantially the same form as the sample agreement attached as Exhibit D.

3. Elementary and High School Water Education Program ("School Education Programs"), with Costs Based on Student Participation

3.1 The Parties agree that the School Education Programs shall be made available in City's water service area for the Term of this Agreement, without the need for a separate agreement between the Parties in addition to this Agreement. The City shall have no obligations to participate in any School Education Programs unless the City has agreed in writing to participate. There are two School Education Programs: (a) program for students Grade 1 through Grade 6 ("Elementary School Education Program"); and (b) program for students Grade 9 through Grade 12 ("High School Education Program").

3.2 The Elementary School Education Program will provide grade-specific water education programs for students in Grade 1 through Grade 6 in private and public schools located in the City of Anaheim. MWDOC will provide a specific water conservation curriculum that meets state teaching standards and is organized and conducted by MWDOC through trained educational specialists. Prior to the commencement of any Elementary School Education Program during the Term, MWDOC shall provide Anaheim a detailed description of the program and MWDOC shall not commence that program without Anaheim's prior written consent. Each new school year shall require a new program description. Compensation to MWDOC shall be paid at the rate of \$3.91 per student participating ("Student Participation Rate") in any program of the Elementary School Education Program during the 2016-17 school year. For every school year thereafter during the Term, the Student Participation Rate shall be adjusted, typically by about three percent (3%), however other adjustments may be necessary from time to time. MWDOC does not guarantee the number of schools and students that will participate in the Elementary School Education Program and such may be limited by the amount of funding available. The program description required above will provide a budget and expected targets, and will require the consent of both parties prior to implementation.

3.3 The High School Education Program will provide grade-specific water education programs for students in Grade 9 through Grade 12 in private and public schools located in the City of Anaheim. MWDOC will provide a specific water conservation curriculum that meets state teaching standards and is organized and conducted by MWDOC through trained educational specialists. Prior to the commencement of any High School Education Program during the Term, MWDOC shall provide Anaheim a detailed description of the program and MWDOC shall not commence that program without Anaheim's prior written consent. Each new school year shall require a new program description. Compensation to MWDOC shall be paid based on an agreed upon level of participation and the program structure. For Fiscal Year 2016-17, the participation rate is \$4,120.00 per participating High School ("High School Participation Rate"). For every school year thereafter during the Term, the High School Participation Rate shall be adjusted, typically by about three percent (3%), however other adjustments may be necessary from time to time. MWDOC does not guarantee the number of schools and students that will participate in the High School Education Program and such may be limited by the amount of funding available and the level of engagement at each High School. The program description required above will provide a budget and expected targets, and will require the consent of both parties prior to implementation.

3.4 MWDOC shall submit invoices to City in January and June of each year for the Services provided in accordance with the Agreement. City agrees to pay MWDOC for undisputed invoices within a period of thirty (30) days after receipt of the submittal.

3.5 Without limiting City's right to indemnification, it is agreed that MWDOC shall secure prior to commencing any School Education Programs on behalf of City, and maintain during the period in which City is participating in a School Education Program, insurance coverage as follows:

3.5.1 Worker's Compensation Insurance as required by California statutes.

3.5.2 Comprehensive General Liability Insurance, or Commercial General Liability Insurance, including coverage for Premises and Operations, Contractual Liability, Personal Injury Liability, Products/Completed Operations Liability, and Broad-Form Property Damage (if applicable), in an amount of not less than One Million Dollars (\$1,000,000.00) per occurrence, combined single limit, written on an occurrence form.

3.5.3 Comprehensive Automobile Liability coverage, including, as applicable, owned, non-owned and hired autos, in an amount of not less than One Million Dollars (\$1,000,000.00) per occurrence, combined single limit, written on an occurrence form.

3.5.4 City's Risk Manager is hereby authorized to reduce the requirements set forth above in the event he or she determines that such reduction is in City's best interest.

3.5.5 Prior to commencing any School Education Programs on behalf of City, MWDOC shall deliver to City insurance certificates confirming the existence of the insurance required by this Agreement and the naming of the City of Anaheim as an additional insured.

3.5.6 In addition to any other remedies City may have if MWDOC fails to provide or maintain the insurance required by this Section, City may, at its sole option: (a) order MWDOC to stop work under this Agreement and/or withhold any payment(s) which become due to MWDOC hereunder until MWDOC demonstrates compliance with the requirements hereof; and/or (b) terminate this Agreement.

3.5.7 Exercise of any of the above remedies, however, is an alternative to other remedies City may have and is not the exclusive remedy for MWDOC's failure to maintain insurance or secure appropriate endorsements.

3.6 The Water Emergency Response Organization of Orange County ("WEROC")

3.6.1 City may participate, without the need for an additional agreement in WEROC operations. MWDOC provides the overall staff and support for WEROC and has historically allocated the costs for WEROC among MWDOC, Orange County Water District, the Cities of Anaheim, Fullerton and Santa Ana, the Orange County Sanitation District and the South Orange County Wastewater Authority. The purpose of WEROC is to assist water and wastewater services with preparedness and response coordination for mutual aid and other services and to represent water and wastewater entities at the Orange County Operational Area. In order to build the relationships needed for effective response, WEROC works with MWDOC member agencies, Metropolitan, the County Operational Area, the State Office of Emergency Services and other emergency response partners throughout the year to educate, network and train together. WEROC staff works with its member agencies and the City on emergency plans and standard operating procedure development, review of state and federal required trainings for grant eligibility, disaster readiness, disaster exercise development, grant identification and applications and response and recovery coordination. Lastly, WEROC staff maintains two emergency operation centers, its own response plans and the backbone of the WEROC radio communications system. In providing these services WEROC continues to lead the nation as a model for water and wastewater emergency coordination and response.

3.6.2 By executing this Agreement, City elects to participate in WEROC and MWDOC will charge City a percentage of WEROC's annual budget to the City to fund WEROC operations. The historical percentage allocated is ___% and is based on historical negotiations among the WEROC funding partners. The proposed program budget and funding agency charges will be submitted to City for budgetary consideration annually.

4. The Water Emergency Response Organization of Orange County ("WEROC")

4.1 City may participate, without the need for an additional agreement in WEROC operations. MWDOC provides the overall staff and support for WEROC and has historically allocated the costs for WEROC among MWDOC, Orange County Water District, the Cities of Anaheim, Fullerton and Santa Ana, the Orange County Sanitation District and the South Orange County Wastewater Authority. The purpose of WEROC is to assist water and wastewater services with preparedness and response coordination for mutual aid and other services and to represent water and wastewater entities at the Orange County Operational

Area. In order to build the relationships needed for effective response, WEROC works with MWDOC member agencies, Metropolitan, the County Operational Area, the State Office of Emergency Services and other emergency response partners throughout the year to educate, network and train together. WEROC staff works with its member agencies and the City on emergency plans and standard operating procedure development, review of state and federal required trainings for grant eligibility, disaster readiness, disaster exercise development, grant identification and applications and response and recovery coordination. Lastly, WEROC staff maintains two emergency operation centers, its own response plans and the backbone of the WEROC radio communications system. In providing these services WEROC continues to lead the nation as a model for water and wastewater emergency coordination and response.

4.2 By executing this Agreement, City elects to participate in WEROC and MWDOC will charge City a percentage of WEROC's annual budget to the City to fund WEROC operations. The historical percentage allocated is 3.8% and is based on historical negotiations among the WEROC funding partners. The proposed program budget and funding agency charges will be submitted to City for budgetary consideration annually.

5. Term and Agreement Limit

5.1 This Agreement shall be effective immediately upon the Effective Date and shall continue through August 31, 2019 ("Initial Term"). The Parties may mutually agree in writing to extend this Agreement for two (2) additional one year terms (each, an "Extension Term") so long as the Parties agree to (1) the first extension on or before the expiration of the Initial Term; and (2) the second extension on or before the expiration of the first Extension Term. Further, the Extension Terms shall be on the same terms and conditions as the Initial Term. The Initial Term and each Extension Term shall be collectively referred herein as a "Term". The City Public Utilities General Manager or designee is authorized, on behalf of the City, to approve an Extension Term.

5.2 City's funding obligation for this Agreement shall not exceed two hundred thousand and eighty-eight dollars and ninety-five cents (\$213,888.95) ("Agreement Limit") for all programs and services covered herein; therefore, this Agreement shall terminate and all services provided by MWDOC to City shall be discontinued when the Agreement Limit is reached.

5.3 If the City wishes to add or delete any programs, activities, or studies set forth in this Agreement, notice of such additions or deletions must be received by MWDOC prior to March 15th for the following fiscal year.

5.4 The City or MWDOC may terminate this Agreement in its entirety at any time upon thirty (30) days written notice to the other Party.

5.5 In the event either Party terminates this Agreement, any funds paid by the City in the year of termination for costs that had not yet been incurred by MWDOC as of the date of termination will be subject to reconciliation during MWDOC's budget process. At that time

MWDOC will determine whether the funds will be credited or refunded to the City. Further, any costs incurred by MWDOC as of the date of termination that have not yet been invoiced to the City shall be invoiced by MWDOC promptly and paid by the City within thirty (30) days.

5.6 Failure of City to pay MWDOC for services pursuant to this Agreement will be grounds for MWDOC to terminate this Agreement upon thirty (30) days written notice.

6. Delivery of Notice

6.1 Except as expressly provided herein, all notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective Party may provide in writing for this purpose:

6.2 If to MWDOC:
18700 Ward Street
Fountain Valley, CA 92708

Mailing Address: PO Box 20895
Fountain Valley, CA 92728
Phone: (714) 963-3058
Fax: (714) 964-9389
Attention: General Manager

6.3 If to City:
201 S. Anaheim Blvd. Suite 601
Anaheim, CA 92805
Attention: Thomas McCarthy

6.3.1 Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

7. Accounting

7.1 MWDOC shall keep a correct and current accounting of payroll costs, travel, subsistence, field and incidental expenses. MWDOC shall use recognized accounting methods in preparing such invoices and reports.

7.2 City reserves the right to request an audit of MWDOC records related to invoices prepared pursuant to this Agreement and to designate a representative(s) to examine any cost, revenue, payment, claim or any other records or procedures related to this Agreement. Any such audit(s) would be done at reasonable times with full cooperation from the MWDOC. If MWDOC fails to provide supporting documentation for any costs charged City to City's reasonable satisfaction, then MWDOC agrees to reimburse City for those disputed payments.

7.3 The right to audit shall be extended to three (3) years beyond the date of final payment, or longer if required by law. MWDOC agrees to retain all necessary records/documentation for the entire length of this audit period. Any required adjustments and/or payments resulting from the audit will be made within 30 days of written notification to MWDOC.

8. Independent Contractors

Any consultant engaged by MWDOC as contemplated in this Agreement will not be a party or third party beneficiary to this Agreement and will not be an employee or agent of MWDOC or the City, either as a result of this Agreement or as a result of any professional services agreement between MWDOC and the consultant. The professional services agreement between MWDOC and any consultant engaged by MWDOC as contemplated in this Agreement will specify that the consultant is an independent contractor.

9. Indemnification

9.1 When WUE Programs provided in the City's water service area require participants to sign an application form that contains a release, waiver and/or indemnification, the application form shall specify that the release, waiver and/or indemnification covers both MWDOC and the City.

9.2 To the extent that MWDOC, including its staff or consultants, or the City, including its staff or consultants, performs any activities in connection with the programs or services provided as contemplated in this Agreement, each agrees to indemnify and hold the other harmless from any and all liability, claims, obligations, damages, and suits arising out of the activities it performs.

10. Jurisdiction and Venue

In all matters concerning the validity, interpretation, performance, or effect of this Agreement, the laws of the State of California shall govern and be applicable. The Parties hereby agree and consent to the exclusive jurisdiction of the courts of the State of California and that venue of any action brought hereunder shall be in Orange County, California.

11. Joint Drafting

All Parties have participated in the drafting of this Agreement. The Agreement may be signed in counterpart to facilitate processing.

12. Severability

If any provision of this Agreement shall be held illegal, invalid, or unenforceable, in whole or in part, the legality, validity, and enforceability of the remaining provisions shall not be affected thereby.

13. Other Invoice Payment.

City agrees to pay MWDOC in the amount of thirteen thousand and eight hundred and eighty-eight dollars and ninety-five cents (\$13,888.95) for water education as evidenced by MWDOC Invoice number 15468.

14. Effective Date.

The effective date of this Agreement shall be the latest date of execution hereinafter set forth opposite the names of the signators hereto ("Effective Date").

15. Entire Agreement

This Agreement 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 that are not set forth herein. Except as provided herein, this Agreement may not be modified or altered without prior written approval from both Parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement by and through their authorized officers.

1. MWDOC

Date _____

By: _____
Robert Hunter, General Manager
Municipal Water District of Orange County

Approved as to Form:

Date _____

By: _____
General Counsel

2. City of Anaheim

Date _____

By: _____
Dukku Lee,
Public Utilities General Manager

Approved as to Form:

Date _____

By: _____
Daniel A. Ballin,
Deputy City Attorney

Internal Use Only:

Program No. _____

Line Item: _____

Funding Year: _____

Contract Amt.: _____

Purchase Order #: _____

MWDOC/ANAHEIM MASTER AGREEMENT FOR PROGRAMS AND SERVICES

Exhibit “A”

MWDOC INVOICES

FINAL 7-11-16

**MASTER AGREEMENT FOR PROGRAMS AND SERVICES
BETWEEN MUNICIPAL WATER DISTRICT OF ORANGE COUNTY (MWDOC)
AND THE CITY OF SANTA ANA**

THIS AGREEMENT (the "Agreement") is made as of Aug. 21, 2016 by and between the Municipal Water District of Orange County ("MWDOC") and the City of Santa Ana ("City") to provide for participation by the City in various programs and services administered by MWDOC, as described herein. The City and MWDOC are referred to jointly as "Parties" and individually as "Party." City Staff shall be defined as the City's Water Resources Manager or his designee. That role is currently filled by Nabil Saba, PE, City of Santa Ana Water Resources Manager.

RECITALS

WHEREAS, the Parties are both member agencies of the Metropolitan Water District of Southern California ("Metropolitan") and have many common interests related to water activities, programs and organizations within Orange County; and

WHEREAS, the Parties share many water planning characteristics, including location, climate history, demographics, water sources, water supplies and demand management measures; and

WHEREAS, the Parties share a long and successful history of collaborating on water resource activities, planning analyses and reports, water use efficiency programs, school education programs, emergency preparedness programs and other joint efforts; and

WHEREAS, the Parties desire to cooperate and pool resources to obtain economies of scale on joint studies and programs, share information developed independently, simplify the process of implementing water use efficiency measures, and maximize grant funding for all of these activities; and

WHEREAS, the Parties understand that all programs administered are done so that the ultimate decision to participate and seek a rebate is made by the end water user within the City; and

WHEREAS, the Parties have prepared this Agreement to address the common goal of consolidating and streamlining the contracting procedures required for MWDOC's administration of, and the City's participation in, the programs and services referenced herein;

NOW, THEREFORE, the Parties agree as follows:

1. OVERVIEW OF JOINT ACTIVITIES

- a) The Agreement shall cover those activities as can be agreed to between MWDOC and the City including the following:
 - Water Use Efficiency (WUE) Programs

- School Education Programs (Elementary and High School)
- Water Emergency Preparedness Activities including annual support of the Water Emergency Response Organization of Orange County (WEROC)
- Shared Consulting Agreements
- Water Resources Planning
- Strategic Services
- Water Loss Control Services
- Urban Water Management Plans

b) The provisions as described below shall apply to the above services.

2. WATER USE EFFICIENCY PROGRAMS ("WUE PROGRAMS")

- a) Subject to the limitations set forth in Sections 2 - 5, the Parties shall work together to make WUE Programs available to water users throughout the City's water service area. In general, the City will have access to the same "Choice" WUE Programs that are available to MWDOC's member agencies. Each year, as MWDOC's budget is developed, MWDOC shall provide notice to the City by submitting the WUE Program Participation cost estimate (budget) for the subsequent fiscal year (same as it provides to all of its member agencies) to allow the City to consider participation. City has the sole discretion to participate. MWDOC shall also provide City with any other information or documents which are required for participation in WUE Programs or reasonably requested by the City in connection with WUE Programs. For each fiscal year, the City shall review the WUE Program Participation cost estimate and choose the WUE Programs, the level of its participation, and funding levels that the City deems beneficial. In connection with the foregoing, the City will notify MWDOC via email regarding the City's financial participation in the upcoming fiscal year. Whenever NEW opportunities for WUE programs shall become available, MWDOC shall notify the City Staff and provide sufficient details and requirements for each, and estimated costs for City's review and decision regarding participation. The City Staff shall provide MWDOC an email confirmation regarding whether it intends to participate in the NEW opportunities and its level of participation.
- b) Except to the extent of the elections made in the WUE Participation Notification, the City shall have no obligation to participate in any WUE Program, including, but not limited to, any obligation to provide financial contribution to such program, unless elected to by the City Staff as outlined in Sections 2 - 5.

3. WUE PROGRAMS WITH NO MATCHING CONTRIBUTION REQUIREMENT

- a) Subject to the limitations set forth herein, the Parties agree that the WUE Programs chosen by the City for participation, with the exception of any WUE program that requires City funding, shall be made available throughout the City's water service area for the Term of this Agreement, without the need for a separate agreement between the Parties beyond this Agreement. City participation in any WUE program that requires City funding shall proceed only upon approval of the City, as provided herein.

- b) At the time this Agreement is made, the following WUE Programs are available to the City from MWDOC and they do not require local match funding from the City or any other contribution from the City. The City may voluntarily elect to provide, as described below, supplemental funding in order to enhance the level of incentive paid to the participant.

- Drought Response Turf Removal Program (SAWPA)
- Comprehensive CII Program (SAWPA)
- Comprehensive Landscape Program (USBR)
- Water Smart Landscape Program (aka - Landscape Performance Certification Program)

MWDOC will provide the City with support for these programs in the form of marketing materials and staff support. Grant funding obtained by MWDOC for WUE Programs will be made available to end water users within the City's water service area in the same manner it is made available to MWDOC member agencies.

- c) When required for any WUE Program, as determined by MWDOC and the program design, and subject to provisions in Sections 2 - 5, the City will be required to conduct pre- and post- installation verification inspections and will provide MWDOC with documentation showing inspection results. Personnel and equipment costs incurred by the City, if any, will not be reimbursed by MWDOC or any other third party. Such inspection obligations shall not exceed those levels or amounts set forth in the WUE Participation Notification, attached hereto as Exhibit A. If City has agreed to participate in any program that requires inspections, the City may, in the alternative to the foregoing, request in writing in response to the WUE Program Participation budget that MWDOC direct its inspection contractor to conduct pre- and post-installation verification inspections, at the City's cost, provided MWDOC provides City with an estimate for these costs and City Staff approves such costs. MWDOC shall invoice the City monthly for such inspection costs. In addition to the direct costs to MWDOC, reasonable staff time and overhead attributable to the inspection services may be invoiced to the City and the City is responsible for paying MWDOC for such.
- d) Should City request to add supplemental funding in order to increase incentive levels beyond the levels established, City may do so at its sole discretion by listing the per device and total funding amounts in its response to the WUE Program Participation budget. Submittal to MWDOC of the WUE Participation Notification document with changes by the 10th of the month will take effect by the first of the following month.

4. WUE PROGRAMS WITH MATCHING LOCAL CONTRIBUTION REQUIREMENT

- a) The Parties agree that MWDOC's WUE Programs that require a local contribution shall be made available throughout the City's water service area for the Term of this Agreement, without the need for a separate agreement between the Parties beyond this Agreement. Selection to participate by the City and the level of funding required for any MWDOC WUE

program device will be designated in the WUE Program Participation budget. Any changes, such as funding levels, program participation, and/or overall funding amounts, City wishes to make during the Term of this agreement will be made in response to the WUE Program Participation budget.

- b) The local contribution required under these Programs varies. The amount of local match funding required for any particular device will be determined by the availability of other funding, and the City's share of the local matching fund for each device installed shall be mutually agreed upon between the City and MWDOC prior to the commitment of City funds, which the City shall acknowledge by submitting a response to the WUE Program Participation budget.

5. WUE PROGRAM COST ALLOCATION AND INVOICING

- a) During its annual budget process, MWDOC shall allocate to the City a proportionate share of MWDOC's estimated WUE Program costs. This share is determined by calculating the percentage of total outside funding provided during the previous calendar year to WUE Program participants within the City's service area compared to the total of all outside funding under MWDOC's WUE Program. That percentage is then applied to MWDOC's total WUE "Choice" Program budget, including personnel and overhead costs. Based on the information provided, the City shall decide whether or not to participate and shall advise MWDOC. This allocation process is the same as the allocation process used to allocate costs to MWDOC's member agencies.
- b) For those programs included in the WUE Program Participation budget, MWDOC shall invoice the City for WUE Program costs no later than August 30 of each year, and the City shall pay the amount due within thirty (30) days of receipt of the invoice. MWDOC must be notified of any disputed invoice within 30 days of receipt.
- c) A reconciliation of actual WUE Program costs will be performed at the end of each year during MWDOC's budget process and reflected in the invoice sent to the City the following year.
- d) MWDOC shall invoice the City on a monthly basis for any local funding required, including the per device amounts, any inspection costs, and/or any provided supplemental funding, provided the City has agreed to participate in such programs. Such invoices shall be mailed by the 10th day of each month for the preceding month and shall be paid by the City within 30 days. The amount invoiced per device shall be determined by MWDOC and conveyed to City prior to City's participation. All funding amounts will be listed in the WUE Program Participation budget.

6. SCHOOL EDUCATION PROGRAMS (ELEMENTARY AND HIGH SCHOOL)

- a) MWDOC's School Education Programs are offered as a "Choice" program offering on a pay-for-service program manner for both MWDOC's member agencies and the Cities of Anaheim, Fullerton and Santa Ana. The programs and options are described below. Typically, these programs are structured and priced annually through MWDOC's

budgeting process. The School Education Program services offered by MWDOC and the City annually selects targets for both Elementary and the High School Programs. MWDOC and its contractors agree to attempt to fulfill the target amounts, but cannot guarantee such and will charge the City based on actual students and schools involved in the programs. For the School Programs, MWDOC will invoice for the total annual estimated costs and will provide a reconciliation at the year-end, based on the actual services provided.

b) Elementary School Grades 1-6

- i) Currently, the Elementary School Program is operated by the *Discovery Science Foundation* under contract with MWDOC and offers services based on the number of students desired by each of the member agencies. The program is offered to grades 1-6 with all students using the Keypad Program. The final billing is based on actual number of students that participate.

c) High School Program

Currently, the High School Program is being conducted by contract with MWDOC by *Inside the Outdoors*, a department of the Orange County Department of Education and is being conducted in partnership with *The Ecology Center*. The program offers two parts as follows:

- i) Basic Program - MWDOC structured the “digital portion” of the High School Program and the High School Teacher Training portion of the program, with costs allocated to member agencies and the City based on the High School Student Population count per water serving agency. This was done because the “digital” portion of the program involves development of a web-based program aimed at attracting and engaging high school students from all over the County and because the Teacher Training is open to all teachers in the County.
- ii) Specific Funding to a High School in the Member Agency Service Area - Agencies can elect to have at least one High School in their service area participate in the detailed program involving their entire student body. Agencies can opt in or out of this portion of the program if they do not want it offered for their service area.

7. THE WATER EMERGENCY RESPONSE ORGANIZATION OF ORANGE COUNTY (WEROC)

- a) The parties may participate, without the need for an additional agreement in WEROC operations. MWDOC provides the overall staff and support for WEROC and has historically allocated the costs for WEROC among MWDOC, Orange County Water District, the Cities of Anaheim, Fullerton and Santa Ana, the Orange County Sanitation District and the South Orange County Wastewater Authority. The purpose of WEROC is to assist water and wastewater services with preparedness and response coordination for mutual aid and other services and to represent water and wastewater entities at the Orange County Operational Area. In order to build the relationships needed for effective

response, WEROC works with member agencies, Metropolitan Water District of Southern California, the County Operational Area, the State Office of Emergency Services and other emergency response partners throughout the year to educate, network and train together. WEROC staff works with its member agencies (including the City) on emergency plans and standard operating procedure development, review of state and federal required trainings for grant eligibility, disaster readiness, disaster exercise development, grant identification and applications and response and recovery coordination. Lastly, WEROC staff maintains two emergency operation centers, its own response plans and the backbone of the WEROC radio communications system. In providing these services WEROC continues to lead the nation as a model for water and wastewater emergency coordination and response.

- b) MWDOC will charge a percentage of WEROC's annual budget to the City to fund WEROC operations. The historical percentage allocated is 3.80% and is based on historical negotiations among the WEROC funding partners. The proposed program budget and funding agency charges will be submitted to City for budgetary consideration annually.

8. SHARED CONSULTING SERVICES

- a) The Parties may participate, without the need for an additional agreement, in the planning, research, policy development, water resources planning, strategic processes and other activities that require engagement of an outside consultant. MWDOC shall provide the City a copy of each consultant's proposal for review and comments. For each consultant so engaged, the City will notify MWDOC if it elects to participate in the consulting services and the limit of its financial participation. These and other joint activities and studies related to water resources planning are basic and recurring functions for both MWDOC and the City, and the City's Water Resources Manager shall have discretion to authorize participation by the City in consulting contracts administered by MWDOC by giving written notice to MWDOC, provided the Agreement Limit (defined below) has not been reached.
- b) The City shall not have any obligation to pay for this consultant unless the City agrees to participate in the consultant's proposed costs.

9. AWARD AND ADMINISTRATION OF CONSULTANT AGREEMENTS

- a) When programs or services desired by the City and administered by MWDOC require MWDOC to engage a consultant, MWDOC will use its standardized professional services agreement as a form and will modify it as required for each particular engagement. MWDOC will award the agreement pursuant to its own Administrative Code and procedures, except as noted in this Agreement.
- b) For each professional services agreement, MWDOC will determine appropriate insurance requirements. When MWDOC requires a consultant's insurer to name MWDOC, its directors, officers, agents, employees, attorneys, consultants and volunteers as additional

insureds, the same requirement will be made for the City and its Council, officers, agents, employees, attorneys, consultants and volunteers. Other protections in MWDOC's insurance requirements, including waiver of subrogation rights, will also be extended to the City when practicable.

- c) MWDOC shall administer such professional services agreements and coordinate all aspects of the proposed work. MWDOC shall communicate with the City regularly and upon request regarding the status of the agreement and the work for each professional services agreement in which the City has elected to participate.
- d) MWDOC shall invoice the City for the City's share of total costs anticipated for each professional services agreement in which the City has elected to participate, as contemplated in this Agreement. The cost allocation among participants and the City will vary by project; the basis of the cost allocation and sharing to the City shall be provided and agreed upon prior to the initiation of the professional services agreement. MWDOC shall invoice the City for the full estimated cost of such services and shall provide a reconciliation at the end of each contract. Any invoices shall be mailed by the 10th day of each month for the preceding month and shall be paid by the City within 30 days.
- e) MWDOC shall inform the City on a timely basis of any proposed extra work under any professional service agreement being administered by MWDOC that would result in an increase in the City's payment under this Agreement. MWDOC shall seek input and written concurrence from the City and any other participating agencies prior to the authorization of extra work by the consultant. For the purpose of this section only, an e-mail from MWDOC staff to City staff, with an e-mail response from City staff, shall satisfy MWDOC's obligation to seek written concurrence.
- f) MWDOC will be responsible for all aspects of managing the consultant contract including making any payments required under the terms and conditions of the contract.

10. TERM

- a) This Agreement shall be effective immediately upon execution and shall continue through June 30, 2019 ("Expiration Date"). The Parties may mutually agree to renew this Agreement for an additional three years in writing made on or before the initial Expiration Date, said extension to be exercisable in writing by the City Manager and the City Attorney.
- b) This Agreement does not authorize the programs and services in excess of three hundred and thirty three thousand dollars (\$333,000) over the entire term of the agreement ("Agreement Limit"), as outlined below.
- c) If the City wishes to add any programs, activities, or studies set forth in this Agreement, notice of such additions can be given at any time acceptable to either Party. If the City wishes to delete any programs, activities, or studies set forth in this Agreement, notice of such deletions must be received by MWDOC prior to April 15th for the following fiscal year.
- d) The City or MWDOC may terminate this Agreement in its entirety at any time upon thirty

(30) days written notice to the other Party. In the event either Party terminates this Agreement, any funds paid by the City in the year of termination for costs that had not yet been incurred by MWDOC as of the date of termination will be subject to reconciliation during MWDOC's budget process. At that time MWDOC will determine whether the funds will be credited or refunded to the City. Further, any costs incurred by MWDOC as of the date of termination that have not yet been invoiced to the City shall be invoiced by MWDOC and promptly paid by the City within thirty (30) days. At the time of termination, the City shall remain obligated for any initiatives started that cannot be terminated without incurring costs. MWDOC and the City agree to work amicably to carry out any notice of termination.

11. LIMITATION OF FINANCIAL COMMITMENT BY THE CITY

- a) The financial limit by this agreement is outlined below. The below table provides the estimated current level of activities and projects out the future costs of these activities over the next five years, with future estimates of escalation. The limits provided below are for purposes of City Staff seeking authorization to carry-out these activities over a multiple year period and DO NOT imply any future commitment by the City to MWDOC. The City Staff will utilize this agreement, within their discretion and decision-making to engage on activities with MWDOC only as specifically outlined in this Agreement and only for the matters outlined in this Agreement. The City Staff has sole decision-making responsibility in determining whether or not to participate with MWDOC on any or none of the opportunities outlined in this Agreement.

Limitation of Cost of Services Over the Next Three Years		
Type of Service	Annual Estimate	Maximum Not to Exceed Over 3 Years
Water Use Efficiency (WUE) Programs	Varies	\$21,000
School Education Programs	\$70,000	\$210,000
Water Emergency Preparedness Organization of Orange County (WEROC)	\$15,000	\$45,000
Shared Consulting Agreements	Varies	\$45,000
Water Resources Planning	\$2,000	\$6,000
Strategic Services	\$2,000	\$6,000
Total		\$333,000

12. DELIVERY OF NOTICE

- a) Except as expressly provided herein, all notices permitted or required under this Agreement shall be given to the respective Parties at the following address, or at such other address as the respective Party may provide in writing for this purpose:

If to MWDOC:
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley CA 92708
Phone: (714) 963-3058
Attention: General Manager, Rob Hunter
Email: Rhunter@mwdoc.com

If to City:
Public Works Agency
Water Resources Division
220 South Daisy Ave.
Santa Ana, CA 92702
Phone: (714) 647-3378
Attention: Water Resources Manager, Nabil Saba
Email: NSaba@santa-ana.org

- b) Such notice shall be deemed made when personally delivered or emailed and shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

13. ACCOUNTING

- a) Upon request of the City, MWDOC will provide copies of any specified consultant's agreements, invoices and MWDOC's related payment records.

14. INDEPENDENT CONTRACTORS

- a) Any consultant engaged by MWDOC as contemplated in this Agreement will not be a party or third party beneficiary to this Agreement and will not be an employee or agent of MWDOC or the City, either as a result of this Agreement or as a result of any professional services agreement between MWDOC and the consultant. The professional services agreement between MWDOC and any consultant engaged by MWDOC as contemplated in this Agreement will specify that the consultant is an independent contractor.

15. INDEMNIFICATION

- a) When WUE Programs provided in the City's water service area require participants to sign an application form that contains a release, waiver and/or indemnification, the application form shall specify that the release, waiver and/or indemnification covers both MWDOC and the City.
- b) To the extent that MWDOC, including its staff or consultants, or the City, including its staff or consultants, performs any activities in connection with the programs or services provided as contemplated in this Agreement, each agrees to indemnify and hold the other harmless from any and all liability, claims, obligations, damages, and suits arising out of the activities it performs.

16. JURISDICTION AND VENUE

- a) In all matters concerning the validity, interpretation, performance, or effect of this Agreement, the laws of the State of California shall govern and be applicable. The Parties hereby agree and consent to the exclusive jurisdiction of the courts of the State of California and that venue of any action brought hereunder shall be in Orange County, California.

17. JOINT DRAFTING

- a) All Parties have participated in the drafting of this Agreement. The Agreement may be signed in counterpart to facilitate processing.

18. SEVERABILITY

- a) If any provision of this Agreement shall be held illegal, invalid, or unenforceable, in whole or in part, the legality, validity, and enforceability of the remaining provisions shall not be affected thereby.

19. ENTIRE AGREEMENT

- a) This Agreement 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 that are not set forth herein. Except as provided herein, this Agreement may not be modified or altered without prior written approval from both Parties.

[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties have executed this Agreement by and through their authorized officers.

Date: 9-7-16

By: [Signature]
Rob Hunter
General Manager
MWDOC

Date: AUG 25 2016

By: [Signature]
David Cavazos
City Manager
City of Santa Ana

Approved as to Form

Date: 9/7/16

By: [Signature]
Legal Counsel:
Best, Best & Krieger

Approved as to Form

Date: July 12, 2016

By: [Signature]
City Attorney

RECOMMENDED FOR APPROVAL:

[Signature]
Fred Mousavipour
Executive Director
Public Works Agency

ATTEST:

[Signature]
MARIA D. HUIZAR
CLERK OF THE COUNCIL

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Fiscal Year 2016-17

Sole Source Procurement Justification for Projects under \$25,000*



- A. Supplier Information/Name of Company and Prime Contact at the Supplier and at MWDOC: CV Strategies
- B. Contract awards to Supplier over prior 36-months: None
- C. Product(s) or Service(s) to be provided and Deliverables: Assist with recruitment effort for Director of Public Affairs position.
- D. Justification Definition** Special expertise in the area of Communications that can help assist in selecting a qualified candidate to fill the Director of Public Affairs position.
- E. Narrative Explanation: This position has been vacant for some time and based on CV strategies area of expertise, it is anticipated that they will provide assistance in selecting a candidate.
- F. Budget Line Item Reference & Amount: Salaries and Overhead
- G. Core or Choice designation: Core
- H. Signature/Approvals:

 11-8-16
Requestor Date

 11-8-16
General Manager Date

* Projects over \$25,000 must go to a Committee of the Board.

** Possible justifications include but are not limited to: Only qualified bidder; Proprietary item; Urgent necessity; Bid process did not produce competitors; Governmental agency, association or Utility; Prior phase of professional services contract completed successfully by same Consultant; and Special technical expertise by Consultant for tasks desired.

Status of Ongoing MWDOC Reliability and Engineering and Planning Projects

November 8, 2016

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
Baker Treatment Plant or Expansion of Baker Water Treatment Plant	IRWD, MNWD, SMWD, ETWD Trabuco CWD		On line date is Oct 2016	On October 25, the Baker Treatment Plant dedication ceremony took place. The event was attended by a number of MWDOC staff along with Director Sat Tamaribuchi. The plant is scheduled to go on line in December.
Doheny Desalination Project	South Coast Water District, Laguna Beach CWD			<p>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.</p> <p>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.</p> <p>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.</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
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				<p>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).</p> <p>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.</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				<p>The next step is for MET staff to compile all related data and info, and 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.</p>
<p>Service Connection CM-1 Cost Issues with MET</p>				<p>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.</p> <p>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 amount of MET water to be delivered concurrent with groundwater deliveries; the low flow is anticipated at 0.5 to 1 cfs</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				<p>which should be sufficient to keep the Orange County Feeder water quality at acceptable levels.</p> <p>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.</p>
Other Meetings/Work				
				<p>Karl Seckel 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 put on 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.</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				Karl Seckel, Rob Hunter and MWDOC Director Sat Tamaribuchi 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 Dec 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.
				<p>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. As a way of background, the May 2016 Authority Board meeting included consideration of a report of governance options for the Authority. The report indicated that stakeholders agreed that regional partnerships should be explored. Potential entities for membership included the County of Orange, Trabuco County Water District and Rancho Mission Viejo. During the Board discussion several Directors indicated a desire to expand the list of potential partners to include the cities within the watershed, and non-governmental organizations. Additional names put forward included; MWDOC, South Orange County Watershed Management Area, and Orange County Chapter of the California Native Plant Society. 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.</p> <p>Additionally the Authority Board acted to approve a recruitment</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				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.
				A number of staff and Director Jeff Thomas attended the SMWD Lake Mission Viejo Water Purification Project dedication.
				Karl Seckel and Director Jeff Thomas 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.
				<p>Karl Seckel, Heather Baez 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 a 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 the four of the Board of Supervisors; our opposition is based on:</p> <ol style="list-style-type: none"> 1. We do not believe it is appropriate or good public policy for one public agency to charge another public agency a use fee to cross property paid for with public funds. 2. Given the separate statutory rights of the cities, water and

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				<p>sewer agencies (Public Entities), we do not believe OCFCD has the authority to impose use fees and cannot require Public Entities to enter into a license agreement that in any way restricts these rights. By virtue of these rights, OCFCD also cannot force Public Entities to move facilities or prohibit them from installing facilities based on a lack of entering into a license agreement and paying a use fee.</p> <ol style="list-style-type: none"> 3. We do not believe OCFCD has the legal authority levy such a fee. 4. We are NOT opposed to paying reasonable costs that are directly related to a specific encroachment (review, coordination, plan check fees, etc), but the OCFCD proposal goes way beyond this, proposing to charge “market value” real estate fees that increase 2% each year. 5. OCFCD staff will tell you they will add language indicating that the proposal will not apply if separate statutory prohibits such, but they appear unwilling to address this issue up-front as should be done. <p>A meeting is scheduled with OCFCD on Nov 14 and the item is currently scheduled to go to the Board of Suprs on Nov 22.</p>
				<p>Karl Seckel 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 Gyk, the original founder of the CDR.</p>
				<p>Director Susan Hinman, along with Rob Hunter and Karl Seckel participated in an hour-long presentation to the American</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				Association of University Women in San Juan Capistrano.
				Karl Seckel and Charles Busslinger 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.

**Status of Ongoing WEROC Projects
October 2016**

Description	Comments
Coordination with Member Agencies	<p>The WEROC quarterly emergency coordinators meeting was on November 1st 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 (see below), 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 Water District and Laguna Beach County Water District shared lessons learned in testing their water outage plans.</p> <p>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 were 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.</p>
Fall Exercise Activities	<p>The fall exercise was held on September 29th 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 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.</p>
Coordination with the County of Orange	<p>Kelly attended the October Orange County Emergency Management Organization (OCOMO) meeting at the newly built Disney EOC in Anaheim. 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</p>

Description	Comments
	<p>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.</p> <p>Kelly attended the Urban Area Security Initiative (UASI) meeting in Anaheim. The group was reviewing grant proposals for 2017 grant funding. The committee will vote on the proposed projects on November 9th.</p>
Coordination with Outside Agencies	<p>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.</p> <p>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.</p>
WEROC Emergency Operations Center (EOC) Readiness	<p>Power Plus provided routine generator maintenance service, including a load bank test at the North EOC.</p> <p>The WEROC radio test was conducted from the North EOC. There were some interference issues for some agencies, but the interferences did not 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.</p>

Description	Comments
<p>Miscellaneous Activities</p>	<p>Kelly attended the California Emergency Services Association (CESA) annual conference in San Diego. 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.</p> <p>Kelly also attended the International Association of Emergency Managers (IAEM) conference in Savannah, Georgia. 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.</p>

Status of Water Use Efficiency Projects

November 2016

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	Ongoing	For September 2016, 270 residential and 137 commercial smart timers were installed in Orange County. For program water savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	For September 2016, 20,113 rotating nozzles were installed in Orange County. For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.
Water Smart Landscape Program	MWDSC	Ongoing	On hold pending evaluation and RFP process	This Program is currently on hold while a Process and Impact Evaluation is conducted. Once the Evaluation is complete, the results will be used to make refinements to the Program. For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.
SoCal WaterSmart Residential Indoor Rebate Program	MWDSC	Ongoing	Ongoing	In September 2016, 580 high efficiency clothes washers and 142 premium high efficiency toilets were installed through this program. For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.

SoCal Water\$mart Commercial Rebate Program	MWDSC	On-going	On-going	<p>In September 2016, 146 laminar flow restrictors and 1,148 premium high efficiency toilets were installed through this program.</p> <p>For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.</p>
Industrial Process Water Use Reduction Program	MWDOC	September 2016	95%	<p>A total of 41 Focused Surveys and 19 Comprehensive Surveys have been completed or are in progress. To date, 15 companies have signed Incentive Agreements. Updated discharger lists have been obtained, and outreach is continuing to sites with feasible water savings potential. As a result of this program, 359 AFY of water savings is being achieved.</p>
MWDOC Conservation Meeting	MWDOC	Monthly	On-going	<p>This month's meeting was held on November 3, 2016 at MWDOC. The next meeting will be on December 1, 2016 at the City of Newport Beach.</p>
Metropolitan Conservation Meeting	MWDSC	Monthly	On-going	<p>This month's meeting was held on October 20, 2016. The next meeting will be November 17, 2016 at Metropolitan.</p>
Turf Removal Program	MWDOC	On-going	On-going	<p>In September 2016, 70 rebates were paid, representing \$175,786.98 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 20.3 million square feet of turf.</p> <p>On October 13, 2016, the General Manager signed a letter with the National League of Cities and Alliance for Water Efficiency requesting that the Internal Revenue Service treat water use efficiency-related rebates the same as energy efficiency rebates - as non-taxable income. This would also remove the need for MWDOC to issue 1099s to program participants and further incentivize participation in our water use efficiency programs.</p> <p>For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.</p>

California Sprinkler Adjustment Notification System – Base Irrigation Schedule Calculator	MWDOC	On-going	On-going	<p>The California Sprinkler Adjustment Notification System (CSANS) will e-mail or “push” an irrigation index to assist property owners with making global irrigation scheduling adjustments. Participants voluntarily register to receive this e-mail at www.csans.net and can unsubscribe at any time.</p> <p>Through a grant from the Department of Water Resources (DWR) to the California Urban Water Conservation Council, the East Bay Municipal Utility District and Bay Area Water Supply and Conservation Agency are now enrolled in CSANS. Once this has been completed, staff will be pursuing DWR for administration of CSANS state-wide.</p> <p>The following member agencies have recently requested access to the CSANS to administer their own messages to their customers: City of Brea, Mesa Water District, City of San Juan Capistrano, and Laguna Beach County WD. MWDOC will work with these agencies over the next month to transition administration of CSANS to these agencies. All other agencies are currently receiving educational messages administered by MWDOC.</p>
Spray to Drip Conversion Program	MWDOC	75%	October 2017	<p>This is a pilot program designed to test the efficacy of replacing conventional spray heads in shrub beds with low-volume, low-precipitation drip technology. Through a rebate program format, residential and commercial sites will be encouraged to convert their existing spray nozzles to drip.</p> <p>To date, 193 residential sites and 52 commercial sites have completed spray to drip conversion projects.</p>

Orange County

Water Use Efficiency Programs Savings and Implementation Report

Retrofits and Acre-Feet Water Savings for Program Activity

Program	Program Start Date	Retrofits Installed in	Month Indicated		Current Fiscal Year		Overall Program		
			Interventions	Water Savings	Interventions	Water Savings	Interventions	Annual Water Savings[4]	Cumulative Water Savings[4]
High Efficiency Clothes Washer Program	2001	September-16	580	1.67	1,151	6.19	109,934	3,793	23,739
Smart Timer Program - Irrigation Timers	2004	September-16	407	8.59	788	170.95	18,270	6,961	38,033
Rotating Nozzles Rebate Program	2007	September-16	20,113	80.42	22,779	91.08	544,137	2,683	11,114
SoCal WaterSmart Commercial Plumbing Fixture Rebate Program	2002	September-16	1,294	3.82	6,789	33.96	77,071	3,518	39,164
Water Smart Landscape Program [1]	1997	November-15	12,677	904.62	12,677	3,615.21	12,677	10,621	72,668
Industrial Process Water Use Reduction Program	2006	October-16	0	0.00	0	0.00	15	359	1,881
Turf Removal Program ^[3]	2010	September-16	102,497	1.20	292,440	780	20,319,109	2,845	7,176
High Efficiency Toilet (HET) Program	2005	September-16	77	0.27	627	26.67	59,212	2,189	14,138
Home Water Certification Program	2013	November-15	0	0.000	53	0.251	312	7,339	15,266
Synthetic Turf Rebate Program	2007						685,438	96	469
Ultra-Low-Flush-Toilet Programs ^[2]	1992						363,926	13,452	162,561
Home Water Surveys ^[2]	1995						11,867	160	1,708
Showerhead Replacements ^[2]	1991						270,604	1,667	19,083
Total Water Savings All Programs				1,001	337,304	4,724	22,472,572	48,351	391,749

Water Smart Landscape Program participation is based on the number of water meters receiving monthly Irrigation Performance Reports.

Cumulative Water Savings Program To Date totals are from a previous Water Use Efficiency Program Effort.

Turf Removal Interventions are listed as square feet.

Cumulative & annual water savings represents both active program savings and passive savings that continues to be realized due to plumbing code changes over time.

HIGH EFFICIENCY CLOTHES WASHERS INSTALLED BY AGENCY through MWDOC and Local Agency Conservation Programs

Agency	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY13/14	FY14/15	FY15/16	FY16/17	Total	Current FY Water Savings Ac/Ft (Cumulative)	Cumulative Water Savings across all Fiscal Years	15 yr. Lifecycle Savings Ac/Ft
Brea	156	42	186	144	93	115	114	76	12	1,822	0.07	396.73	943
Buena Park	146	59	230	145	105	106	91	76	10	1,474	0.05	306.21	763
East Orange CWD RZ	17	3	23	10	10	8	8	8	-	189	0.00	43.34	98
El Toro WD	130	32	162	112	134	121	111	65	11	1,485	0.06	309.57	768
Fountain Valley	243	72	289	158	115	102	110	76	23	2,358	0.14	531.46	1,220
Garden Grove	332	101	481	236	190	162	165	251	24	3,460	0.16	742.92	1,790
Golden State WC	447	168	583	485	265	283	359	260	49	4,926	0.27	1,050.64	2,549
Huntington Beach	751	211	963	582	334	295	319	225	46	8,112	0.23	1,864.94	4,197
Irvine Ranch WD	1,844	1,394	2,621	2,170	1,763	1,664	1,882	1,521	403	23,696	2.19	4,866.83	12,261
La Habra	83	22	179	128	82	114	87	66	9	1,283	0.05	267.62	664
La Palma	51	25	76	46	34	25	34	29	2	450	0.01	92.54	233
Laguna Beach CWD	77	27	96	57	38	37	39	32	1	914	0.01	204.29	473
Mesa Water	246	73	232	176	114	86	89	113	23	2,461	0.12	567.10	1,273
Moulton Niguel WD	742	250	1,127	679	442	421	790	688	183	9,529	0.96	1,960.38	4,931
Newport Beach	259	57	197	142	116	92	95	66	18	2,581	0.09	608.46	1,335
Orange	403	111	349	262	218	163	160	124	21	3,839	0.11	885.91	1,986
Orange Park Acres	-	-	-	-	-	-	-	-	-	12	0.00	3.42	6
San Juan Capistrano	127	43	190	110	76	73	92	63	11	1,437	0.03	310.53	744
San Clemente	278	63	333	206	140	94	141	75	18	2,568	0.10	563.34	1,329
Santa Margarita WD	740	257	1,105	679	553	662	792	466	116	9,265	0.59	1,922.32	4,794
Seal Beach	57	7	81	51	31	29	38	23	-	593	0.00	129.29	307
Serrano WD	23	7	21	20	13	10	26	8	4	350	0.03	80.93	181
South Coast WD	148	43	183	112	89	79	68	43	14	1,554	0.06	337.97	804
Trabuco Canyon WD	62	28	82	62	30	45	47	34	6	776	0.03	167.40	402
Tustin	144	45	174	97	78	59	80	66	18	1,586	0.10	357.57	821
Westminster	233	74	329	208	121	82	109	149	21	2,523	0.14	551.48	1,305
Yoga Linda	367	117	394	273	181	167	156	123	19	3,715	0.10	850.45	1,922
MWDOC Totals	8,106	3,331	10,686	7,350	5,365	5,094	6,002	4,726	1,062	92,958	5.69	19,973.64	17,959

Alhambra	781	860	910	477	331	285	295	266	47	10,516	0.27	2,372.51	5,441
Furbert	330	69	397	270	200	186	211	165	24	3,612	0.13	725.56	1,869
Santa Ana	257	87	355	190	163	131	132	259	18	2,848	0.10	666.87	1,474
Non-MWDOC Totals	1,368	1,016	1,662	937	694	602	638	690	89	16,976	0.50	3,764.94	3,280

Orange County Totals	9,474	4,347	12,348	8,287	6,059	5,696	6,640	5,416	1,151	109,934	6.19	23,738.58	21,239
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SMART TIMERS INSTALLED BY AGENCY through MWDOC and Local Agency Conservation Programs

Agency	FY 09/10		FY 10/11		FY 11/12		FY 12/13		FY 13/14		FY 14/15		FY 15/16		FY 16/17		Total Program		Cumulative Water Savings across all Fiscal Years
	Res	Comm	Res	Comm	Res	Comm	Res	Comm	Res	Comm	Res	Comm	Res	Comm	Res	Comm	Res	Comm	
Brea	0	0	0	0	8	0	0	8	4	0	43	6	20	4	11	0	111	76	457.89
Buena Park	0	0	0	0	4	19	3	0	0	0	4	10	7	4	2	5	23	39	116.07
East Orange CWD RZ	0	0	1	0	5	0	2	0	0	0	2	0	1	0	1	0	15	0	6.59
El Toro WD	2	18	5	5	26	2	7	2	11	0	8	9	9	17	7	3	89	350	2,227.40
Fountain Valley	0	6	2	2	8	2	3	2	4	0	7	10	13	1	13	0	71	28	138.30
Garden Grove	6	0	5	4	7	0	5	2	9	0	10	14	13	11	6	0	79	38	141.53
Golden State WC	9	22	7	4	13	3	9	49	9	25	39	12	35	16	15	34	184	189	668.11
Huntington Beach	6	27	6	36	15	4	18	33	20	35	19	2	42	12	30	4	214	178	804.57
Invine Ranch WD	14	145	28	153	267	71	414	135	71	59	67	310	239	207	90	50	1,515	1,916	9,433.26
La Habra	0	21	0	0	3	0	4	7	2	0	4	7	3	3	1	1	25	44	171.25
La Palma	0	0	0	0	1	0	1	0	2	0	2	0	3	2	0	0	9	2	4.12
Laguna Beach CWD	2	14	4	1	109	2	76	2	71	0	86	0	86	1	3	0	473	20	197.45
Mesa Water	13	7	7	22	21	0	10	2	15	2	17	28	36	12	8	0	177	113	580.41
Moulton Niguel WD	17	162	36	60	179	31	51	74	40	45	46	95	163	100	68	19	746	691	2,911.38
Newport Beach	7	58	6	0	275	12	242	26	188	75	11	9	28	43	12	10	1,020	407	2,289.80
Orange	2	13	5	8	25	0	20	24	13	9	18	31	51	13	18	1	234	156	794.69
San Juan Capistrano	7	49	13	1	103	2	14	18	6	11	6	19	20	8	8	0	208	117	541.85
San Clemente	13	209	46	11	212	17	26	7	28	2	28	24	26	3	12	1	1,026	362	2,345.83
Santa Margarita WD	10	152	61	53	262	7	53	171	64	93	53	321	189	136	174	53	1,002	1,204	4,520.51
Santiago CWD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Seal Beach	0	1	0	0	0	3	1	0	1	36	1	12	2	2,446	1	4	6	2,502	3,434.97
Serrano WD	11	0	4	0	3	0	1	0	0	0	4	0	11	2	2	0	36	2	10.77
South Coast WD	3	10	13	3	78	10	13	16	8	4	104	73	9	11	1	0	272	212	991.77
Trabuco Canyon WD	2	0	2	10	12	0	6	0	2	0	6	1	16	50	4	0	94	154	837.38
Tustin	10	14	10	0	11	0	8	4	9	1	18	14	33	8	12	1	122	58	262.83
Westminster	3	0	1	1	2	0	1	1	2	0	13	17	7	1	5	0	53	32	155.72
Yorba Linda	5	21	25	0	22	0	20	0	12	5	32	2	61	27	25	1	291	113	638.30
MWDOC Totals	142	949	289	374	1,671	185	1,017	583	571	402	648	1,026	1,123	3,136	529	193	8,095	9,003	34,682.75

Anaheim	5	46	12	11	23	60	19	10	9	26	7	52	30	34	28	10	185	457	2,284.48
Fullerton	2	39	9	33	22	51	9	29	8	0	40	26	32	12	16	6	162	198	788.02
Santa Ana	1	8	8	0	6	5	8	19	7	8	9	27	22	26	4	2	71	99	277.79
Non-MWDOC Totals	8	93	29	44	51	116	36	58	24	34	56	105	84	72	48	18	418	754	3,350.29
Orange County Totals	150	1,042	318	418	1,722	301	1,053	641	595	436	704	1,131	1,207	3,208	577	211	8,513	9,757	38,033

ROTATING NOZZLES INSTALLED BY AGENCY
through MWDOC and Local Agency Conservation Programs

Agency	FY 11/12			FY 12/13			FY 13/14			FY 14/15			FY 15/16			FY 16/17			Total Program			Cumulative Water Savings across all Fiscal Years
	Small		Large	Small		Large	Small		Large	Small		Large	Small		Large	Small		Large	Small		Large	
	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	
Brea	130	0	0	65	120	0	84	0	0	157	45	0	74	2,484	0	0	0	0	572	2,749	0	32.68
Buena Park	32	0	0	65	0	0	53	0	0	248	0	0	45	98	0	0	0	0	509	173	2,535	453.42
East Orange	340	0	0	55	0	0	30	0	0	221	0	0	0	0	0	0	0	0	751	0	0	10.83
El Toro	357	76	0	23	6,281	0	56	3,288	0	1,741	28,714	0	730	4,457	0	55	242	0	3,369	46,222	890	820.63
Fountain Valley	108	0	0	35	0	0	0	0	0	107	0	0	222	0	0	0	0	0	710	0	0	10.22
Garden Grove	119	0	0	95	0	0	80	0	0	88	50	0	110	0	0	55	0	0	933	201	0	19.33
Golden State	294	0	0	257	2,595	0	192	0	0	583	1,741	0	1,088	0	0	176	4,701	0	3,417	10,009	0	152.29
Huntington Beach	458	0	0	270	0	0	120	0	0	798	1,419	0	1,345	2,836	0	67	1,465	0	3,715	10,629	2,681	790.18
Irvine Ranch	1,715	4,255	0	25,018	1,014	0	11,010	4,257	0	1,421	632	0	1,989	5,047	0	86	2,953	0	46,888	88,003	2,004	2,893.00
La Habra	33	90	0	0	0	0	15	0	0	109	338	0	300	0	0	0	0	0	481	1,236	900	221.65
La Palma	0	0	0	0	0	0	0	0	0	0	0	0	46	505	0	0	0	0	56	505	0	4.65
Laguna Beach	763	0	0	3,596	0	0	2,948	878	0	2,879	1,971	0	1,390	0	0	0	0	0	12,139	2,896	0	224.61
Mesa Water	297	277	0	270	0	0	361	0	0	229	0	0	166	0	0	30	0	0	1,947	385	343	121.83
Moulton Niguel	1,225	0	0	512	1,385	0	361	227	0	1,596	4,587	0	5,492	1,441	0	76	4,371	0	11,797	19,014	2,945	1,011.21
Newport Beach	640	3,273	0	25,365	50	0	19,349	6,835	0	460	3,857	0	348	670	0	0	0	0	46,678	21,413	0	1,178.02
Orange	343	0	0	264	0	0	245	120	0	304	668	0	631	91	0	0	0	0	3,170	1,072	0	69.27
San Clemente	4,266	117	1,343	631	172	0	415	5,074	0	326	0	0	426	0	0	0	0	0	9,989	7,538	1,343	415.75
San Juan Capistrano	949	0	0	684	30	0	370	0	0	495	737	0	310	593	0	0	0	0	5,420	8,729	0	256.24
Santa Margarita	4,817	0	0	983	0	0	389	0	0	1,207	1,513	0	1,820	837	0	0	0	0	16,150	6,921	611	450.27
Seal Beach	0	0	0	0	0	0	0	0	0	40	5,261	0	0	2,300	0	0	0	0	155	7,852	0	90.55
Serrano	58	0	0	190	0	0	105	0	0	377	0	0	695	0	0	0	0	0	3,405	0	0	55.23
South Coast	688	359	0	435	0	0	70	0	0	4,993	13,717	0	1,421	2,889	0	16	0	0	8,130	18,870	0	323.31
Trabuco Canyon	379	0	0	34	0	0	0	0	0	56	0	0	130	0	0	0	0	0	2,086	791	0	53.52
Tustin	476	1,013	0	378	0	0	329	0	0	408	0	0	317	386	0	65	0	0	3,371	1,399	0	69.73
Westminster	26	0	0	15	0	0	0	0	0	54	0	0	73	0	0	72	0	0	431	0	0	6.39
Yorba Linda	559	0	0	730	0	0	40	990	0	921	0	0	1,715	0	0	107	0	0	5,975	4,359	500	277.95
MWDOC Totals	19,072	9,460	1,343	59,970	11,647	0	36,622	21,669	0	19,818	65,250	0	20,883	24,634	0	805	13,732	0	192,244	260,966	14,752	10,012.75

Anaheim	742	38,554	0	459	813	0	338	0	0	498	712	0	794	5,221	0	117	3,953	0	3,990	49,799	105	630.04
Fullerton	409	0	0	119	0	0	107	0	0	684	1,196	0	521	7,015	0	32	3,034	0	2,877	11,309	1,484	386.27
Santa Ana	22	65	0	99	0	0	86	2,533	0	310	0	0	0	1,420	0	0	1,106	0	859	5,752	0	85.35
Non-MWDOC Totals	1,173	38,619	0	677	813	0	531	2,533	0	1,492	1,908	0	1,315	13,656	0	149	8,093	0	7,726	66,860	1,589	1,101.66
Orange County Totals	20,245	48,079	1,343	60,647	12,460	0	37,153	24,202	0	21,310	67,158	0	22,198	38,290	0	954	21,825	0	199,970	327,826	16,341	11,114.41

SOCAL WATER\$MART COMMERCIAL PLUMBING FIXTURES REBATE PROGRAM^[1]
INSTALLED BY AGENCY
 through MWDOC and Local Agency Conservation Programs

Agency	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	Totals	Cumulative Water Savings across all Fiscal Years
Brea	27	113	24	4	1	234	0	10	91	0	631	394
Buena Park	153	432	122	379	290	5	23	56	591	0	2,356	1,070
East Orange CWD RZ	0	0	0	0	0	0	0	0	0	0	0	0
El Toro WD	0	92	143	1	137	0	212	6	288	0	1,027	585
Fountain Valley	17	35	0	2	314	0	0	1	249	0	872	584
Garden Grove	5	298	130	22	0	4	1	167	676	310	2,351	1,480
Golden State WC	46	414	55	68	135	0	1	0	1,008	0	2,812	1,893
Huntington Beach	48	104	126	96	156	104	144	7	783	0	2,313	1,541
Irvine Ranch WD	121	789	2,708	1,002	646	1,090	451	725	11,100	3,431	25,339	7,274
La Habra	191	75	53	4	0	0	0	0	340	0	883	544
La Palma	0	140	21	0	0	0	0	0	0	0	166	84
Laguna Beach CWD	20	137	189	0	0	0	27	0	0	0	446	312
Mesa Water	141	543	219	669	41	6	0	79	661	763	4,235	2,068
Moulton Niguel WD	9	69	151	6	0	0	0	3	413	0	996	811
Newport Beach	98	27	245	425	35	0	0	566	0	0	1,834	1,279
Orange	18	374	67	1	73	1	271	81	275	1,535	3,714	1,769
San Juan Capistrano	2	1	1	0	0	0	14	0	0	0	260	397
San Clemente	2	18	43	0	19	0	0	1	0	0	432	381
Santa Margarita WD	6	23	11	0	0	0	0	2	90	0	207	206
Santiago CWD	0	0	0	0	0	0	0	0	0	0	0	0
Seal Beach	1	2	124	0	0	0	0	0	0	0	354	420
Serrano WD	0	0	0	0	0	0	0	0	0	0	0	0
South Coast WD	9	114	56	422	84	148	0	382	0	0	1,320	509
Trabuco Canyon WD	0	4	0	0	0	0	0	0	0	0	11	15
Tustin	115	145	25	230	0	0	0	75	358	0	1,190	814
Westminster	40	161	16	63	35	1	28	0	146	79	1,040	995
Yorba Linda	10	24	8	30	0	1	0	0	226	0	511	555
MWDOC Totals	1,079	4,134	4,537	3,424	1,966	1,594	1,172	2,161	17,275	6,118	55,300	25,981
Anaheim	766	3,298	582	64	48	165	342	463	3,072	39	13,483	6,897
Fullerton	133	579	29	4	0	94	0	178	476	402	2,559	1,619
Santa Ana	493	815	728	39	12	16	17	5	1,293	230	5,729	4,667
Non-MWDOC Totals	1,392	4,692	1,339	107	60	275	359	646	4,841	671	21,771	13,133
Orange County Totals	2,471	8,826	5,876	3,531	2,026	1,869	1,531	2,807	22,116	6,789	77,071	39,164

[1] Retrofit devices include ULF Toilets and Urinals, High Efficiency Toilets and Urinals, Multi-Family and Multi-Family 4-Liter HETs, Zero Water Urinals, High Efficiency Clothes Washers, Cooling Tower Conductivity Controllers, Ph Cooling Tower Conductivity Controllers, Flush Valve Retrofit Kits, Pre-rinse Spray heads, Hospital X-Ray Processor Recirculating Systems, Steam Sterilizers, Food Steamers, Water Pressurized Brooms, Laminar Flow Restrictors, and Ice Making Machines.

Water Smart Landscape Program

Total Number of Meters
in Program by Agency

Agency	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	Overall Water Savings To Date (AF)
Brea	0	0	0	0	22	22	22	22	22	0	64.37
Buena Park	0	0	17	103	101	101	101	101	101	0	462.69
East Orange CWD RZ	0	0	0	0	0	0	0	0	0	0	0.00
El Toro WD	352	384	371	820	810	812	812	812	812	0	4,856.93
Fountain Valley	0	0	0	0	0	0	0	0	0	0	0.00
Garden Grove	0	0	0	0	0	0	0	0	0	0	0.00
Golden State WC	14	34	32	34	32	32	32	32	32	0	200.59
Huntington Beach	0	0	31	33	31	31	31	31	31	0	148.43
Irvine Ranch WD	708	1,008	6,297	6,347	6,368	6,795	6,797	6,769	6,780	0	38,304.89
Laguna Beach CWD	0	57	141	143	141	124	124	124	124	0	733.07
La Habra	0	23	22	24	22	22	22	22	22	0	136.72
La Palma	0	0	0	0	0	0	0	0	0	0	0.00
Mesa Water	165	286	285	288	450	504	511	514	515	0	2,943.57
Moulton Niguel WD	180	473	571	595	643	640	675	673	661	0	4,120.71
Newport Beach	58	142	171	191	226	262	300	300	300	0	1,501.19
Orange	0	0	0	0	0	0	0	0	0	0	0.00
San Clemente	227	233	247	271	269	269	299	407	459	0	2,368.77
San Juan Capistrano	0	0	0	0	0	0	0	0	0	0	0.00
Santa Margarita WD	945	1,571	1,666	1,746	1,962	1,956	2,274	2,386	2,386	0	14,178.10
Seal Beach	0	0	0	0	0	0	0	0	0	0	0.00
Serrano WD	0	0	0	0	0	0	0	0	0	0	0.00
South Coast WD	62	117	108	110	118	118	118	164	164	0	829.91
Trabuco Canyon WD	12	49	48	62	60	60	60	60	60	0	350.52
Tustin	0	0	0	0	0	0	0	0	0	0	0.00
Westminster	10	18	18	20	18	18	18	18	18	0	116.46
Yorba Linda WD	0	0	0	0	0	0	0	0	0	0	0.00
MWDOC Totals	2,733	4,395	10,025	10,787	11,273	11,766	12,196	12,435	12,487	0	71,316.9
Anaheim	0	0	142	146	144	190	190	190	190	0	1,351.53
Fullerton	0	0	0	0	0	0	0	0	0	0	0.00
Santa Ana	0	0	0	0	0	0	0	0	0	0	0.00
Non-MWDOC Totals	0	0	142	146	144	190	190	190	190	0	1,351.53
Orange Co. Totals	2,733	4,395	10,167	10,933	11,417	11,956	12,386	12,625	12,677	0	72,668.45

INDUSTRIAL PROCESS WATER USE REDUCTION PROGRAM

Number of Process Changes by Agency

Agency	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	Overall Program Interventions	Annual Water Savings[1]	Cumulative Water Savings across all Fiscal Years[1]
Brea	0	0	0	0	0	0	0	0	0	0	0
Buena Park	0	0	0	0	0	0	0	0	1	54	423
East Orange	0	0	0	0	0	0	0	0	0	0	0
El Toro	0	0	0	0	0	0	0	0	0	0	0
Fountain Valley	0	0	0	0	0	0	0	0	0	0	0
Garden Grove	0	0	0	0	0	0	0	0	0	0	0
Golden State	0	0	0	0	0	0	0	0	1	3	25
Huntington Beach	0	0	0	2	0	1	0	0	3	127	372
Irvine Ranch	2	1	1	1	1	0	0	0	6	98	472
La Habra	0	0	0	0	0	0	0	0	0	0	0
La Palma	0	0	0	0	0	0	0	0	0	0	0
Laguna Beach	0	0	0	0	0	0	0	0	0	0	0
Mesa Water	0	0	0	0	0	0	0	0	0	0	0
Moulton Niguel	0	0	0	0	0	0	0	0	0	0	0
Newport Beach	0	0	0	0	0	1	0	0	1	21	41
Orange	0	0	0	0	0	0	1	0	2	45	379
San Juan Capistrano	0	0	0	0	0	0	0	0	0	0	0
San Clemente	0	0	0	0	0	0	0	0	0	0	0
Santa Margarita	0	0	0	0	0	0	0	0	0	0	0
Seal Beach	0	0	0	0	0	0	0	0	0	0	0
Serrano	0	0	0	0	0	0	0	0	0	0	0
South Coast	0	0	0	0	0	0	0	0	0	0	0
Trabuco Canyon	0	0	0	0	0	0	0	0	0	0	0
Tustin	0	0	0	0	0	0	0	0	0	0	0
Westminster	0	0	0	0	0	0	0	0	0	0	0
Yorba Linda	0	0	0	0	0	0	0	0	0	0	0
MWDOC Totals	2	1	1	3	1	2	1	0	14	348	1712
Anaheim	0	0	0	0	0	0	0	0	0	0	0
Fullerton	0	0	0	0	0	0	0	0	0	0	0
Santa Ana	0	0	0	0	0	0	1	0	1	11	169
OC Totals	2	1	1	3	1	2	2	0	15	359	1881

[1] Acre feet of savings determined during a one year monitoring period.
If monitoring data is not available, the savings estimated in agreement is used.

TURF REMOVAL BY AGENCY⁽¹⁾
through MWDOT and Local Agency Conservation Programs

Agency	FY 11/12		FY 12/13		FY 13/14		FY 14/15		FY 15/16		FY 16/17		Total Program		Cumulative Water Savings across all Fiscal Years
	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	
Brea	3,397	9,466	7,605	0	5,697	0	71,981	30,617	118,930	404,411	756	0	208,366	444,494	209,05
Buena Park	0	0	0	0	0	0	11,670	1,626	77,127	16,490	250	0	89,047	18,116	31.83
East Orange	0	0	0	0	1,964	0	18,312	0	27,844	0	0	0	48,120	0	16.59
El Toro	4,723	0	4,680	72,718	4,582	0	27,046	221,612	63,546	162,548	2,852	0	107,429	456,878	228.85
Fountain Valley	1,300	0	682	7,524	4,252	0	45,583	5,279	65,232	0	0	0	117,049	12,803	48.84
Garden Grove	14,013	0	4,534	0	8,274	0	67,701	22,000	177,408	49,226	3,299	0	275,229	117,403	166.42
Golden State	42,593	30,973	31,813	3,200	32,725	8,424	164,507	190,738	310,264	112,937	0	0	581,902	346,272	377.04
Huntington Beach	27,630	48,838	9,219	12,437	20,642	0	165,600	58,942	305,420	270,303	5,422	21,534	534,734	415,705	364.59
Irvine Ranch	6,450	1,666	32,884	32,384	36,584	76,400	234,905	317,999	782,844	2,675,629	68,117	23,455	1,167,207	3,140,327	1,347.01
La Habra	0	8,262	0	0	0	0	14,014	1,818	49,691	72,164	0	0	63,705	90,019	55.33
La Palma	0	0	0	0	0	0	4,884	0	10,257	59,760	0	0	15,141	59,760	21.66
Laguna Beach	2,533	0	2,664	1,712	4,586	226	13,647	46,850	47,614	0	0	0	72,022	48,788	47.58
Mesa Water	6,777	0	10,667	0	22,246	0	131,675	33,620	220,815	106,896	670	39,746	392,850	180,262	192.45
Moulton Niguel	4,483	26,927	11,538	84,123	14,739	40,741	314,250	1,612,845	889,748	1,059,279	73,244	0	1,308,958	2,840,054	1,506.50
Newport Beach	3,454	0	3,548	2,346	894	0	33,995	65,277	76,675	375,404	0	0	118,566	443,027	175.80
Orange	12,971	0	15,951	8,723	11,244	0	120,093	281,402	289,990	106,487	550	2,366	450,799	398,978	314.51
San Clemente	21,502	0	16,062	13,165	18,471	13,908	90,349	1,137	215,249	438,963	356	0	361,989	467,173	278.30
San Juan Capistrano	22,656	103,692	29,544	27,156	12,106	0	101,195	32,366	197,290	143,315	2,624	0	365,415	306,529	304.43
Santa Margarita	1,964	11,400	10,151	11,600	17,778	48,180	211,198	514,198	534,048	550,420	4,586	25,912	784,208	1,167,271	685.80
Seal Beach	0	0	3,611	0	0	0	15,178	504	17,349	15,911	0	0	36,138	16,415	18.43
Serrano	0	0	0	0	2,971	0	41,247	0	127,877	4,403	0	0	172,095	4,403	56.02
South Coast	6,806	0	9,429	4,395	15,162	116,719	84,282	191,853	181,102	128,290	1,864	0	298,645	457,581	308.11
Trabuco Canyon	272	0	1,542	22,440	2,651	0	14,771	0	42,510	88,272	0	0	61,746	110,712	61.32
Tustin	0	0	9,980	0	1,410	0	71,285	14,137	232,697	33,362	7,793	0	323,165	47,499	119.24
Westminster	0	0	0	0	0	0	14,040	34,631	71,833	23,902	1,339	0	87,212	58,533	47.43
Yorba Linda	0	0	0	0	0	0	112,136	12,702	360,279	116,985	5,705	0	489,469	129,687	197.98
MWDOT Totals	183,524	241,224	216,104	303,923	238,978	304,598	2,195,544	3,692,153	5,493,639	7,015,357	179,427	113,013	8,531,206	11,778,689	7,171.11

Anaheim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Fullerton	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.16
Santa Ana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Non-MWDOT Totals	0	0	0	0	0	9,214	0	0	0	0	0	0	0	9,214	5.16

Orange County Totals	183,524	241,224	216,104	303,923	238,978	313,812	2,195,544	3,692,153	5,493,639	7,015,357	179,427	113,013	8,531,206	11,787,903	7,176
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(1) Installed device numbers are listed as square feet

HIGH EFFICIENCY TOILETS (HETs) INSTALLED BY AGENCY through MWDOC and Local Agency Conservation Programs

Agency	FY05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	Total	Cumulative Water Savings across all Fiscal Years
Brea	0	2	7	43	48	8	0	0	38	146	154	0	446	77.33
Buena Park	0	1	2	124	176	7	0	0	96	153	112	0	671	156.23
East Orange CWD RZ	0	0	10	12	1	0	0	0	13	26	24	0	86	16.77
EI Toro WD	0	392	18	75	38	18	0	133	218	869	264	8	2,033	437.38
Fountain Valley	0	69	21	262	54	17	0	0	41	132	220	2	818	207.69
Garden Grove	0	14	39	443	181	24	0	0	63	350	363	-1	1,476	347.88
Golden State WC	2	16	36	444	716	37	80	2	142	794	512	1	2,782	638.73
Huntington Beach	2	13	59	607	159	76	0	0	163	1,190	628	1	2,898	574.68
Irvine Ranch WD	29	1,055	826	5,088	2,114	325	0	1,449	810	1,777	2,798	426	16,697	4,555.10
Laguna Beach CWD	0	2	17	91	28	11	0	0	45	112	81	-1	386	84.65
La Habra	0	3	18	296	34	20	0	0	37	94	83	-1	584	165.30
La Palma	0	1	10	36	26	13	0	0	21	59	52	0	218	46.77
Mesa Water	0	247	19	736	131	7	0	0	147	162	162	-1	1,610	511.77
Moulton Niguel WD	0	20	104	447	188	46	0	0	400	2,497	1,939	24	5,665	855.52
Newport Beach	0	5	19	163	54	13	0	0	49	168	243	3	717	145.72
Orange	1	20	62	423	79	40	0	1	142	978	416	8	2,170	422.10
San Juan Capistrano	0	10	7	76	39	11	0	0	35	140	202	0	520	94.35
San Clemente	0	7	22	202	66	21	0	0	72	225	246	11	872	181.13
Santa Margarita WD	0	5	14	304	151	44	0	0	528	997	1,152	87	3,282	508.20
Seal Beach	0	678	8	21	12	1	0	2	17	50	69	-1	857	348.77
Serrano WD	2	0	0	13	5	0	0	0	2	40	55	1	119	18.30
South Coast WD	2	2	29	102	41	12	23	64	102	398	235	6	1,016	178.83
Trabuco Canyon WD	0	0	4	23	23	0	0	0	10	108	169	1	338	48.26
Tustin	0	186	28	387	479	17	0	0	64	132	201	13	1,507	460.79
Westminster	0	17	25	541	167	23	0	0	35	161	359	2	1,330	346.69
Yorba Linda WD	0	14	89	323	96	18	0	0	40	280	379	0	1,239	281.02
MWDOC Totals	38	2,779	1,494	11,282	5,106	809	103	1,651	3,330	12,038	11,118	589	50,337	11,709.96
Anaheim	0	255	78	2,771	619	114	0	0	156	1,188	614	23	5,818	1,690.15
Fullerton	0	4	28	286	60	23	0	0	61	293	286	10	1,051	223.18
Santa Ana	0	11	25	925	89	23	0	0	33	602	293	5	2,006	514.88
Non-MWDOC Totals	0	270	131	3,982	768	160	0	0	250	2,083	1,193	38	8,875	2,428.21
Orange County Totals	38	3,049	1,625	15,264	5,874	969	103	1,651	3,580	14,121	12,311	627	59,212	14,138.16

HOME WATER SURVEYS PERFORMED BY AGENCY

through MWDOC and Local Agency Conservation Programs

Agency	FY 13/14		FY 14/15		FY 15/16		Total		Cumulative Water Savings
	Surveys	Cert Homes	Surveys	Cert Homes	Surveys	Cert Homes	Surveys	Cert Homes	
Brea	1	0	2	0	0	0	3	0	0.16
Buena Park	0	0	1	0	0	0	1	0	0.05
East Orange	19	0	1	0	0	0	20	0	1.39
El Toro	0	0	3	0	0	0	3	0	0.14
Fountain Valley	3	0	4	0	1	0	8	0	0.42
Garden Grove	0	0	6	0	1	0	7	0	0.31
Golden State	0	0	0	0	0	0	0	0	0.00
Huntington Beach	2	0	5	0	2	0	9	0	0.42
Irvine Ranch	1	0	3	0	6	0	10	0	0.35
La Habra	0	0	1	0	0	0	1	0	0.05
La Palma	0	0	0	0	0	0	0	0	0.00
Laguna Beach	4	0	8	0	1	0	13	0	0.68
Mesa Water	0	0	0	0	0	0	0	0	0.00
Moulton Niguel	4	0	4	0	0	0	8	0	0.47
Newport Beach	2	0	8	0	6	0	16	0	0.66
Orange	2	0	18	0	1	0	21	0	1.01
San Clemente	15	0	13	0	0	0	28	0	1.67
San Juan Capistrano	4	0	13	0	2	0	19	0	0.94
Santa Margarita	15	0	40	1	14	0	69	1	3.27
Seal Beach	0	0	1	0	2	0	3	0	0.09
Serrano	0	0	2	0	0	0	2	0	0.09
South Coast	6	0	4	0	1	0	11	0	0.64
Trabuco Canyon	0	0	4	0	0	0	4	0	0.19
Tustin	0	0	10	0	5	0	15	0	0.59
Westminster	0	0	0	0	0	0	0	0	0.00
Yorba Linda	0	0	13	0	10	0	23	0	0.85
MWDOC Totals	78	0	164	1	52	0	294	1	14.44

Anaheim	0	0	0	0	0	0	0	0	0.00
Fullerton	0	0	17	0	1	0	18	0	0.82
Santa Ana	0	0	0	0	0	0	0	0	0.00
Non-MWDOC Totals	0	0	17	0	1	0	18	0	0.82
Orange County Totals	78	0	181	1	53	0	312	1	15.266

SYNTHETIC TURF INSTALLED BY AGENCY^[1] **through MWDOC and Local Agency Conservation Programs**

Agency	FY 07/08		FY 08/09		FY 09/10		FY 10/11		Total Program		Cumulative Water Savings across all Fiscal Years
	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	
Brea	0	0	2,153	2,160	500	0	0	0	2,653	2,160	3.30
Buena Park	0	0	1,566	5,850	0	0	0	0	1,566	5,850	5.19
East Orange	0	0	0	0	983	0	0	0	983	0	0.55
El Toro	3,183	0	2,974	0	3,308	0	895	0	10,360	0	6.98
Fountain Valley	11,674	0	1,163	0	2,767	0	684	0	16,288	0	12.46
Garden Grove	1,860	0	0	0	3,197	0	274	0	5,331	0	3.47
Golden State	6,786	0	13,990	0	15,215	0	2,056	0	38,047	0	24.88
Huntington Beach	15,192	591	12,512	0	4,343	1,504	0	0	32,047	2,095	25.29
Irvine Ranch	11,009	876	13,669	0	2,585	0	0	0	27,263	876	21.00
La Habra	0	0	0	0	0	0	0	0	0	0	-
La Palma	429	0	0	0	0	0	0	0	429	0	0.36
Laguna Beach	3,950	0	3,026	0	725	0	0	0	7,701	0	5.84
Mesa Water	4,114	0	3,005	78,118	4,106	0	2,198	0	13,423	78,118	63.46
Moulton Niguel	14,151	0	25,635	2,420	7,432	0	0	0	47,218	2,420	35.69
Newport Beach	2,530	0	6,628	0	270	0	0	0	9,428	0	6.92
Orange	4,169	0	7,191	0	635	0	0	0	11,995	0	8.89
San Clemente	9,328	0	11,250	455	2,514	1,285	500	0	23,592	1,740	18.37
San Juan Capistrano	0	0	7,297	639	2,730	0	4,607	0	14,634	639	9.02
Santa Margarita	12,922	0	26,069	0	21,875	0	7,926	0	68,792	0	44.68
Seal Beach	0	0	817	0	0	0	0	0	817	0	0.57
Serrano	7,347	0	1,145	0	0	0	0	0	8,492	0	6.97
South Coast	2,311	0	6,316	0	17,200	0	1,044	0	26,871	0	16.43
Trabuco Canyon	1,202	0	9,827	0	0	0	0	0	11,029	0	7.89
Tustin	6,123	0	4,717	0	2,190	0	0	0	13,030	0	9.67
Westminster	2,748	16,566	8,215	0	890	0	0	0	11,853	16,566	22.47
Yorba Linda	11,792	0	12,683	0	4,341	5,835	0	0	28,816	5,835	24.48
MWDOC Totals	132,820	18,033	181,848	89,642	97,806	8,624	20,184	0	432,658	116,299	384.83

Anaheim	4,535	0	7,735	20,093	13,555	65,300	4,122	0	29,947	85,393	69.18
Fullerton	4,865	876	5,727	0	6,223	0	105	0	16,920	876	12.36
Santa Ana	0	0	2,820	0	525	0	0	0	3,345	0	2.27
Non-MWDOC Totals	9,400	876	16,282	20,093	20,303	65,300	4,227	0	50,212	86,269	83.81

Orange County Totals	142,220	18,909	198,130	109,735	118,109	73,924	24,411	0	482,870	202,568	468.63
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[1] Installed device numbers are calculated in square feet

ULF TOILETS INSTALLED BY AGENCY
through MWDOC and Local Agency Conservation Programs

Agency	Previous Years	FY 95-96	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	Total	Cumulative Water Savings across all Fiscal Years
Brea	378	189	299	299	122	144	867	585	341	401	26	48	17	4	0	3,720	1,692.64
Buena Park	361	147	331	802	520	469	524	1,229	2,325	1,522	50	40	18	9	0	8,347	3,498.37
East Orange CWD RZ	2	0	33	63	15	17	15	50	41	44	19	18	13	2	0	332	138.23
El Toro WD	1,169	511	678	889	711	171	310	564	472	324	176	205	61	40	0	6,281	3,091.16
Fountain Valley	638	454	635	858	1,289	2,355	1,697	1,406	1,400	802	176	111	58	32	0	11,911	5,383.10
Garden Grove	1,563	1,871	1,956	2,620	2,801	3,556	2,423	3,855	3,148	2,117	176	106	67	39	0	26,298	12,155.41
Golden State WC	3,535	1,396	3,141	1,113	3,024	2,957	1,379	2,143	3,222	1,870	167	116	501	43	0	24,607	11,731.47
Huntington Beach	3,963	1,779	2,600	2,522	2,319	3,492	3,281	2,698	3,752	1,901	367	308	143	121	0	29,246	13,854.70
Irvine Ranch WD	4,016	841	1,674	1,726	1,089	3,256	1,534	1,902	2,263	6,741	593	626	310	129	0	26,700	11,849.23
Laguna Beach CWD	283	93	118	74	149	306	220	85	271	118	32	26	29	6	0	1,810	845.69
La Habra	594	146	254	775	703	105	582	645	1,697	1,225	12	31	6	7	0	6,782	2,957.73
La Palma	65	180	222	125	44	132	518	173	343	193	31	27	20	17	0	2,090	927.52
Mesa Water	1,610	851	1,052	2,046	2,114	1,956	1,393	1,505	2,387	988	192	124	56	14	0	16,288	7,654.27
Moulton Niguel WD	744	309	761	698	523	475	716	891	728	684	410	381	187	100	0	7,607	3,371.14
Newport Beach	369	293	390	571	912	1,223	438	463	396	1,883	153	76	36	16	0	7,219	3,166.77
Orange	683	1,252	1,155	1,355	533	2,263	1,778	2,444	2,682	1,899	193	218	88	53	4	16,600	7,347.93
San Juan Capistrano	1,234	284	193	168	323	1,319	347	152	201	151	85	125	42	39	0	4,663	2,324.42
San Clemente	225	113	191	65	158	198	667	483	201	547	91	66	37	34	0	3,076	1,314.64
Santa Margarita WD	577	324	553	843	345	456	1,258	790	664	260	179	143	101	29	0	6,522	3,001.01
Seal Beach	74	66	312	609	47	155	132	81	134	729	29	10	6	12	0	2,396	1,073.80
Serrano WD	81	56	68	41	19	52	95	73	123	98	20	15	14	2	0	757	338.66
South Coast WD	110	176	177	114	182	181	133	358	191	469	88	72	32	22	0	2,305	990.05
Trabuco Canyon WD	10	78	42	42	25	21	40	181	102	30	17	20	12	14	0	634	273.02
Tustin	968	668	557	824	429	1,292	1,508	1,206	1,096	827	69	89	26	12	0	9,571	4,423.88
Westminster	747	493	969	1,066	2,336	2,291	2,304	1,523	2,492	1,118	145	105	70	24	0	15,683	7,064.28
Yorba Linda WD	257	309	417	457	404	1,400	759	1,690	1,155	627	158	136	81	41	0	7,891	3,409.49
MWDOC Totals	24,256	12,879	18,778	20,765	21,136	30,242	24,918	27,175	31,827	27,568	3,654	3,242	2,031	861	4	249,336	113,878.61

Anaheim	447	1,054	1,788	3,661	1,755	7,551	4,593	6,346	9,707	5,075	473	371	462	341	1	43,625	18,359.52
Fullerton	1,453	1,143	694	1,193	1,364	2,138	1,926	2,130	2,213	1,749	172	77	44	23	2	16,321	7,435.23
Santa Ana	1,111	1,964	1,205	2,729	2,088	8,788	5,614	10,822	10,716	9,164	279	134	25	5	0	54,644	22,887.95
Non-MWDOC Totals	3,011	4,161	3,687	7,583	5,207	18,477	12,133	19,298	22,636	15,988	924	582	531	369	3	114,590	48,682.70

Orange County Totals	27,267	17,040	22,465	28,348	26,343	48,719	37,051	46,473	54,463	43,556	4,578	3,824	2,562	1,230	7	363,926	162,561.30
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