

REVISED

**MEETING OF THE
BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**
Jointly with the
PLANNING & OPERATIONS COMMITTEE
June 1, 2015, 8:30 a.m.
MWDOC Conference Room 101

Teleconference Site:
33072 Sea Lion Drive
Dana Point, CA 92629
(949) 493-1568

(Members of the Public may attend and participate in the meeting at both locations.)

P&O Committee:

Director Osborne, Chair
Director Barbre
Director Hinman

Staff: R. Hunter, K. Seckel, R. Bell,
H. De La Torre, K. Davanaugh, J. Berg

Ex Officio Member: L. Dick

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 --

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

ACTION ITEMS

1. TURF REMOVAL REBATE PROGRAM REBATE PROCESSING PLATFORM
2. AUTHORIZE EXECUTION OF GRANT AGREEMENTS

DISCUSSION ITEMS

3. UPDATE ON RECYCLING IN ORANGE COUNTY

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.)

4. UPDATE ON OC RELIABILITY STUDY
5. 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
6. 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

June 17, 2017

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Osborne, Barbre, Hinman)

Robert Hunter
General Manager

Joe Berg
Water Use Efficiency Programs Manger

SUBJECT: Turf Removal Program Rebate Processing Platform

STAFF RECOMMENDATION

Staff recommends the Board of Directors authorize the General Manager to enter into annual contracts with Droplet Technologies for the next three years at a total cost not to exceed \$139,642.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

On April 6, 2015, staff presented the results of an independent Turf Removal Rebate Program Quality Control and Process Evaluation to the Planning and Operations Committee. The evaluation concluded that MWDOC's Turf Removal Rebate Program has realized high achievement on many fronts. The program is managed with unparalleled quality standards and meticulous oversight. However, with the recent surge in program response, the rebate processes and software systems are now taxed to the limit of the capabilities designed in to the original system. As a result, the optimal solution for the longer term is to buy or build a rebate management system with the modules and capabilities that best meet today's program volume and customer service demands.

After presenting the results of the evaluation to the Planning and Operations Committee, staff released a Request for Proposals (RFP) to begin the process of selecting a new rebate

Budgeted (Y/N): Yes	Budgeted amount: FY 15-16 = \$72,000	Core __	Choice <u>X</u>
Action item amount: \$139,642		Line item:	
Fiscal Impact (explain if unbudgeted): The start-up cost and annual license fee for year one are \$59,056 and have been planned for in the FY 15-16 budget. Annual license fees of \$41,514 will be budgeted in FY 16-17, and the annual license fee of \$39,072 will be budgeted in FY 17-18.			

processing platform. The RFP closed on May 8th, with one response from Droplet Technologies.

DETAILED REPORT

Staff reviewed the Droplet Technologies proposal very carefully. The rebate processing platform is a web-based software system and data warehouse of all program participant data. The platform provides for all application steps we have in our current program including on-line application submittal, application review, pre-inspection work orders, letters to proceed, notices of completion, post inspection work orders, application approval, and rebate check-run. The system is entirely on-line, therefore avoiding our current paper-based system.

The Droplet Technologies system is designed to maximize data input by the program participant, therefore minimizing data input requirements by MWDOC and member agency staff. This will result in significant MWDOC and member agency staff time savings. However, staff will retain quality control over all data before the application can be approved to move on to the next step in the rebate process. Program participants will also have the ability to log on to the system to track the status of their applications. We believe this will improve customer service and also save significant staff time responding to phone calls and e-mails from participants wanting to know the status of their applications. The system will also be set up to require program participants to view videos or PowerPoint-style presentations describing program requirements before the participant can begin completing the on-line rebate application. We believe these required steps will assist in “screening out” participants who are not serious about participating in the program.

Droplet Technologies has been providing rebate processing services for several water agencies throughout California. Some of these agencies are listed in Table 1.

Table 1 Agencies Currently Using Droplet Technologies	
Castaic Lake Water Agency	California Water Service Company
Cal American Water	City of Long Beach
Coachella Valley Water District	Newhall County Water District
Santa Clarita Water District	Western Municipal Water District

Staff has had detailed discussions with staff from the City of Long Beach and Western Municipal Water District regarding Droplet Technologies, Droplet’s customer service, and the functionality of the rebate processing platform. These discussions have revealed a very high degree of customer satisfaction with the company and their products. As one agency requests an upgrade in their platform, it becomes available to all other agencies using that platform. As a result, the functionality of the platform has evolved rapidly.

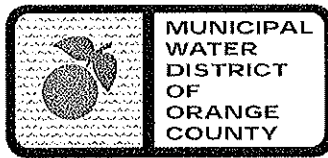
Droplet Technologies rebate processing platform is a hosted, license fee based tool that includes on-going technical support and upgrades as they become available. Annual license fees includes fees for the web-based hosting, platform development, training, and maintenance. As shown in Table 2, Year 1 costs will include start-up costs to configure the rebate processing platform to meet MWDOC’s rebate program needs and an annual license

fee. The total Year 1 cost is \$59,056 and is budgeted in our Fiscal Year 2015-16 budget. Staff will budget for Year 2 and Year 3 costs in future budget cycles. While staff is requesting Board Authorization to utilize Droplet Technologies for the next three years, we will only make commitments to Droplet Technologies in one-year increments.

Table 2 Droplet Technologies Web-Based Rebate Processing and Database Platform				
	One-Time Start-Up	Annual License Fee	Annual Pre-Paid Discount (1)	Total
Year - 1	\$ 15,100	\$ 48,840	10%	\$ 59,056
Year - 2	\$ -	\$ 48,840	15%	\$ 41,514
Year - 3	\$ -	\$ 48,840	20%	\$ 39,072
Grand Total:				\$ 139,642

(1) The annual license fee is reduced by 10% for an annual pre-paid agreement in the first year, 15% in the second year, and 20% in subsequent years.

The costs incurred by MWDOC for this technology improvement will be funded by the participating agencies in the Choice Water Use Efficiency Program. There may be an opportunity to pull in funding from other grant sources; however, this cannot be confirmed at this time. Having an improved processing system should result in staff time savings at both MWDOC and at our member agencies and should provide enhanced customer satisfaction. It is estimated that with Board approval in June, the platform can be up and running by October



ACTION ITEM

June 17, 2015

TO: Board of Directors

FROM: **Planning & Operations Committee**
(Directors Osborne, Barbre, Hinman)

Robert Hunter
General Manager

Joe Berg
Water Use Efficiency Programs Manager

SUBJECT: Metropolitan Water Conservation Funding Agreement and US Bureau of Reclamation Field Services Agreement

STAFF RECOMMENDATION

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

1. Amendments to Metropolitan's Water Conservation Funding Agreements extending the terms an additional 10 years to June 30, 2025, and
2. A Field Services Agreement with the US Bureau of Reclamation for California Friendly Technical Design Assistance Program.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

The Metropolitan Water District of Southern California and Bureau of Reclamation have been very supportive of MWDOC's water use efficiency programs for many years. Metropolitan's Conservation Credit Program has been a foundational source of funding for all MWDOC incentive programs. It is time to extend the terms of the Metropolitan Commercial, Industrial and Institutional, and Residential agreements another 10 years to June 30, 2025. Additionally, MWDOC was recently awarded a US Bureau of Reclamation Field Services Grant for a California Friendly Technical Design Assistance Program. Staff requests the Board authorize the General Manager to sign these agreements for continued and expanded program implementation.

Budgeted (Y/N): N/A	Budgeted amount:	Core __	Choice <u>X</u>
Action item amount: N/A	Line item: N/A		
Fiscal Impact (explain if unbudgeted): No direct cost impact to MWDOC is anticipated other than staff time to administer agreements. Staff time reimbursement will be accomplished the Choice Program agreement with member agencies.			

DETAILED REPORT

MWDOC's water use efficiency efforts rely heavily on outside funding from a variety of sources including the Metropolitan Water District of Southern California and US Bureau of Reclamation.

Metropolitan's Water Conservation Funding Agreement

In June 2006, Metropolitan and MWDOC entered into two agreements to allow access to Metropolitan's Conservation Credits Program funding for water use efficiency program implementation. One agreement focuses on Commercial, Industrial and Institutional customers and the other focuses on Residential customers. The terms of these agreements expire June 30, 2015. Metropolitan is requesting the terms of these agreements be extended 10 additional years to June 30, 2025. Amendments to these agreements are provided as Attachment A.

These agreements combine all conservation programs into two agreements and provide incentives to Metropolitan's member agencies for water use efficiency program implementation. Addendums to these agreements are periodically issued for changes involving Board approved items, the addition of grant funding, and changes to incentive programs including funding and incentive levels.

US Bureau of Reclamation Field Service Program Agreement

This annual program, offered on a competitive basis, provides funding for implementation of local water use efficiency programs. MWDOC was awarded a 2015 Field Services Grant in the amount of \$98,965 for implementation of the California Friendly Landscape Design Assistance Program. This program will provide Turf Removal Rebate Program participants with landscape Design Assistance for their new landscape. This is an important new feature in our Turf Removal Program. Design assistance will help ensure enhanced aesthetics and water savings from program participants.

Staff is requesting Board authorization to sign the Bureau of Reclamation grant agreement, which is provided as Attachment B. Staff will be conducting a Request for Proposals process to hire a consultant who will provide the design assistance. Staff will return to the Board later this summer to request authorization to sign that professional services agreement.

Staff requests the Board authorize the General Manager to sign these agreements for continued and expanded water use efficiency program implementation.

SECOND AMENDMENT

FY 2015-2025

WATER CONSERVATION FUNDING AGREEMENT NO. 66652

BETWEEN

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

There is now in effect a Water Conservation Funding Agreement between

The Metropolitan Water District of Southern California and Municipal Water District of Orange County effective through December 31, 2015, as amended by the First Amendment, hereinafter referred to as Agreement.

The parties desire to amend the Agreement with this Second Amendment to extend the Agreement Term through June 30, 2025.

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IN WITNESS WHEREOF, the Parties hereto have executed this Second Amendment to the Agreement.

MUNICIPAL WATER DISTRICT OF
ORANGE COUNTY

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Jeffrey Kightlinger
General Manager

By: _____
Robert Hunter
General Manager

By: _____
Debra C. Man
Assistant General Manager/COO

Date: _____

Date: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:

Marcia L. Scully
General Counsel

By: _____
Attorney

By: _____
Setha E. Schlang
Senior Deputy General Counsel

Date: _____

Date: _____

SECOND AMENDMENT

FY 2015-2025

WATER CONSERVATION FUNDING AGREEMENT NO. 70038

BETWEEN

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

There is now in effect a Water Conservation Funding Agreement between
The Metropolitan Water District of Southern California and Municipal Water District of Orange
County effective through June 30, 2015, amended by the First Amendment, hereinafter referred to as
Agreement.

The parties desire to amend the Agreement with this Second Amendment to extend the
Agreement Term through June 30, 2025.

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IN WITNESS WHEREOF, the Parties hereto have executed this Second Amendment to the Agreement.

MUNICIPAL WATER DISTRICT OF
ORANGE COUNTY

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA
Jeffrey Kightlinger
General Manager

By: _____
Robert Hunter
General Manager

By: _____
Debra C. Man
Assistant General Manager/COO

Date: _____

Date: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:
Marcia L. Scully
General Counsel

By: _____
Attorney

By: _____
Setha E. Schlang
Senior Deputy General Counsel

Date: _____

Date: _____

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

1A. AGREEMENT NUMBER R15AP00066		1B. MOD NUMBER N/A		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 Lower Colorado Region P.O. Box 61470 Boulder City, NV 89006-1460				5. RECIPIENT Municipal Water District of Orange County 18700 Ward Street Fountain Valley, CA 92728					
								EIN #:	
				DUNS #:		087380721		Congress. Dist:	
6. GRANTS MANAGEMENT SPECIALIST Diana Blake Bureau of Reclamation P.O. Box 61470 Boulder City, Nevada 89006-1470 Phone: 702-293-8550; E-Mail: dmlake@usbr.gov				7. RECIPIENT PROJECT MANAGER Joseph Berg Municipal Water District of Orange County 18700 Ward Street Fountain Valley, CA 92728 Phone: 714-593-5008; E-Mail: jberg@mwdoc.com					
8. GRANTS OFFICER TECHNICAL REPRESENTATIVE Debra Whitney Bureau of Reclamation 27708 Jefferson Avenue, Suite 202 Temecula, CA 92590 Phone: 951-695-5310; E-Mail: dwhitney@usbr.gov				9A. INITIAL AGREEMENT EFFECTIVE DATE: See Block 17a		9B. MODIFICATION EFFECTIVE DATE: N/A			
				10. COMPLETION DATE June 30, 2016					
11A. PROGRAM STATUTORY AUTHORITY P.L. 111-11 Omnibus Public Lands Management Act of 2009, Sec. 9504 (a)(1)(A)-(H)						11B. CFDA Number 15.530			
12. FUNDING INFORMATION		RECIPIENT/OTHER		RECLAMATION		13. REQUISITION NUMBER 0020072240			
Total Estimated Amount of Agreement		\$317,307.35		\$98,965.19		14A. ACCOUNTING AND APPROPRIATION DATA WBS: RY.31736400.3000000 Fund: 15XR0680A1 Cost Center: RR03510000 Commitment Item: 411G00			
This Obligation		\$317,307.35		\$98,965.19					
Previous Obligation		\$0.00		\$0.00					
Total Obligation		\$317,307.35		\$98,965.19		14B. TREASURY ACCOUNT FUNDING SYMBOL 14X0680			
Cost-Share %		50%		50%					
15. PROJECT TITLE California Friendly Technical Design Assistance Program									
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 Robert J. Hunter General Manager 714-964-9389 <input type="checkbox"/> Additional signatures are attached				17b. NAME OF GRANTS OFFICER Shawna M. Thompson Grants Officer 702- 293-8570					

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**Grant Agreement
Between
Bureau of Reclamation
And
Municipal Water District of Orange County
For
California Technical Design Assistance Program**

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 P.L. 111-11 Omnibus Public Lands Management Act of 2009, Sec. 9504 (a)(1)(a)-(h). 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 and;

2. PUBLIC PURPOSE OF SUPPORT OR STIMULATION

Municipal Water District of Orange County (MWDOC) is working to implement a Technical Design Assistance Project aimed at optimizing landscape conversion benefits to reduce outdoor water consumption and irrigation runoff. MWDOC will administer this Project as lead agency on behalf of the retail water agencies within Orange County. The proposed Program will target the removal of 250,000 square feet (ft²) of non-functional turfgrass and installation of California Friendly landscapes with climate appropriate greenscape and permeable hardscape. The landscape improvements will yield 34 AFY (336 lifetime-AF) of water savings.

The Program also meets the objectives of Reclamation's Water Conservation Field Services Program and helps meet the Secretary's High Priority Water Conservation Goal.

3. BACKGROUND AND OBJECTIVES

MWDOC service area serves approximately 2.3 million people and is comprised of the 28 retail water agencies (districts and cities) of Orange County. Comprehensive Orange County has a population of 3.2 million with a 948 square-mile area and is located on the California coast between Los Angeles and San Diego Counties. This Project will be initially implemented within all of Orange County (including Anaheim, Santa Ana, and Fullerton). The five year average water demand in the MWDOC service area is 589,853 acre-feet (AF). Imported sources account for 42% (241,000 AF), groundwater accounts for 51% (303,000 AF), recycled water accounts for 6% (37,000 AF), and surface water accounts for 2% (8,000 AF). Approximately 99% of MWDOC's demand is for municipal and industrial purposes, and 1% is for agricultural purposes. Municipal and industrial water use in Orange County is comprised of single- and multi-family residential, commercial, industrial, and institutional users.

MWDOC proposes to implement a California Friendly Technical Design Assistance Program (Project) to enhance MWDOC's Turf Removal Program aimed at reducing landscape water consumption and irrigation runoff. MWDOC will administer this Project as lead agency on behalf of the retail water agencies within Orange County. The technical assistance will be offered as a pilot to 125 residential and commercial sites as a means to promote landscape renovations yielding optimum benefits.

Based on past participant follow-up, the predominant barrier to project completion by the participant attrition/mortality population (sites interested in participation, but unable to complete the project) was the need for technical assistance.

Upon further investigation, technical assistance at the onset of the project is most highly requested. The turfgrass removal component of the Project will be available to both residential and commercial properties. Landscape water use accounts for 50% of Orange County water use and is a critical component to ensure domestic water use efficiency. Providing technical assistance will ensure the comprehensive Californian Friendly landscape includes selecting a climate appropriate plant palette, encouraging onsite infiltration, and implementing efficient irrigation design and management. California Friendly plantings require less than half the irrigation required by turfgrass. Turfgrass requires more irrigation than any other ornamental plant and is often over-irrigated. The proposed Project will target the voluntary removal of 250,000 square feet (ft²) of non-functional turfgrass and installation of California Friendly landscapes with climate appropriate greenscape and permeable hardscape.

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 \$98,965.19 of which the initial amount of federal funds available is limited to \$98,965.19 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

Through this Agreement the MWDOC will implement a California Friendly Technical Design Assistance aimed at optimizing landscape conversion benefits to reduce outdoor water consumption and irrigation runoff. The technical assistance component will initially be offered as a pilot to 125 residential and commercial sites as a means to promote landscape renovations by providing turf removal sessions and detailed site design template resources. The proposed Program will also target the removal of 250,000 square feet (ft²) of non-functional turfgrass and installation of California Friendly landscapes with climate appropriate greenscape and permeable hardscape. The landscape improvements will yield 34 AFY (336 lifetime-AF) of water savings.

This Project will include seven tasks, as described below:

Task 1 – Program Administration

Program administration, Task 1, is the staff hours needed for the day-to-day operations of the Project and constitutes the salaries/wages and fringe benefits associated with the comprehensive Program administration. As part of the Program reporting (Task 5), MWDOC will supply a data table 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 Program website to read about Program rules and regulations, to submit a Program application, and to learn about rebate levels through the Program.

- Marketing will primarily consist of bill inserts, water bill messages, newsletter articles, and posts on water agency websites. Over the 20+ years MWDOC has marketed water use efficiency programs, marketing surveys have rated bill inserts as the most effective forms of marketing collateral to encourage participation. Program promotional materials will acknowledge Reclamation's funding. Additionally, in collaboration with local nurseries, big-box retailers, irrigation supply houses, and product manufacturers MWDOC will facilitate Program informational material for Program consultants.
- Project sites will also receive lawn signs to display during the conversion process. This will encourage a shift in the social norm to surge community support for landscape conversion projects and acceptance of the California Friendly landscapes.
- 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. In addition, environmental organizations, such as the Surf Rider Foundation and Coast Keeper, express support for MWDOC's landscape water conservation projects.

Task 3 – Technical Assistance

Over the 12-month period of the potential grant award, MWDOC proposes to facilitate technical design assistance for 125 sites. The Project technical design assistance will provide a tutorial on how to remove existing turfgrass and detailed site design plans. The site design plans will include the following: 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. The specific plant recommendations will highlight those climate appropriate and native plants that are locally available as identified on the Orange County Garden Friendly top ten plant list developed in cooperation with University of California Cooperative Extension, the County of Orange, and MWDOC.

The technical resources will ensure the project plan will meet the criteria for a comprehensive California Friendly landscapes, including:

- No non-functional turfgrass; Plant material is climate appropriate;
- No invasive plant species as identified in the California Invasive Plant Council Don't Plant a Pest Project;
- All exposed soil is covered with a 2 to 4 inch layer of mulch, except areas planted with creeping or rooting groundcovers or directly seeded;
- Area is permeable to air and water. Weed barriers must be permeable. Concrete, plastic sheeting, or other impermeable surfaces do not qualify; and
- Selection of the most appropriate water efficient irrigation equipment and technology including: weather based irrigation controllers, soil moisture sensors, high-efficiency low-precipitation rate rotation sprinkler nozzles, and drip irrigation.

Each site will be responsible for following the Turf Removal Program steps (Task 4). Additionally, at the time of the post-project inspection, implementation pictures will be taken and cataloged for the website gallery.

For selection of the technical assistance consultants, MWDOC will 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 Reclamation award agreement.

Tasks 4 – Turf Removal Rebate Incentives

Concurrently, over the 12-month period of the potential grant award, MWDOC proposes to facilitate the removal of up to 250,000 ft² of turfgrass, providing incentives through a rebate-style format to residential and commercial property owners. Rebates will be provided to property owners for qualifying project areas (qualification criteria listed above). The current regional rebate incentive offer to the participant is at minimum \$1.00/ft² of non-functional turfgrass removed.

Project participation begins with the submission of an application to MWDOC. The application package must include site pre-project photos of the conversion area, project design plan, square footage of the anticipated turfgrass removal area, and a copy of a recent water bill for the site. Upon review, MWDOC will determine customer eligibility. If the site qualifies, a follow-up letter and authorization-to-proceed will be mailed/emailed to the Participant. Upon receipt of this authorization-to-proceed, the customer may begin the turf removal project. They will have sixty (60) days to complete work. When all work is complete, the customer will contact the Program Administrator to indicate that the work is completed and schedule the mandatory post-project inspection.

This mandatory site visit, for all Project sites, will serve to verify the amount of turfgrass removed for calculation of the turfgrass removal rebate amount. Turf removal project area qualification criteria include the following:

- The site must meet the criteria for a comprehensive California Friendly landscapes (listed above);
- Pre-removal, the site consists of a minimum 250 ft² of live, well-maintained and irrigated turfgrass. Deviations will be considered on a case-by-case basis;
- Projects must comply with all applicable laws, ordinances, codes, policies, covenants, conditions and restrictions;
- Only one turf removal rebate per water meter will be issued; and
- Projects that have been started or are already completed prior to the completion of the rebate application are not eligible.

If the conversion cannot be verified, rebate incentives will not be paid. If this requirement is violated, the applicant may be required to refund all or a portion of MWDOC/Grant funds. This requirement is void upon transfer of ownership.

MWDOC currently has Mission Resource Conservation District (Mission) under contract for the next three (3) years to provide landscape survey services for MWDOC's various landscape programs. Mission, as a Non-Profit Special District, an arm of the Natural Resource Conservation Service, is uniquely qualified to perform irrigation audits. They have many years of experience in both the urban and agricultural setting and provide MWDOC with highly competitive rates.

During each post-inspection site visit performed by MWDOC, Mission, or the retail water agency, the following will be performed:

- Walk the site with the property owner or person designated by the property owner;
- Verify the site and contact information for the property;
- Verify the water account information;
- Perform a post-project site visit to measure the actual turf removed;
- Verify installation of water efficient nozzles or drip irrigation (if applicable) ;
- Provide maintenance and irrigation management literature and/or web-based California Friendly Landscape Irrigation Educational Classes information;
- Provide rebate Program literature for MWDOC's other rebate programs; and
- For commercial properties with dedicated landscape meters, provide information on

While labor intensive, practices such as 100% percent pre- and post-installation inspections and having multiple MWDOC staff reviewing each application at several steps throughout the rebate program process nearly eliminate any possibility of customer fraud. These levels of review go beyond the average water utility rebate program.

Task 5 – Program Reporting

Following the reporting schedule set forth in the Grant Agreement, MWDOC will submit Semi-annual final and program reports that will include all required SF forms, a written Program progress narrative, tabular data tables, and all required back up to support the requested reimbursement.

Task 6 – Program Evaluation

At the commencement of the fourth quarter of the agreement term, MWDOC staff 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 turf removal with and without technical assistance in 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 landscape/irrigation improvements. 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 during the final quarter of the agreement term. Either qualified MWDOC staff or a consultant will conduct the analysis, process the Program's data, liaise between the involved retail water agencies and their sites' water consumption data, and develop the draft and final report. If a consultant is hired to aid in the any component of the evaluation, MWDOC will develop and release a request for proposals to several qualified water use evaluation consulting firms, review submitted proposals, and select the most qualified submission per the terms of MWDOC's Administration Code and procurement criteria listed in the Reclamation award agreement.

Task 7 – Program Database

MWDOC's current historical Landscape Program's database would need to be modified to accommodate the Program'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.

The Recipient shall complete the work described in this Scope of Work by adhering to the following scheduled milestones:

Milestone / Task / Activity	Planned Start Date	Planned Completion Date
1. Task 1 Participation procedures developed	Jul. 1, 2015	Aug. 31, 2015
2. Task 2 Marketing material designed (including Reclamation's logo) and printed	Jul. 1, 2015	Aug. 31, 2015
3. Task 2 Market Program	Aug. 1, 2015	May 30, 2016
4. Task 3 Hire design assistance consultant	Jul. 1, 2015	Aug. 31, 2015
5. Task 3 Change order established with Mission RCD	Jul. 1, 2015	Aug. 31, 2015
6. Task 3 Develop site design plans	Aug. 1, 2015	May 30, 2016
7. Task 4 Perform quality control reviews	Aug. 1, 2015	May 30, 2016
8. Task 4 Provide rebates on turfgrass removal projects	Sep. 1, 2015	Jun. 30, 2016
9. Task 5 Reporting	Dec. 1, 2015	Jun. 30, 2016
10. Task 7 Develop online application process	Jul. 1, 2015	Aug. 31, 2015
11. Task 7 Program's database modified	Jul. 1, 2015	Aug. 31, 2015
12. Task 7 Update database	Sep. 1, 2015	Jun. 30, 2016
13. Task 7 Perform verifications for the accuracy of the database data	Sep. 1, 2015	Jun. 30, 2016

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.

6.2 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.

6.2.2 Substantial involvement by Reclamation is not anticipated during the performance of activities funded under this cooperative 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			Reclamation	Recipient	TOTAL COST
	Price/Rate	Unit	Quantity			
SALARIES AND WAGES						
Project Administration (Joe Berg)	\$61.69	Per Hr	52	\$ 257.75	\$ 2,964.17	\$ 3,221.92
Project Manager (Steve Hedges)	\$48.00	Per Hr	78	\$ 299.52	\$ 3,444.48	\$ 3,744.00
Marketing (Jessica Ouwerkerk)	\$36.47	Per Hr	13	\$ 37.93	\$ 436.18	\$ 474.11
Project Support (Melissa Baum-Haley)	\$39.36	Per Hr	156	\$ 491.21	\$ 5,648.95	\$ 6,140.16
Project Support (Sergio Ramirez)	\$27.07	Per Hr	936	\$ 2,027.00	\$ 23,310.52	\$ 25,337.52
Project Staff Intern	\$18.00	Per Hr	624	\$ 898.56	\$ 10,333.44	\$ 11,232.00
			Subtotal	\$ 4,011.97	\$ 46,137.74	\$ 50,149.71
FRINGE BENEFITS - See proposal in official file for detailed calculations						
Project Administration (Joe Berg)	\$21.05	Per Hr	52	\$ 98.51	\$ 996.09	\$ 1,094.60
Project Manager (Steve Hedges)	\$13.46	Per Hr	78	\$ 94.49	\$ 955.39	\$ 1,049.88
Marketing (Jessica Ouwerkerk)	\$10.23	Per Hr	13	\$ 11.98	\$ 121.02	\$ 132.99
Project Support (Melissa Baum-Haley)	\$11.16	Per Hr	156	\$ 156.69	\$ 1,584.27	\$ 1,740.96
Project Support (Sergio Ramirez)	\$8.47	Per Hr	936	\$ 713.51	\$ 7,214.41	\$ 7,927.92
Project Staff Intern	\$2.28	Per Hr	624	\$ 128.04	\$ 1,295	\$ 1,422.72
			Subtotal	\$1,203.22	\$ 12,165.86	\$13,369.08
EQUIPMENT - Leased Equipment use rate + hourly wage/salary x est. hours for assisted activity - Describe equipment to be purchased, unit price, # of units for all equipment to be purchased or leased for assisted activity. Do not list contractor supplied equipment here.						
None						\$ -
			Subtotal	\$ -	\$ -	\$ -
SUPPLIES/MATERIALS - Describe all major types of supplies/materials, unit price, # of units, etc., to be used on this assisted activity.						
Promotional - Marketing Billing Inserts	\$0.03	Per Piece	300,125.00		9,003.75	\$ 9,003.75
			Subtotal	\$ -	\$ 9,003.75	\$ 9,003.75
CONTRACTUAL/ CONSTRUCTION - Explain any contracts or sub-Agreements that will be awarded, why needed. Explain contractor qualifications and how the contractor will be selected.						
Site Design Plan Development Sessions	\$1,750.00	Per Session	30	\$ 52,500.00		\$ 52,500.00
			Subtotal	\$ 52,500.00	\$ -	\$ 52,500.00
OTHER - List any other cost elements necessary for your project, such as extra reporting, or contingencies in a construction contract.						
Turf Removal Incentive to Recipient	\$1.00	Per Rebate/Ft	250,000		250,000.00	
Online Application/Database Service	\$1,250.00	Per Month	12	15,000.00		
Quality Control Inspections	\$210.00	Per	125	26,250.00		
			Subtotal	41,250.00	250,000.00	291,250.00
TOTAL DIRECT COSTS:				\$ 98,965.19	\$ 317,307.35	\$ 416,272.54
INDIRECT COSTS -						
None						
TOTAL ESTIMATED PROJECT/ACTIVITY COSTS:				\$ 98,965.19	\$ 317,307.35	\$ 416,272.54

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 based upon the cost share percentage above shall occur concurrently. 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, 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 Berg
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, CA 92728
Phone: 714-593-5008; E-Mail: jberg@mwdoc.com

8.2 Reclamation's Key Personnel

8.2.1 Grants Officer (GO):

Shawna M. Thompson, LC-10100
Bureau of Reclamation
P.O. Box 61470
Boulder City, Nevada 89006-1470
Phone: 702- 293-8570; E-Mail: smthompson@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):

Debra Whitney
Bureau of Reclamation
27708 Jefferson Ave., Suite 202
Temecula, CA 92590
Phone: 951-695-5310; E-Mail: 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.

Diana Blake
Bureau of Reclamation
P.O. Box 61470
Boulder City, Nevada 89006-1470
Phone: 702-293-8550; E-Mail: dmblake@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 upon 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 September 30, 2015	N/A
Submit to: Grants Officer @	LCFA@usbr.gov	LCFA@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 upon 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 Federal financial report is due for report period ending September 30, 2015	N/A
Submit to: Grants Officer @	LCFA@usbr.gov	LCFA@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.

II. RECLAMATION STANDARD TERMS AND CONDITIONS - STATES, LOCAL GOVERNMENTS, AND FEDERALLY RECOGNIZED INDIAN TRIBAL GOVERNMENTS

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 government wide 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.



DISCUSSION ITEM

June 1, 2015

TO: **Planning & Operations Committee**
(Directors Osborne, Barbre, Hinman)

FROM: **Robert Hunter, General Manager**

Staff Contact: Karl Seckel and Richard Bell

SUBJECT: **Existing and Planned Recycled Water Supply/Use in Orange County**

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receive and file this report and provide input as appropriate.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

A question was recently raised by the P&O Committee regarding the current and planned level of recycling in OC. It should be recognized that Orange County to date has done more to advance and implement water recycling than any other region in the Nation. We show present and projected recycling for OC by three areas: OCWD/OCSD area, IRWD and South Orange County. Based on current planning, most of the reclaimable wastewater will be used for recycling by 2035. Major planning and project efforts are underway at this time.

A question was also raised concerning the potential use of recycled water for residential landscaping. Recycled water is legally permitted for use for residential landscaping and is being done so in several communities in California, where economically feasible and available. In OC, use of recycled water for limited individual residential yards is currently being done in IRWD but is limited to larger estates where higher demands justify the higher

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

cost of dual supply and on-site systems. Other uses of recycled water have taken up the produced recycled water supply.

DETAILED REPORT

Orange County is the recognized leader in water recycling in California. The first dual distribution system for recycling was established by IRWD in the early 1970's which was followed later by other retailers in South OC, and more recently indirect potable reuse was implemented by OCSD/OCWD through their award winning Groundwater Replenishment System Project. OC agencies have also been leaders in advancing water recycling technology through extending uses of recycled water and through research and development of advanced purification technology.

In 2013/14, 105,595 AFY of recycled water was beneficially used in OC. In addition, OCWD utilizes the baseflow of the Santa Ana River (SAR) for groundwater recharge. This baseflow is mostly wastewater originating from discharges of nitrified tertiary treated wastewater that is discharged into the Upper SAR drainage basin. In WY 2013/14, the SAR baseflow discharge from Prado Dam was 63,500 AFY. Considering both types of recycled water use, in 2013/14, the total wastewater recharge and recycled use in OC was 27.7 percent of total demand (including Brea/La Habra demand).

OCWD/OCSD Water Recycling

OCWD is nearing completion on the Phase 2 expansion of the GWRS that will increase the product water capacity of the project from 70 MGD to 100 MGD. When fully on-line in the next few months, the GWRS will produce approximately 100,000 AFY of purified water.

The availability of sufficient quantities of both raw wastewater and secondary treated wastewater from OCSD is an important consideration in planning for the Phase 3 Final Expansion of the GWRS to 130 MGD. To produce 130 MGD of purified water, approximately 186 MGD of treated secondary wastewater is needed (based on a 30 percent loss through the GWRS advanced treatment system – pretreatment backwash wastewater and RO reject water). Currently, the average dry weather influent into OCSD wastewater plants is running about 189 MGD, down from 246 MGD in 2000/01 due primarily to conservation and implementation of indoor water conservation measures. With the current drought, new SWRCB emergency water use restrictions, and newly adopted conservation plumbing standards that further reduce toilet flushing and water fixture flow rates, it is expected that wastewater flows will further decrease as the public responds to the significant State emergency mandated cutbacks.

Recently, OCWD and OCSD Board's approved a \$2.0 million recycling study with the goal to fully utilize all wastewater that is discharged to the ocean, including the brines and process wastewater. The team of CDM Smith/Brown and Caldwell were recently selected and awarded a contract by OCSD. OCSD is managing the study and OCWD is funding half the work as well as actively participating in the study. The study has just been initiated. The key objective of the study is to determine how OCSD can maximize the reuse of treated wastewater currently being discharged to the ocean. The study will include options to convey secondary effluent to GWRS for the Phase 3 expansion. The study will also determine the amount of effluent that would be available for reuse after supplying the

GWRS Phase 3, and potential opportunities for recycling that flow. The study will also work in conjunction with the OCSD Lab to study environmental and NPDES compliance.

The deliverables from the study are:

- Plant No.1 and Plant No. 2 Hydraulic Models
 - Final Hydraulic Model Report
- GWRS Final Expansion Implementation Plan and Report
 - Plant No. 2 Secondary Water Quality Report
 - SARI/Sidestream Separate Process Treatment Concept Design
 - Plant No. 2 GWRS Pump Station Concept Design
 - Flow Equalization Concept Design
 - Permit and Environmental Impacts
 - Implementation Plan (Costs and Schedule)
- Collection Diversions/Urban Runoff Opportunities Report

The results from this study are key to planning the GWRS Phase 3 final expansion. This study has just been initiated and the schedule calls for the draft report by May 2016.

With implementation of Phase 3 of the GWRS, all the easily reclaimable wastewater will have been recycled in the OCSD service area. With future increased levels of indoor conservation and gray water use, the yield of the GWRS may be less than 130 MGD unless some of the reject brines and process wastewaters are treated to advanced levels and are recycled. One of the key issues with large scale recycling and concentration of the remaining wastewater that is discharged to the ocean is the ability to be in compliance with NPDES permit for toxicity and other parameters. This current comprehensive study will be evaluating all issues and developing a plan for GWRS to produce 130 MGD of recycled, purified water supply.

Table 1 shows the 2015 and 2035 wastewater flows and planned recycled water use. Figure 1 shows the OCWD service area and GWRS facilities. Information provided by OCWD and OCSD.

IRWD Water Recycling

IRWD began water recycling in the early 1970's through the development of a separate non-potable/reclamation irrigation system. Non-potable water service is provided for irrigation, non-potable usage in high rise commercial office buildings, and for other commercial/industrial uses. IRWD's water recycling policy has been aided by the "planned community" concept adopted by the City of Irvine and The Irvine Company which more easily allowed for the use of recycled water. IRWD provides wastewater treatment and reclamation through its Michelson and Los Aliso Water Recycling Plants with ultimate disposal through the OCSD wastewater treatment and ocean outfall system and through the South Orange County Wastewater Authority Aliso Outfall.

IRWD has an extensive dual "purple pipe" system that serves several areas and pressure zones throughout the District. In addition, IRWD has four large seasonal storage reservoirs (Rattlesnake, Sand Canyon, Syphon and San Joaquin) to conserve winter recycled water

production for subsequent use during higher seasonal demand periods. Irvine Lake water can be used to supplement the non-potable system if there is insufficient recycled water supply and stored untreated water is available. IRWD continues to extend its non-potable system within new developments. IRWD is currently investigating the feasibility to expand Syphon Reservoir to 5,000 AF for additional seasonal storage of recycled water. IRWD nearly fully utilizes its wastewater and will continue doing so into the future with continuing growth of the District. In 2013/14 IRWD recycled water use was 21,950 AF, equal to 23.5% of its total demand.

Table 2 shows the 2015 and 2035 projected wastewater flows and recycled water use and planned recycled water projects. Information provided by IRWD.

South Orange County Water Recycling

Recycled water development is an integral part of the South Orange County program to improve water supply reliability. Current recycling is being accomplished by dual distribution “purple pipe” systems by most retail water agencies in SOC. In the future SOC agencies plan to further extend their dual systems and are also investigating the feasibility of indirect potable reuse in the San Juan Basin as well as the potential for direct potable reuse. The SOC area has 11 wastewater reclamation plants that produce a combined flow of 43 MGD. Of that amount, today 17,700 AFY are recycled and 30,800 AFY are disposed to the ocean through two outfalls. Future supply projects include the following projects:

- Expansion of Chiquita WRP and the recycled water distribution system
- Expansion of El Toro WRP distribution system (plant expansion just completed)
- Coordination of Flows between OCWRP, 3A, and Latham Plants to get more recycled water
- Expansion of 3A Plant
- Construction of the Trampas Seasonal Storage Reservoir
- Potential Ortega Reservoir/IPR Project
- Potential Use of Capacity in the Planned Expansion by IRWD of the Syphon Reservoir to 5,000 AF
- Advanced treatment (GWRS type) for recycled water supply to Lake Mission Viejo
- San Juan Basin Indirect Potable Reuse Project

The future goal is to recycle up to 44,000 AFY with only 10,100 AFY being disposed to the ocean. SMWD is currently in the process of finalizing the design for the 5,000 AF Trampas Reservoir Project. This \$55 million project is intended to provide regional seasonal storage of recycled water for SMWD, City of San Juan Capistrano and City of San Clemente. This project is now scheduled to be operational by the end of 2017. As part of this project and expansion of the 3A plant from 2.4 to 6.0 MGD, recycled water “purple pipes” will be extended throughout the City of Rancho Santa Margarita and other areas. SMWD will be applying for financial support under MET’s Local Resources Program for these projects.

The indirect potable reuse projects (San Juan Basin recharge and Ortega Reservoir Project) have technical, regulatory and economic feasibility questions that need to be resolved. Significant work will be necessary to evaluate the feasibility of these projects. A feasibility investigation is underway for replenishing the San Juan Basin with recycled water and is being partially funded through the MET Foundational Action Program. SMWD has

requested MWDOC to provide a conceptual level study of the Ortega Reservoir IPR Project for inclusion into the OC Water Reliability Study.

Table 3 and Figure 2 show the existing and future recycling programs and project yields. Information provided by SMWD and SOCWA.

Residential On-Site Use of Recycled Water

The California Water Code provides the authority to local agencies to require the use of recycled water for residential landscaping (§13552.4). This section provides the following authority: "...public agencies may require the use of recycled water for irrigation of residential landscaping, if all of the following requirements are met:

- Recycled water, for this use, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.
- The use of recycled water does not cause any loss or diminution of any existing water right.
- The irrigation systems are constructed in accordance with Chapter 3 (Section 60301 et seq) of Division 4 of Title 22 of the California Code Regulations.

The SWRCB Division of Drinking Water (formerly under the California Department of Public Health) sets standards for municipal wastewater reuse to protect public health under "Water Recycling Criteria" in Title 22 of California Code of Regulations. These regulations specify treatment and use requirements for various recycled water uses, including on-site dual plumbed irrigation systems for single family residences.

The SWRCB has the authority for water quality protection and the Regional Boards have permitting and ongoing oversight authority for recycled water applications. The Division of Drinking Water reviews and approves new recycled water uses and the RWQCBs issue permits for the application of recycled water. Uses of recycled water are specified under

Title 22 Code of Regulations, Division 4. Environmental Health, Chapter 3 Water Recycling Criteria, Article 3. Uses of Recycled Water, and specifically §60304 Use of recycled water for irrigation. Recycled water used for residential landscape irrigation must be Tertiary treated water (disinfected, filtered recycled water).

Several communities in California allow for residential landscaping irrigation with recycled water. The challenge for residential landscaping is often one of high costs due to the need for dual piping and on-site retrofit costs. Most areas using dual systems ("purple pipe") have installed dual pipes to serve the larger irrigation users (roadway landscaping, HOA common areas, parks, etc) where the cost of service is economically feasible due to the larger, concentrated demand.

For example, IRWD's non-potable water system meets about 35% of its total demands through the delivery of recycled and other non-potable water to its larger irrigation areas, as well as to dual plumbed buildings. IRWD initiated recycled water service in the early 2000's to large residential estates (Shady Canyon, Pelican Crest and Crystal Cove) for both front

and back yards. Currently they serve about 600 estates which at ultimate will total about 750 single family customers. These larger estates have sufficient demand to justify the cost of installing dual delivery and dual on-site delivery systems. IRWD has found that it is not feasible to serve smaller lots at this time. Also, a good portion of IRWD's recycled water is being fully utilized and supply is limited and constrains expansions into small lot residential areas.

IRWD requirements for single-family residences receiving recycled water include:

- All potable water piping outside of the structure shall be copper pipe, which shall have warning tape installed in accordance with specified conditions.
- All recycled water piping shall be purple colored PVC pipe, which shall be marked in accordance with specified requirements.
- An approved backflow prevention assembly conforming to the IRWD Rules and Regulations shall be installed on the downstream side of the potable water meter.

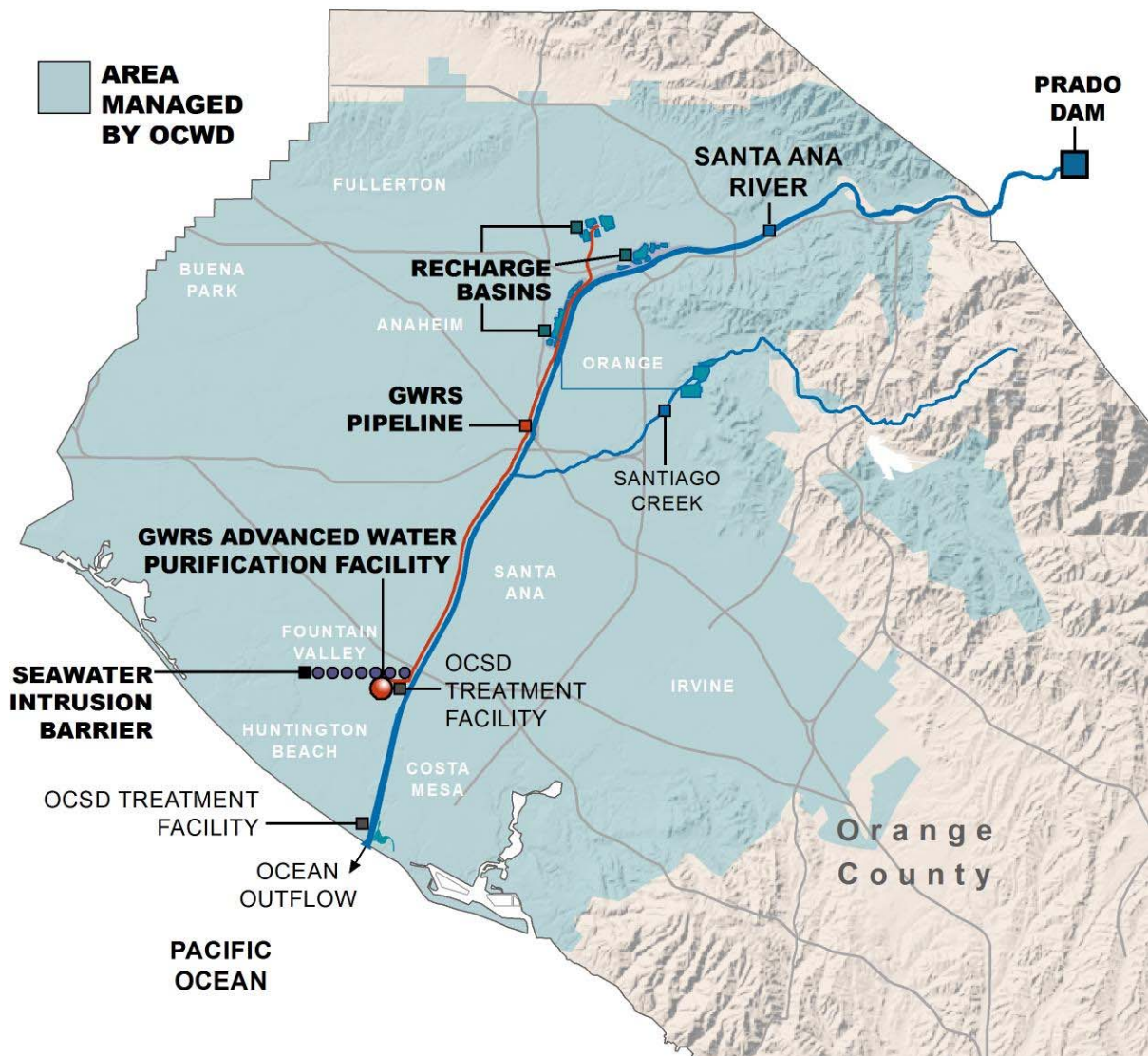
**Table 1 - Existing and Planned Water Recycling in Orange County
OCSD AND OCWD Recycled Water Projects**

Future projects include the Phase 3 final expansion of the GWRS from 100 MGD to 130 MGD.

OCSD Wastewater Flows and OCWD Recycled Water Use						
FYE	WWTP	Wastewater Flow (MGD)	Recycled Water Use (AFY)	Ocean Disposal (AFY)	Total Demand (AFY)	% RW
2014	1	189	66,960	142,000	379,233	17.7%
2035	1	189	133,800	75,200	392,045	34.1%

Note: Recycled Water is GWRS and GAP. OCWD Projected Demands before SWRCB Emergency Conservation Mandate and excluding IRWD demand. SAR baseflow is primarily wastewater but is excluded from this table; WY14 baseflow was 63,500 afy. Future ocean disposal will be entirely GWRS process wastewater. Conservation will reduce future expected influent flow. Source: OCSD and OCWD.

Figure 1 OCWD/OCSD Groundwater Replenishment System Facilities



**Table 2 - Existing and Planned Water Recycling in Orange County
IRWD Recycled Water Projects**

Future recycled water projects in IRWD include the following:

- Continued expansion of the dual distribution system with system growth
- ILP North Conversion Project
- MWRP Final Expansion to 33 MGD
- Conversion and enlargement of Syphon Reservoir for expanded seasonal storage.

IRWD Wastewater Flows and Recycled Water Use						
FYE	WWTP	Wastewater Flow (MGD)	Recycled Water Use (AFY)	Ocean Disposal (AFY)	Total Demand (AFY)	% RW
2014	2	23.4	21,950	4,200	98,800	22.2%
2035	2	34.5	34,200	3,350	114,000	30.0%

Note: Minimum ocean disposal required to convey solids to regional plant for processing and disposal. Excludes IBC flows to OCSD. Source: IRWD

**Table 3 - Existing and Planned Water Recycling in Orange County
South OC Planned Future Recycled Water Supply Projects**

Future recycled water projects in SOC include the following:

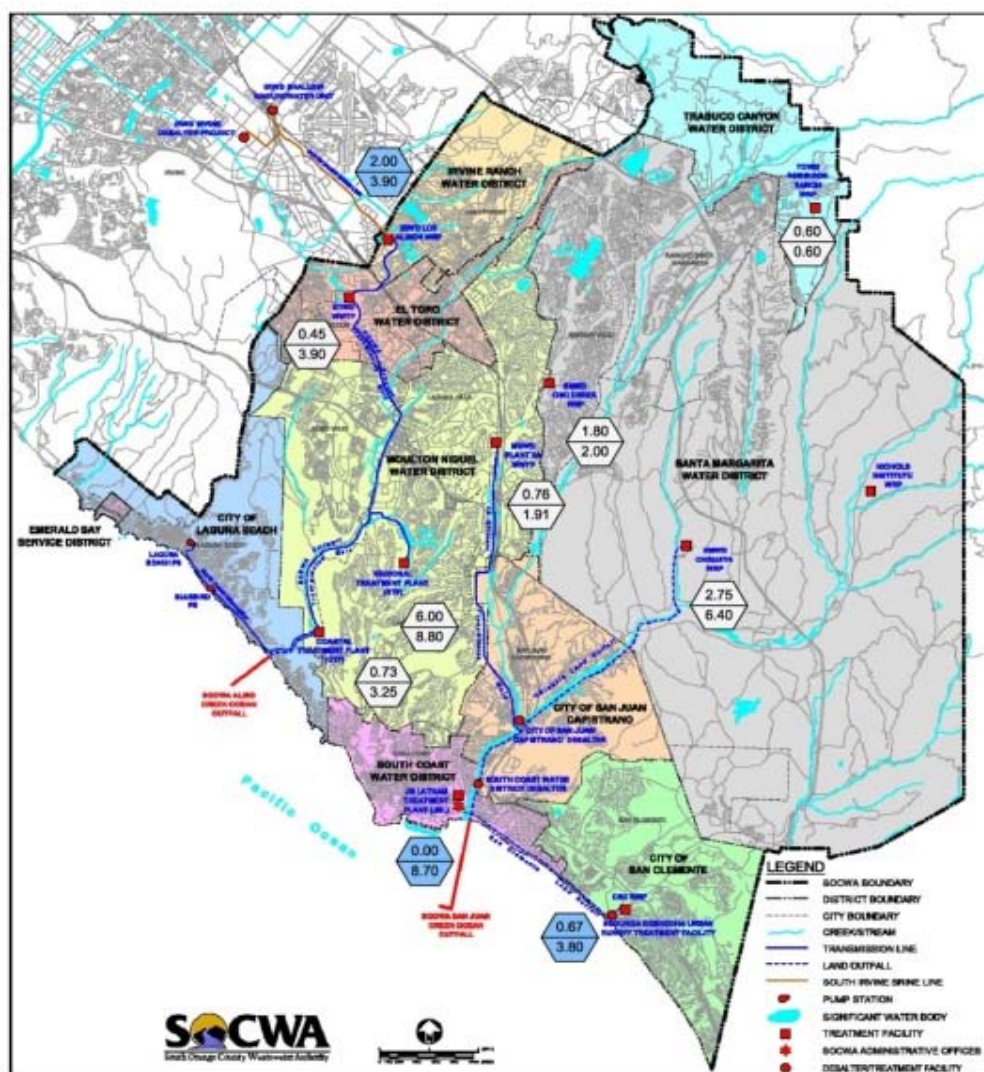
- Expansion of Chiquita WRP, El Toro WRP and Plant 3A and Trampas Reservoir.
- Plant expansions and interconnections (OCWRP, 3A and Latham) to extend recycled water distribution system.
- SJBA Groundwater Recharge and Ortega Reservoir/IPR Project

South Orange County Wastewater Flows and Recycled Water Use						
FYE	WWTP's	Wastewater Flow (MGD)	Recycled Water Use (AFY)	Ocean Disposal (AFY)	Total Demand (AFY)	% RW
2014	10	37.6	15,990	25,590	115,307	13.9%
2035	10	44.0	39,000	9,660	127,643	30.6%

Note: Future recycled water use includes indirect potable reuse projects for San Juan Creek and Ortega Reservoir Project for which feasibility studies are underway or are scheduled. 2014 flows appear to be about 10% lower than normal due to the continuing drought and reduced Infiltration/Inflows. Source: SOCWA and SJBA.

Figure 2 South Orange County Wastewater and Recycling Facilities

CURRENT TREATMENT ACTIVITIES



(MGD)





INFORMATION ITEM

June 1, 2015

TO: Planning & Operations Committee
(Directors Osborne, Barbre, Hinman)

FROM: Robert Hunter, General Manager
Staff Contact: Karl Seckel/Richard Bell

SUBJECT: Status Update on the OC Water Reliability Study – June 2015

STAFF RECOMMENDATION

Staff recommends the Planning & Operations Committee receives and files the report.

COMMITTEE RECOMMENDATION

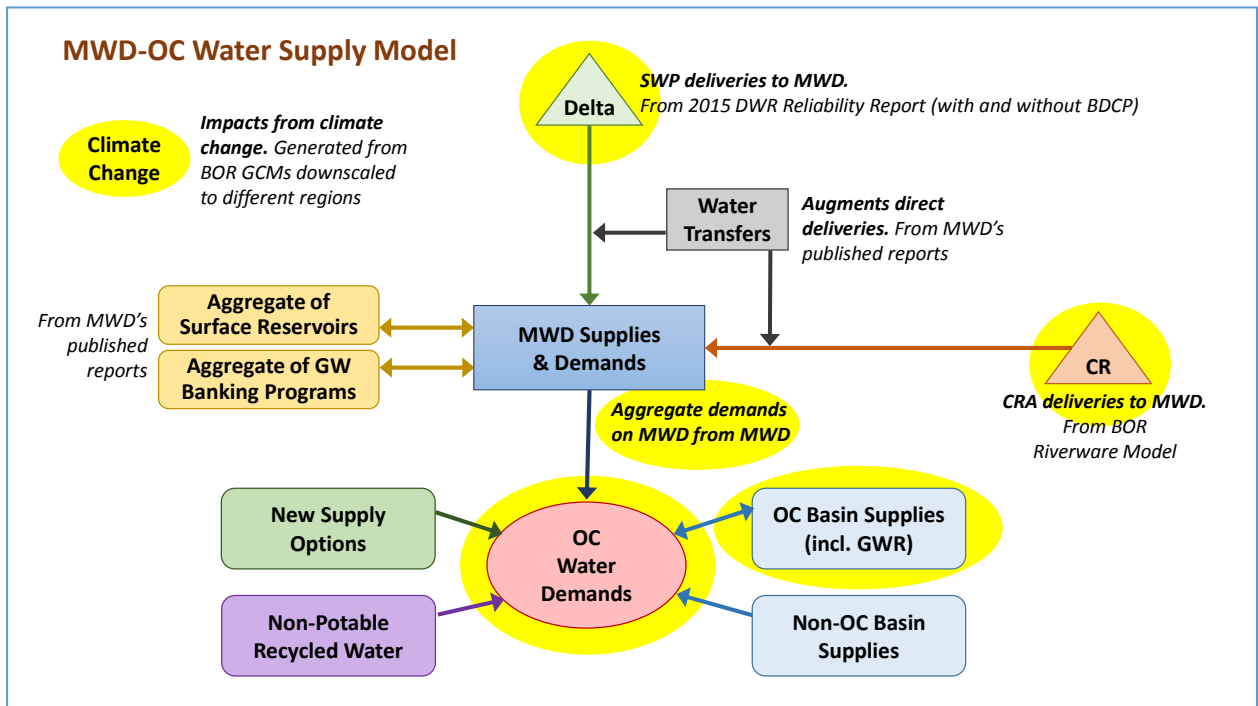
Committee recommends (To be determined at Committee Meeting)

DETAILED REPORT

Not much new information was released in the last month, although work continued in a number of areas on supply modeling, demand projections and seismic work and starting in June and following in July and August, significant pieces of work should be rolling out to the Board and to our member agencies. The following is anticipated in June and July:

- CDM-Smith will complete their demand analysis including projecting the potential for future WUE investments to reduce future demands in OC.
- CDM-Smith will review initial runs on their water supply model that mimics the MET Integrated Resources Plan. Below is a graphical representation of the system to be modeled. The model includes supplies from the State Water Project and the Colorado River Aqueduct as well “puts” into and “takes” out of MET storage accounts. Variations to be included in the modeling will involve climate variability impacts and biops impacts on supplies as well as “with” and “without” a BDCP solution.

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



- CDM-Smith is also working on modeling of supplies to the OCWD basin in conjunction with information provided by OCWD.
- DWR recently released the 2015 Reliability analysis of the State Water Project which will be used in the modeling.
- CDM-Smith is expected to present a SUPPLY GAP Analysis in DRAFT form for a number of scenarios
- Our Seismic Experts (G&E Engineering & GeoPentech) will be issuing their draft report in July. We have been awaiting information from MET regarding the type of pipe in their system to complete the analysis.
- Staff is still analyzing a number of operational scenarios with and without the power grid and with and without MET supplies for the SYSTEM reliability analysis. This portion of the study is somewhat behind schedule.
- Staff has begun drafting pieces of the study on Recycled Water in Orange County; some of that information is included in the P&O packet this month.
- The overall schedule to finish the report this fall remains. OCWD has requested assistance in analyzing the Poseidon Project at a level compatible with their Term Sheet analysis; MWDOC has agreed to help. We are discussing two potential cost adjustments with CDM-Smith to cover work not anticipated in the original scope of work. Staff has requested documentation from CDM-Smith.

Status of Ongoing MWDOC Reliability and Engineering and Planning Projects

May 27, 2015

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 early 2016	<p>The shutdown of the South County Pipeline and Pump Station to allow for the connection of the Baker Treatment Plant Pipeline to the South County Pipeline went smooth. The work was completed in early May.</p> <p>At the other end of the Baker Pipeline system, Karl Seckel and Kevin Hostert are working with IRWD and MET to ensure completion of the OC-33 service connection upgrade to supply the project.</p> <p>Karl Seckel and Kevin Hostert are also working with EOCWD on hydraulic issues and potential water quality issues related to the EOCWD service connection to the Baker Pipeline.</p>
Doheny Desalination Project	South Coast Water District			Work continued under the MET Foundational Action Plan and with the baseline monitoring work required for the coastal lagoon and the lower portion of San Juan Creek. South Coast Water District is proceeding ahead with the hiring of a Project Manager and Owners Rep Consultant to help them complete the CEQA and preliminary design work for the Doheny Desal Project.

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
Poseidon Resources Ocean Desalination Project in Huntington Beach				<p>The OCWD Board authorized staff to proceed with work on the Term Sheet with Poseidon and to complete detailed work on the integration options. MWDOC has been assisting OCWD on these efforts. Several meetings have been held on water quality issues associated with system integration. West Basin MWD staff met with MWDOC and OCWD to discuss their recent research into water quality issues; a meeting with MET's Water Quality staff included a wide-ranging discussion of both operational and water quality issues they perceive. OCWD staff is armed with lots of good information on the work already completed on water quality issues.</p> <p>IRWD presented their analysis of the Poseidon Project issues. Staff will be reviewing and commenting on their draft document.</p>
Orange County Water Reliability Study				<p>At the time of production of the packet, the May meeting of the OC Water Reliability Workgroup had not been held. The report will be summarized in next month's update. An update on the overall report is included in the P&O Packet this month.</p>
California WaterFix & EcoRestore				<p>In April the State released a preview of major changes that are being made to the BDCP. After several months of negotiations it became apparent that the regulatory agencies and water contractors (CVP and SWP) could not come to agreement on the BDCP to provide the required endangered species habitat improvements and protections under the proposed 50 year permit. As a result, the Habitat Conservation Plan (Endangered Species Act, Section 10) is no longer being proposed and is being replaced by dividing the project into two separate actions: the California WaterFix and the California EcoRestore. The</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				California WaterFix is the Twin Tunnel project and EcoRestore will restore 30,000 acres of habitat to be funded from a variety of sources. The Twin Tunnel Project will now be permitted under Section 7 of the ESA which will require a new Biological Opinion for its operation. In addition, the SWRCB will need to issue the CVP and SWP a change for a new point of diversion, scheduled sometime in 2016. The new separated project DEIR/EIS's will apparently be released in the next few weeks for comment. The State plans on adopting a Record of Decision by the end of this year.
Other Meetings/Work				
				Director Susan Hinman and Richard Bell attended the San Juan Basin Authority meeting on May 26 where an update of basin conditions was presented. Basin monitoring indicates that seawater intrusion was partially abated with the curtailment of South Coast WD groundwater production and was aided by recharge from recent storms. A basin management goal is to maintain a positive outflow of groundwater to the ocean so as to repulse seawater until such time that a seawater intrusion control system is implemented. Because of the continuing drought impacts on lowered basin groundwater levels and elevated chloride levels in the coastal area from seawater intrusion, the Commission voted 4-0 to have staff prepare a resolution for the June SJBA meeting that would require the City of San Juan Capistrano to cease groundwater production of SJBA water rights.

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				Karl Seckel and Harvey De La Torre participated in a Mandatory meeting with consultants interested in preparing the MWDOC and Retail Agencies Urban Water Management Plans in Orange County. The RFP was sent to eight consultants; four attended the Mandatory meeting; the final RFP will be sent out and proposals will be received, reviewed and brought to the P&O Committee and Board for authorization in July.
				The SWRCB on May 6, 2015 adopted the Amendment for the California Ocean Plan for Ocean Desalination and Brine Disposal. This effort began in 2007. The SWRCB responded to comments and made several changes requested by CalDesal. The adopted amendment is considered workable by CalDesal members. One of its key features requires project proponents to evaluate the feasibility of subsurface intakes since they avoid marine organism impingement/entrainment impacts which is preferable to mitigation. Projects may be required to use both types of systems to the extent subsurface intakes are determined to be feasible by the Regional Boards with State Water Board oversight. Other changes dealt with brine discharges and mitigation of entrainment impacts.
				Karl Seckel participated in a meeting at MET on the Cadiz Project with Dan Ferons and his consulting team; MET was represented by Glen Boyd, MET Conveyance Section along with one engineering and one water quality staff members. The purpose of the meeting was to re-introduce technical information provided by SMWD's consulting team regarding an interconnection with the Colorado River Aqueduct. MET staff

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				indicated about a two-month turnaround to provide comments. MET also prepared a reimbursement agreement between MET and MWDOC; MWDOC has prepared a reimbursement agreement between MWDOC and SMWD including MWDOC's staff time.
				Karl Seckel participated in the OC Summit, providing a brief overview of ocean desalination issues in OC.
				Karl Seckel attended a SAWPA meeting on Conservation Based Water Rates to get briefed on the program SAWPA is setting up to help a number of the retail agencies develop and implement these rates. It was reported that SAWPA is flying the entire Santa Ana River Watershed to obtain aerial photographs and infrared imagery to be overlaid with parcel maps to help the retail agencies develop irrigable areas on a parcel by parcel basis. This is a similar approach to what MWDOC did back in 2008; the imagery interpretation technology has vastly improved. MWDOC may consider adding to the SAWPA imagery if they conduct additional flights later in the fall, so that we would have complete coverage for Orange County.

**Status of Ongoing WEROC Projects
May 2015**

Description	Comments
General Activities	<p>Brandon Stock and Kelly Hubbard participated in the annual OC Water Summit by providing assistance with set-up on Thursday night and by staffing a MWDOC/WEROC information table during the Summit.</p> <p>Brandon attended the Earthquake Threat Forecast Seminar at the Orange County American Red Cross offices presented by CalTech. The seminar provided a century timeline of earthquakes happening in California and the California earthquake early warning system was discussed in detail. Additionally, information about earthquake monitoring and planning tools was provided, some of which will be implemented in the WEROC EOCs.</p> <p>Brandon has reached out to the New York City's Office of Emergency Services (NYC OEM) to request and share information on emergency planning following a presentation Kelly saw last fall. Due to exercise planning demands, a conference call between WEROC staff and NYC staff has been set for early June. Staff is looking to discuss practices put in place by the NYC OEM, specifically "playbooks" that address areas of response pertinent to WEROC and water utilities. The collaboration with NYC OEM is a great opportunity to learn from another agency and to further develop water/wastewater utility emergency response guidelines here in OC.</p>
Coordination with Member Agencies	<p>UPDATE: The WEROC EOC and staff participated in the county-wide earthquake exercise "Surf Quake 2015" on May 21st. Over 25 local government agencies participated in the exercise. WEROC and the participating Member Agencies will be conducting an After-Action meeting on Tuesday, June 2nd and WEROC staff will participate in the County's After-Action meeting on Thursday June 4th. An After-Action Report will be provided to the Board at the July P&O Committee Meeting.</p>

Description	Comments
	<p>Kelly, along with other MWDOC staff, participated in two MWDOC hosted Drought Coordination Workshops on April 29 and May 6. During each Kelly was able to provide insight from the State Office of Emergency Services Drought Conference calls and from information received at various county meetings.</p> <p>On May 5 WEROC hosted its quarterly Member Agency Emergency Services Coordination Meeting. The meeting included discussion on:</p> <ul style="list-style-type: none"> • City of Fountain Valley April 20, 2015 water outage • City of Nibley, UT water contamination event • Final comments/feedback on the AlertOC After Action Report • And the Drought disaster declaration process and financial tracking. <p>Following these general discussions Agencies participating in SurfQuake stayed for a second meeting on exercise planning. Participants logged in to WebEOC (emergency incident tracking system) and worked as a group to set up the system for the May 21st exercise. This planning session was critical for exercise planning and provided a learning environment for the participating agencies.</p> <p>Kelly met with the new Irvine Ranch Water District Safety and Security Manager, Emilyn Zuniga, who also oversees emergency management. The meeting was to provide Emilyn an overview of the WEROC program and to discuss areas of support provided by WEROC staff.</p> <p>Kelly provided approximately 30 member agency staff from 5 agencies and a few WEROC volunteers with WebEOC Training on May 12th in preparation for the May 21st exercise. Additional time was spent at the end of the training on exercise development.</p>
<p>Coordination with the County of Orange</p>	<p>Kelly attended an emergency meeting of the Urban Area Working Group (UAWG) on April 29th to review proposed projects for 2015 Homeland Security Funds. WEROC's proposed grant projects for fuel trailers and generator cabling were approved as part of that package. The OC UAWG will submit the approved grant package to the California Offices of Emergency Services and FEMA for final approval. If approved, the grant funding period would start in Fall 2015. The WEROC projects are also being considered for any remaining 2014 funds that may be available</p>

Description	Comments
	<p>sooner.</p> <p>Kelly and Brandon attended the Orange County Summer Weather Outlook, Heat and Power Outage Annex training and Drought Workshop on April 30th. The workshop was attended by water utilities, city emergency managers and planning officials, fire response staff, county departments, public information officers, and other response partners. National Weather Service (NWS) staff provided a presentation on the current drought situation and expected weather conditions moving into the summer. Orange County Fire Authority staff provided an overview of the current fire conditions and fire assets available for firefighting. At the time of the meeting the fire fuel levels (vegetation moisture levels measured to determine fire risk) were 8 weeks ahead of normal conditions in growth and moisture level (very dry). Attendees then reviewed the Operational Area Heat and Power Outage Annexes; these are plans for county and government response to each set of conditions. In the afternoon, Harvey De La Torre provided the group a presentation on the Water Supply and Drought Conditions. The group then broke up into groups based on geographic region to discuss drought response and long term planning from an emergency management perspective. Several water utilities were in attendance which provided each group with important insight into current policies and operational concerns.</p> <p>Brandon and Kelly attended the Orange County Emergency Management Organization (OCEMO) and OCEMO Exercise Design Meeting at the Newport Beach Backbay Nature Center. A panel discussion by agency representatives was presented on the County's Point of Distribution (POD) program to better illustrate the necessity of PODs and key concepts to a successful POD program. PODs can be used to distribute medication in a mass medical emergency or commodities during all disaster events if needed. The POD planning is important to water utilities as these sites will be used for the distribution of water if there was a significant water outage.</p> <p>Kelly and Brandon attended the OC Emergency Management Council (EMC), Operational Area (OA) Executive Board, and a joint meeting of the two groups on May 13th. Supervisor Spitzer and OCFA Chief Bowman facilitated the three jointly held meetings. The group approved the following Operational Area plans: Evacuation Annex, Recovery Annex, and the Excessive Heat</p>

Description	Comments
	<p>Annex. An interesting report was provided on a joint OCFA and Law Enforcement Meeting to discuss the summer fire outlook and joint operations for response. County Emergency Management staff explained that they are watching AB 361, Emergency Services Act: Nuclear Powerplants (Author Achadjian). The bill has the potential to negatively impact funding that is currently required from Edison to support local emergency planning functions. OCFA received a \$500,000 boost in funding from CalFire for drought response operations as part of the drought funding that has been approved by the Governor. The full agenda packet and attachments are available from Kelly.</p> <p>Kelly participated in a OC UAWG Grant Effectiveness Report Conference Call on May 26th. The purpose of the Grant Effectiveness Report is to document progress made by the Anaheim/ Santa Ana Urban Area (ASAUA) in building capabilities, reducing risk, and enhancing regional preparedness based on investments made using UASI funds. A similar report was first produced based on grant fiscal years 2004-2009. This second report will be based on grant funding years 2010-2014. WEROC staff are being asked to participate as a grant recipient and participant of UAWG.</p> <p>Kelly and Brandon spoke with Lieutenant Miller, Orange County Intelligence Assessment Center (OCIAAC) regarding the City of Fountain Valley water outage. Although the outage was not a cyber-related event, circumstances during the outage brought cyber security to the forefront of operational planning considerations. WEROC and OCIAAC staff have agreed to enhance coordination to provide the water utilities with more concrete direction and tools for enhancing their own cyber security. Lt. Miller and WEROC staff discussed potential options to meet this need, including a possible FEMA sponsored exercise based on a cyber-security breach.</p>
Coordination with Outside Agencies	<p>ONGOING: Kelly participated in the California Office of Emergency Services (Cal OES) Southern Region Drought Conference Call on May 4, 11, and 18th (May 25th was canceled due to the holiday). Kelly participates as the Region 1 California Water/Wastewater Agency Response Network (CalWARN) representative. The calls provide good information on state-wide drought response efforts, programs, and activities.</p>

Description	Comments
	<p>Kelly participated in the California Water/Wastewater Agency Response Network (CalWARN) State Steering Committee Conference Call on May 19th. Kelly was able to use the conference call to receive feedback on WEROC drought response activities and the Surf Quake exercise planning.</p>
<p>WEROC Emergency Operations Center (EOC) Readiness</p>	<p>WEROC successfully participated in the MARS radio test for May from the WEROC South EOC. Staff were not available for the OA (county) radio test due to a conflict in schedule, however the Fountain Valley radio was tested and is in working order. WEROC facilitated its bi-monthly radio test exercise on May 21st as a component of the SurfQuake exercise.</p> <p>Kelly, Kevin Hostert and Chris Lingad (MWDOC Engineering Intern) met with MET staff at the WEROC North EOC to provide MET staff with access to the facility for an engineering review for seismic safety and compliance. No information was provided as to their conclusions as a more detailed review of structural drawings still needs to be completed. MET staff will keep us informed on any issues identified and their project timeline for improvements if any are determined to be needed.</p> <p>Brandon has continued to work on updating employee and member agency contact information and ensuring that this information is updated in contact lists in the EOC, in the WEROC In Case of Crisis phone application, and in Alert OC for reverse notification purposes.</p> <p>UPDATE - Both EOC's continue to have construction onsite, however construction at both sites has largely wrapped up. The North EOC site has the IRWD Baker Raw Water Pump Station construction in process and the South EOC has a communications infrastructure construction project onsite for El Toro Water District. Both sites are still accessible and in working order, but because the North EOC is physically a smaller site with construction traffic, the South EOC will continue as the primary EOC at this time.</p>

Status of Water Use Efficiency Projects

June 2015

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
Smart Timer Rebate Program	MWDSC	Ongoing	September 2015	For March 2015, 135 smart timers were installed in the residential and 90 in the commercial sectors. For program water savings and implementation information, see MWDOC Water Use Efficiency Program Savings and Implementation Report.
Rotating Nozzles Rebate Program	MWDSC	Ongoing	Ongoing	For March 2015, 4,488 residential and 11,976 commercial rotating nozzles were installed in Orange County. For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.
Water Smart Landscape Program	MWDOC	On-going	November 2015	In March 2015, a total of 12,477 meters received monthly irrigation performance reports comparing actual water use to a landscape irrigation budget customized to each meter. For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.
SoCal WaterSmart Residential Indoor Rebate Program	MWDSC	On-going	On-going	In April 2015, 486 high efficiency clothes washers and 1,756 high efficiency toilets were installed through this program. For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.

SoCal Water\$mart Commercial Rebate Program	MWDSC	On-going	On-going	<p>In April 2015, 95 high efficiency toilets and 9 zero water urinals 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	90%	December 2015	<p>A total of 41 Focused Surveys and 19 Comprehensive Surveys have been completed or are in progress. To date, 12 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, 346 AFY of water savings is being achieved.</p>
MWDOC Conservation Meeting	MWDOC	On-going	Monthly	<p>This month's meeting was held on May 7, 2015 and was hosted by the City of Santa Ana. The next meeting will be on June 4, 2015 at MWDOC.</p>
Metropolitan Conservation Meeting	MWDSC	On-going	Monthly	<p>This month's meeting was held on May 20, 2015. The next meeting will be June 18, 2015 at Metropolitan.</p>
Water Smart Hotel Program	MWDOC	85%	June 2015	<p>MWDOC was awarded a Bureau of Reclamation grant, to be matched with Metropolitan funds, to conduct up to 30 commercial and landscape audits of hotels. Enhanced financial incentives will be provided to augment the current SoCal Water\$mart rebates.</p> <p>All grant funding for this program has all been reserved, and a wait list for has been created. In the event that any of the sites with reserved funding are unable to complete their projects, wait list sites would then become eligible on a first-come, first-served basis. Staff will be requesting an extension through December 2015 to allow all hotels currently in process to complete their retrofits.</p>

Turf Removal Program	MWDOC	On-going	Ongoing	<p>In March 2015, 535 rebates were paid, representing 1,087,314 square feet of turf removed in Orange County. To date, the Turf Removal Program has removed approximately 5,386,363 square feet of turf.</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	10%	December 2015	<p>MWDOC was awarded an additional grant from the Bureau of Reclamation to develop the Base Irrigation Schedule Calculator in support of the California Sprinkler Adjustment Notification System (CSANS). This system will e-mail or “push” an irrigation index to assist property owners with making global irrigation scheduling adjustments. Participants will voluntarily register to receive this e-mail and can unsubscribe at any time.</p> <p>The CSANS program is being promoted via a bill insert. Currently, Staff is in the process of reviewing responses to our Request for Proposals for the development of the Base Irrigation Schedule Calculator.</p>
Public Spaces Program	MWDOC	20%	December 2015	<p>This program targets publicly-owned landscape properties located in the South Orange County IRWM Plan area and encourages the removal of non-functional turfgrass, the upgrade of antiquated irrigation timers, and the conversion of high-precipitation-rate fixed spray irrigation to low-precipitation-rate rotating nozzles and/or drip irrigation.</p> <p>To date, 10 cities, water districts, or other special districts (i.e., school districts) have applied for funding through this program, six cities have worked with MWDOC on completing their project funding calculation worksheet, and four complete project proposals have been received.</p>

Home Certification Program	MWDOC	17%	July 2015	<p>This program provides single-family sites with indoor and outdoor audits to identify areas for water savings improvements and opportunities and offers rebates for the installation of residential water efficiency devices, including smart timers and high efficiency rotating nozzles.</p> <p>In March 2015, MWDOC received twenty-two (22) applications for the Home Certification Program. Eight (8) surveys were conducted, and survey results are pending.</p>
Landscape Irrigation Survey Program	MWDSC	Ongoing	June 2016	<p>Through this program, Metropolitan offers, at no cost, the services of a certified landscape irrigation auditor who will survey and provide written recommendations for qualifying non-residential properties within Metropolitan's service area.</p> <p>To date, 137 sites in the MWDOC service area have contacted Metropolitan to request surveys.</p>
Spray to Drip Conversion Pilot Program	MWDOC	35%	April 2016	<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 sites will be encouraged to convert their existing spray nozzles to drip.</p> <p>To date, 131 residential applications and 37 commercial applications have received a Notice to Proceed. Of these, 68 residential sites and 17 commercial sites have been completed.</p>
CII Performance-Based Water Use Efficiency Program	MWDOC	2%	December 2017	<p>This program will provide enhanced rebate incentives to commercial, industrial, and institutional sites and large-landscape properties (landscapes ≥ 1 acre).</p> <p>The program launched during the first Quarter of 2015.</p>
Landscape Training and Outreach	MWDOC & County Stormwater	Ongoing	Ongoing	<p>The Orange County Garden Friendly (OCGF) Pilot Program promotes the use of climate appropriate plants and water efficient irrigation practices, with the overall goals of reducing water runoff and improving outdoor water use efficiency. The</p>

Landscape Training and Outreach (cont.)				<p>OCGF Pilot Program is a collaborative effort of the Orange County Stormwater Program (OCSP) and the University of California Cooperative Extension (UCCE). Each partner plays a role in planning and implementing the Program.</p> <p>The OCGF program held six events during Spring 2015 at the Home Depots in Cypress, Lake Forest, Irvine, Mission Viejo, and Costa Mesa, and at Green Thumb in Lake Forest.</p>
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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	April-15	486	1.12	5,628	69.44	102,355	2,827	17,673
Smart Timer Program - Irrigation Timers	2004	March-15	225	5.45	1,483	434.30	12,715	4,424	24,126
Rotating Nozzles Rebate Program	2007	March-15	16,464	5.48	56,121	1,151.12	428,523	2,220	8,628
SoCal WaterSmart Commercial Plumbing Fixture Rebate Program	2002	April-15	104	0.43	1,608	24.69	46,967	3,466	30,446
Water Smart Landscape Program [1]	1997	March-15	12,477	890.35	12,477	7,970.26	12,477	10,454	65,796
Industrial Process Water Use Reduction Program	2006	March-15	0	7.75	2	7.75	13.00	346	1,162
Turf Removal Program ^[3]	2010	March-15	1,087,314	12.68	3,756,387	1,052	5,386,363	754	1,984
High Efficiency Toilet (HET) Program	2005	April-15	1,756	6.22	10,807	383.07	42,987	1,589	8,986
Home Water Certification Program	2013	March-15	8	0.016	133	1.142	211	4.963	6.798
Synthetic Turf Rebate Program	2007		0	0	0	0	685,438	96	469
Ultra-Low-Flush-Toilet Programs ^[2]	1992		0	0	0	0	363,926	13,452	162,561
Home Water Surveys ^[2]	1995		0	0	0	0	11,867	160	1,708
Showerhead Replacements ^[2]	1991		0	0	0	0	270,604	1,667	19,083
Total Water Savings All Programs				929	3,844,646	11,094	7,364,446	41,460	342,627

⁽¹⁾ Water Smart Landscape Program participation is based on the number of water meters receiving monthly Irrigation Performance Reports.

⁽²⁾ Cumulative Water Savings Program To Date totals are from a previous Water Use Efficiency Program Effort.

⁽³⁾ Turf Removal Interventions are listed as square feet.

⁽⁴⁾ 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 01/02	FY 02/03	FY03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY13/14	FY14/15	Total	Current FY Water Savings Ac/Ft (Cumulative)	Cumulative Water Savings across all Fiscal Years
Brea	17	107	178	132	143	132	175	156	42	186	144	93	115	100	1,720	1.22	295.10
Buena Park	9	45	88	81	84	85	114	146	59	230	145	105	106	79	1,376	1.07	219.40
East Orange CWD RZ	3	8	20	20	11	18	22	17	3	23	10	10	8	7	180	0.10	32.95
El Toro WD	21	88	108	103	83	91	113	130	32	162	112	134	121	94	1,392	1.21	222.58
Fountain Valley	36	127	209	196	178	205	219	243	72	289	158	115	102	96	2,245	1.16	402.20
Garden Grove	39	173	278	243	243	238	304	332	101	481	236	190	162	141	3,161	1.61	548.23
Golden State WC	37	195	339	374	342	339	401	447	168	583	485	265	283	300	4,558	3.68	766.88
Huntington Beach	114	486	857	738	680	761	750	751	211	963	582	334	295	255	7,777	3.13	1,429.72
Irvine Ranch WD	159	626	1,087	1,093	1,445	1,972	2,052	1,844	1,394	2,621	2,170	1,763	1,664	1,607	21,497	20.50	3,447.74
La Habra	8	40	86	81	66	96	136	83	22	179	128	82	114	75	1,196	0.95	191.89
La Palma	3	5	13	21	18	33	35	51	25	76	46	34	25	29	414	0.31	65.25
Laguna Beach CWD	17	88	119	84	68	57	77	77	27	96	57	38	37	30	872	0.33	156.61
Mesa Water	24	117	228	240	212	239	249	246	73	232	176	114	86	71	2,307	0.81	432.34
Moulton Niguel WD	158	630	841	640	570	652	716	742	250	1,127	679	442	421	649	8,517	7.00	1,429.41
Newport Beach	17	144	343	277	243	245	270	259	57	197	142	116	92	81	2,483	1.04	471.35
Orange	58	247	304	358	330	366	365	403	111	349	262	218	163	138	3,672	1.65	674.65
Orange Park Acres	-	-	-	-	-	4	8	-	-	-	-	-	-	-	12	0.00	2.76
San Juan Capistrano	16	95	120	107	102	109	103	127	43	190	110	76	73	76	1,347	1.01	230.36
San Clemente	32	182	235	170	136	204	261	278	63	333	206	140	94	120	2,454	1.43	423.18
Santa Margarita WD	140	510	743	573	592	654	683	740	257	1,105	679	553	662	691	8,582	8.80	1,391.25
Seal Beach	13	28	57	39	46	47	46	57	7	81	51	31	29	32	564	0.34	96.30
Serrano WD	9	16	54	39	39	30	31	23	7	21	20	13	10	23	335	0.30	62.55
South Coast WD	35	138	165	97	103	107	130	148	43	183	112	89	79	56	1,485	0.74	254.82
Trabuco Canyon WD	10	63	76	58	44	69	60	62	28	82	62	30	45	39	728	0.54	125.13
Tustin	21	89	152	138	127	152	146	144	45	174	97	78	59	66	1,488	0.72	270.81
Westminster	37	159	235	196	186	213	171	233	74	329	208	121	82	92	2,336	1.19	414.07
Yorba Linda	36	214	342	355	333	288	350	367	117	394	273	181	167	135	3,552	1.73	646.78
MWDOC Totals	1,069	4,620	7,277	6,453	6,424	7,406	7,987	8,106	3,331	10,686	7,350	5,365	5,094	5,082	86,250	62.57	14,704.32
Anaheim	917	677	904	1,364	701	854	847	781	860	910	477	331	285	247	10,155	3.21	1,912.64
Fullerton	40	196	369	289	263	269	334	330	69	397	270	200	186	188	3,400	2.41	569.15
Santa Ana	15	69	188	269	244	236	235	257	87	355	190	163	131	111	2,550	1.24	486.48
Non-MWDOC Totals	972	942	1,461	1,922	1,208	1,359	1,416	1,368	1,016	1,662	937	694	602	546	16,105	6.87	2,968.27
Orange County Totals	2,041	5,562	8,738	8,375	7,632	8,765	9,403	9,474	4,347	12,348	8,287	6,059	5,696	5,628	102,355	69.44	17,672.60

SMART TIMERS INSTALLED BY AGENCY
through MWD OC and Local Agency Conservation Programs

Agency	FY 08/09		FY 09/10		FY 10/11		FY 11/12		FY 12/13		FY 13/14		FY 14/15		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.	
Brea	3	9	0	0	2	0	8	0	9	8	4	0	38	5	75	71	344.93
Buena Park	3	1	0	0	0	0	4	19	3	0	0	0	4	10	14	30	64.91
East Orange CWD RZ	0	0	0	0	1	0	5	0	2	0	0	0	2	0	13	0	2.95
El Toro WD	0	25	2	18	5	5	26	2	7	2	11	0	4	5	69	326	1,747.48
Fountain Valley	1	0	0	6	2	2	8	2	3	2	4	0	6	10	44	27	94.60
Garden Grove	2	1	6	0	5	4	7	0	5	2	9	0	8	14	58	27	83.27
Golden State WC	1	2	9	22	7	4	13	3	9	49	9	25	34	11	129	138	419.37
Huntington Beach	13	1	6	27	6	36	15	4	18	33	20	35	13	1	136	161	548.32
Irvine Ranch WD	29	56	14	145	28	153	267	71	414	135	71	59	49	209	1,168	1,558	6,683.10
La Habra	0	0	0	21	0	0	3	0	4	7	2	0	3	7	20	36	114.42
La Palma	0	0	0	0	0	0	1	0	1	0	2	0	0	0	4	0	0.51
Laguna Beach CWD	2	0	2	14	4	1	109	2	76	2	71	0	85	0	383	19	126.96
Mesa Water	6	7	13	7	7	22	21	0	10	2	15	2	15	28	131	101	412.23
Moulton Niguel WD	21	23	17	162	36	60	179	31	51	74	40	45	34	83	503	560	1,919.60
Newport Beach	10	27	7	58	6	0	275	12	242	26	168	75	9	9	978	354	1,654.95
Orange	5	2	2	13	5	8	25	0	20	24	13	9	13	28	160	139	562.34
San Juan Capistrano	10	0	7	49	13	1	103	2	14	18	6	11	4	11	178	101	360.04
San Clemente	81	20	13	209	46	11	212	17	26	7	28	2	22	13	982	347	1,757.36
Santa Margarita WD	25	44	10	152	61	53	262	7	53	171	64	93	29	302	615	996	2,837.01
Santiago CWD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Seal Beach	0	0	0	1	0	0	0	3	1	0	1	36	0	12	2	52	68.89
Serrano WD	0	0	11	0	4	0	3	0	1	0	0	0	1	0	20	0	4.71
South Coast WD	11	6	3	10	13	3	78	10	13	16	8	4	95	27	253	155	649.94
Trabuco Canyon WD	1	0	2	0	2	10	12	0	6	0	2	0	3	1	71	104	621.43
Tustin	7	9	10	14	10	0	11	0	8	4	9	1	14	14	73	49	174.53
Westminster	3	0	3	0	1	1	2	0	1	1	2	0	13	16	41	30	107.31
Yorba Linda	8	5	5	21	25	0	22	0	20	0	12	5	25	2	198	85	460.83
MWD OC Totals	242	238	142	949	289	374	1,671	185	1,017	583	571	402	523	818	6,318	5,466	21,822.01

Anaheim	9	59	5	46	12	11	23	60	19	10	9	26	4	52	124	413	1,660.07
Fullerton	2	2	2	39	9	33	22	51	9	29	8	0	37	16	111	170	504.43
Santa Ana	2	4	1	8	8	0	6	5	8	19	7	8	6	27	42	71	139.36
Non-MWD OC Totals	13	65	8	93	29	44	51	116	36	58	24	34	47	95	277	654	2,303.86

Orange County Totals	255	303	150	1,042	318	418	1,722	301	1,053	641	595	436	570	913	6,595	6,120	24,126
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ROTATING NOZZLES 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			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	8	100	0	32	0	0	130	0	0	65	120	0	84	0	0	157	15	0	498	235	0	8.34
Buena Park	0	0	2,535	29	0	0	32	0	0	65	0	0	53	0	0	248	0	0	464	75	2,535	449.34
East Orange	0	0	0	0	0	0	340	0	0	55	0	0	30	0	0	221	0	0	751	0	0	8.38
El Toro	145	2,874	890	174	0	0	357	76	0	23	6,281	0	56	3,288	0	1,741	17,549	0	2,584	30,358	890	412.63
Fountain Valley	21	0	0	83	0	0	108	0	0	35	0	0	0	0	0	107	0	0	488	0	0	7.31
Garden Grove	151	45	0	38	0	0	119	0	0	95	0	0	80	0	0	62	0	0	742	151	0	15.43
Golden State	280	29	0	303	943	0	294	0	0	257	2,595	0	192	0	0	483	1,741	0	2,053	5,308	0	80.77
Huntington Beach	39	3,420	305	203	625	0	458	0	0	270	0	0	120	0	0	781	850	0	2,286	5,759	2,681	727.43
Irvine Ranch	1,034	54,441	1,479	2,411	2,861	0	1,715	4,255	0	25,018	1,014	0	11,010	4,257	0	1,249	55	0	44,641	79,426	2,004	2,474.92
La Habra	0	273	0	0	0	0	33	90	0	0	0	0	15	0	0	109	338	0	181	1,236	900	215.56
La Palma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0.24
Laguna Beach	191	0	0	156	0	0	763	0	0	3,596	0	0	2,948	878	0	2,879	1,971	0	10,749	2,896	0	115.36
Mesa Water	195	83	0	118	0	0	297	277	0	270	0	0	361	0	0	197	0	0	1,719	385	343	113.38
Moulton Niguel	234	0	959	1,578	0	0	1,225	0	0	512	1,385	0	361	227	0	1,396	4,098	0	6,029	12,713	2,945	865.92
Newport Beach	92	4,781	0	337	1,208	0	640	3,273	0	25,365	50	0	19,349	6,835	0	253	668	0	46,123	17,554	0	709.16
Orange	129	0	0	135	30	0	343	0	0	264	0	0	245	120	0	227	668	0	2,462	981	0	50.38
San Clemente	729	1,299	0	2,612	851	0	4,266	117	1,343	631	172	0	415	5,074	0	252	0	0	9,489	7,538	1,343	359.13
San Juan Capistrano	656	5,709	0	1,452	0	0	949	0	0	684	30	0	370	0	0	357	732	0	4,972	8,131	0	229.92
Santa Margarita	1,731	937	611	3,959	3,566	0	4,817	0	0	983	0	0	389	0	0	1,080	1,513	0	14,203	6,084	611	395.79
Seal Beach	0	291	0	0	0	0	0	0	0	0	0	0	0	0	0	40	3,111	0	155	3,402	0	21.18
Serrano	1,498	0	0	364	0	0	58	0	0	190	0	0	105	0	0	185	0	0	2,518	0	0	43.53
South Coast	0	0	0	318	1,772	0	688	359	0	435	0	0	70	0	0	4,819	3,414	0	6,519	5,678	0	93.23
Trabuco Canyon	1,357	791	0	0	0	0	379	0	0	34	0	0	0	0	0	56	0	0	1,956	791	0	51.76
Tustin	314	0	0	512	0	0	476	1,013	0	378	0	0	329	0	0	380	0	0	2,961	1,013	0	54.82
Westminster	80	0	0	0	0	0	26	0	0	15	0	0	0	0	0	54	0	0	286	0	0	4.97
Yorba Linda	371	3,256	0	529	0	0	559	0	0	730	0	0	40	990	0	738	0	0	3,970	4,359	500	241.64
MWDOC Totals	9,255	78,329	6,779	15,343	11,856	0	19,072	9,460	1,343	59,970	11,647	0	36,622	21,669	0	18,071	36,723	0	168,809	194,073	14,752	7,750.52

Anaheim	273	164	105	372	382	0	742	38,554	0	459	813	0	338	0	0	498	0	0	3,079	39,913	105	540.27
Fullerton	48	0	1,484	416	0	0	409	0	0	119	0	0	107	0	0	519	0	0	2,159	64	1,484	291.46
Santa Ana	48	572	0	53	0	0	22	65	0	99	0	0	86	2,533	0	310	0	0	859	3,226	0	45.36
Non-MWDOC Totals	369	736	1,589	841	382	0	1,173	38,619	0	677	813	0	531	2,533	0	1,327	0	0	6,097	43,203	1,589	877.10

Orange County Totals	9,624	79,065	8,368	16,184	12,238	0	20,245	48,079	1,343	60,647	12,460	0	37,153	24,202	0	19,398	36,723	0	174,906	237,276	16,341	8,627.61
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SOCAL WATER\$MART COMMERCIAL PLUMBING FIXTURES REBATE PROGRAM^[1]

INSTALLED BY AGENCY

through MWDOC and Local Agency Conservation Programs

Agency	FY 02/03	FY 03/04	FY 04/05	FY 05/06	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	Totals	Cumulative Water Savings across all Fiscal Years
Brea	51	0	22	52	2	27	113	24	4	1	234	0	2	532	300
Buena Park	83	28	55	64	65	153	432	122	379	290	5	23	54	1,763	798
East Orange CWD RZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
El Toro WD	23	73	42	5	2	0	92	143	1	137	0	212	6	759	452
Fountain Valley	94	2	59	35	63	17	35	0	2	314	0	0	1	623	463
Garden Grove	199	51	297	34	136	5	298	130	22	0	4	1	167	1,365	1,178
Golden State WC	197	34	232	80	531	46	414	55	68	135	0	1	0	1,804	1,522
Huntington Beach	191	73	185	82	209	48	104	126	96	156	104	144	7	1,530	1,213
Irvine Ranch WD	1,085	87	325	1,044	429	121	789	2,708	1,002	646	1,090	451	118	10,201	5,156
La Habra	37	52	45	60	16	191	75	53	4	0	0	0	0	543	429
La Palma	0	0	0	5	0	0	140	21	0	0	0	0	0	166	65
Laguna Beach CWD	30	2	18	9	12	20	137	189	0	0	0	27	0	446	250
Mesa Water	155	22	130	241	141	141	543	219	669	41	6	0	79	2,811	1,622
Moulton Niguel WD	74	65	172	3	0	9	69	151	6	0	0	0	0	580	659
Newport Beach	230	9	77	24	94	98	27	245	425	35	0	0	566	1,834	1,009
Orange	144	22	553	127	88	18	374	67	1	73	1	271	6	1,829	1,400
San Juan Capistrano	34	21	181	0	6	2	1	1	0	0	0	14	0	260	337
San Clemente	36	5	95	40	173	2	18	43	0	19	0	0	1	432	318
Santa Margarita WD	16	3	56	0	0	6	23	11	0	0	0	0	2	117	166
Santiago CWD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seal Beach	34	44	40	61	45	1	2	124	0	0	0	0	0	354	346
Serrano WD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Coast WD	31	8	54	8	4	9	114	56	422	84	148	0	4	942	356
Trabuco Canyon WD	1	0	6	0	0	0	4	0	0	0	0	0	0	11	13
Tustin	114	16	82	14	7	115	145	25	230	0	0	0	75	832	647
Westminster	109	32	153	57	104	40	161	16	63	35	1	28	0	815	814
Yorba Linda	36	12	42	4	118	10	24	8	30	0	1	0	0	285	447
MWDOC Totals	3,004	661	2,921	2,049	2,245	1,079	4,134	4,537	3,424	1,966	1,594	1,172	1,088	30,834	19,961
Anaheim	400	947	362	1,113	780	766	3,298	582	64	48	165	342	463	10,372	5,457
Fullerton	41	138	270	91	96	133	579	29	4	0	94	0	53	1,556	1,277
Santa Ana	153	589	227	624	373	493	815	728	39	12	16	17	4	4,205	3,750
Non-MWDOC Totals	594	1,674	859	1,828	1,249	1,392	4,692	1,339	107	60	275	359	520	16,133	10,485
Orange County Totals	3,598	2,335	3,780	3,877	3,494	2,471	8,826	5,876	3,531	2,026	1,869	1,531	1,608	46,967	30,446

[1] Retrofit devices include ULF Toilets and Urinals, High Efficiency Toilets and Urinals, 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 05-06	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	Overall Water Savings To Date (AF)
Brea	0	0	0	0	0	0	22	22	22	22	53.38
Buena Park	0	0	0	0	17	103	101	101	101	101	412.24
East Orange CWD RZ	0	0	0	0	0	0	0	0	0	0	0.00
El Toro WD	109	227	352	384	371	820	810	812	812	812	4,451.32
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	0	0	14	34	32	34	32	32	32	32	184.61
Huntington Beach	0	0	0	0	31	33	31	31	31	31	132.94
Irvine Ranch WD	638	646	708	1,008	6,297	6,347	6,368	6,795	6,797	6,761	34,922.11
Laguna Beach CWD	0	0	0	57	141	143	141	124	124	124	671.13
La Habra	0	0	0	23	22	24	22	22	22	22	125.74
La Palma	0	0	0	0	0	0	0	0	0	0	0.00
Mesa Water	170	138	165	286	285	288	450	504	511	512	2,686.68
Moulton Niguel WD	57	113	180	473	571	595	643	640	675	675	3,782.83
Newport Beach	27	23	58	142	171	191	226	262	300	300	1,351.33
Orange	0	0	0	0	0	0	0	0	0	0	0.00
San Clemente	165	204	227	233	247	271	269	269	299	374	2,157.91
San Juan Capistrano	0	0	0	0	0	0	0	0	0	0	0.00
Santa Margarita WD	619	618	945	1,571	1,666	1,746	1,962	1,956	2,274	2,279	13,001.52
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	0	0	62	117	108	110	118	118	118	164	747.99
Trabuco Canyon WD	0	0	12	49	48	62	60	60	60	60	320.55
Tustin	0	0	0	0	0	0	0	0	0	0	0.00
Westminster	0	0	10	18	18	20	18	18	18	18	107.47
Yorba Linda WD	0	0	0	0	0	0	0	0	0	0	0.00
MWDOC Totals	1,785	1,969	2,733	4,395	10,025	10,787	11,273	11,766	12,196	12,287	65,109.7
Anaheim	0	0	0	0	142	146	144	190	190	190	686.62
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	0	0	142	146	144	190	190	190	686.62
Orange Co. Totals	1,785	1,969	2,733	4,395	10,167	10,933	11,417	11,956	12,386	12,477	65,796.35

INDUSTRIAL PROCESS WATER USE REDUCTION PROGRAM

Number of Process Changes 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	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	1	0	0	0	0	0	0	1	54	338
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	1	0	0	0	0	0	0	0	1	3	21
Huntington Beach	0	0	0	0	0	2	0	1	3	127	171
Irvine Ranch	0	0	2	1	1	1	1	0	6	98	317
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	0	0	1	1	21	7
Orange	1	0	0	0	0	0	0	0	1	43	309
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	2	1	1	3	1	2	13	346	1162

[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 MWDOC and Local Agency Conservation Programs

Agency	FY 10/11		FY 11/12		FY 12/13		FY 13/14		FY 14/15		Total Program		Cumulative Water Savings across all Fiscal Years
	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	
Brea	0	0	3,397	9,466	7,605	0	5,697	0	50,371	14,210	67,070	23,676	33.74
Buena Park	0	0	0	0	0	0	0	0	7,562	0	7,562	0	2.12
East Orange	0	0	0	0	0	0	1,964	0	10,626	0	12,590	0	3.80
El Toro	0	0	4,723	0	4,680	72,718	4,582	0	13,104	201,167	27,089	273,885	108.57
Fountain Valley	0	0	1,300	0	682	7,524	4,252	0	28,031	0	34,265	7,524	15.14
Garden Grove	0	46,177	14,013	0	4,534	0	8,274	0	48,448	15,503	75,269	61,680	72.52
Golden State	0	0	42,593	30,973	31,813	3,200	32,725	8,424	110,601	126,873	217,732	169,470	154.88
Huntington Beach	801	3,651	27,630	48,838	9,219	12,437	20,642	0	120,585	50,161	178,877	115,087	125.87
Irvine Ranch	5,423	12,794	6,450	1,666	32,884	32,384	36,584	76,400	188,946	191,379	270,287	314,623	211.47
La Habra	0	7,775	0	8,262	0	0	0	0	11,914	0	11,914	16,037	15.65
La Palma	0	0	0	0	0	0	0	0	4,199	0	4,199	0	1.18
Laguna Beach	978	0	2,533	0	2,664	1,712	4,586	226	9,756	1,189	20,517	3,127	10.13
Mesa Water	0	0	6,777	0	10,667	0	22,246	0	98,333	20,053	138,023	20,053	53.21
Moulton Niguel	956	16,139	4,483	26,927	11,538	84,123	14,739	40,741	229,590	891,107	261,306	1,059,037	427.00
Newport Beach	0	0	3,454	0	3,548	2,346	894	0	20,069	4,678	27,965	7,024	13.02
Orange	0	0	12,971	0	15,951	8,723	11,244	0	77,420	228,276	117,586	236,999	113.21
San Clemente	0	0	21,502	0	16,062	13,165	18,471	13,908	64,299	0	120,334	27,073	63.02
San Juan Capistrano	0	0	22,656	103,692	29,544	27,156	12,106	0	70,680	9,858	134,986	140,706	147.83
Santa Margarita	4,483	5,561	1,964	11,400	10,151	11,600	17,778	48,180	155,016	355,122	189,392	431,863	200.51
Seal Beach	0	0	0	0	3,611	0	0	0	9,751	504	13,362	504	4.89
Serrano	0	0	0	0	0	0	2,971	0	33,575	0	36,546	0	10.65
South Coast	0	16,324	6,806	0	9,429	4,395	15,162	116,719	65,580	42,998	96,977	180,436	112.01
Trabuco Canyon	0	0	272	0	1,542	22,440	2,651	0	11,552	0	16,017	22,440	17.97
Tustin	0	0	0	0	9,980	0	1,410	0	37,281	3,815	48,671	3,815	17.69
Westminster	0	0	0	0	0	0	0	0	5,909	14,364	5,909	14,364	5.68
Yorba Linda	11,349	0	0	0	0	0	0	0	89,230	12,702	100,579	12,702	38.07
MWDOC Totals	23,990	108,421	183,524	241,224	216,104	303,923	238,978	304,598	1,572,428	2,183,959	2,235,024	3,142,125	1,979.81

Anaheim	0	0	0	0	0	0	0	0	0	0	0	0	-
Fullerton	0	0	0	0	0	0	0	9,214	0	0	0	9,214	3.87
Santa Ana	0	0	0	0	0	0	0	0	0	0	0	0	-
Non-MWDOC Totals	0	0	0	0	0	0	0	9,214	0	0	0	9,214	3.87

Orange County Totals	23,990	108,421	183,524	241,224	216,104	303,923	238,978	313,812	1,572,428	2,183,959	2,235,024	3,151,339	1,983.68
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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	Total	Cumulative Water Savings across all Fiscal Years
Brea	0	2	7	43	48	8	0	0	38	124	270	38.43
Buena Park	0	1	2	124	176	7	0	0	96	131	537	98.18
East Orange CWD RZ	0	0	10	12	1	0	0	0	13	24	60	9.36
El Toro WD	0	392	18	75	38	18	0	133	218	477	1,369	247.99
Fountain Valley	0	69	21	262	54	17	0	0	41	111	575	137.25
Garden Grove	0	14	39	443	181	24	0	0	63	263	1,027	218.50
Golden State WC	2	16	36	444	716	37	80	2	142	695	2,170	397.76
Huntington Beach	2	13	59	607	159	76	0	0	163	1,062	2,141	322.60
Irvine Ranch WD	29	1,055	826	5,088	2,114	325	0	1,449	810	1,485	13,181	3,139.58
Laguna Beach CWD	0	2	17	91	28	11	0	0	45	99	293	51.20
La Habra	0	3	18	296	34	20	0	0	37	82	490	115.04
La Palma	0	1	10	36	26	13	0	0	21	47	154	27.71
Mesa Water	0	247	19	736	131	7	0	0	174	125	1,439	375.41
Moulton Niguel WD	0	20	104	447	188	46	0	0	400	1,963	3,168	351.62
Newport Beach	0	5	19	163	54	13	0	0	49	130	433	83.20
Orange	1	20	62	423	79	40	0	1	142	436	1,204	214.67
San Juan Capistrano	0	10	7	76	39	11	0	0	35	124	302	49.41
San Clemente	0	7	22	202	66	21	0	0	72	193	583	106.01
Santa Margarita WD	0	5	14	304	151	44	0	0	528	819	1,865	224.97
Seal Beach	0	678	8	21	12	1	0	2	17	36	775	275.19
Serrano WD	2	0	1	13	5	0	0	0	2	33	56	7.92
South Coast WD	2	2	29	102	41	12	23	64	102	341	718	90.18
Trabuco Canyon WD	0	0	4	23	23	0	0	0	10	80	140	18.34
Tustin	0	186	28	387	479	17	0	0	64	110	1,271	332.13
Westminster	0	17	25	541	167	23	0	0	35	122	930	231.90
Yorba Linda WD	0	14	89	323	96	18	0	0	40	205	785	172.36
MWDOC Totals	38	2,779	1,494	11,282	5,106	809	103	1,651	3,357	9,317	35,936	7,336.93
Anaheim	0	255	78	2,771	619	114	0	0	156	1,003	4,996	1,188.04
Fullerton	0	4	28	286	60	23	0	0	61	225	687	131.25
Santa Ana	0	11	25	925	89	23	0	0	33	262	1,368	329.88
Non-MWDOC Totals	0	270	131	3,982	768	160	0	0	250	1,490	7,051	1,649.16
Orange County Totals	38	3,049	1,625	15,264	5,874	969	103	1,651	3,607	10,807	42,987	8,986.09

HOME WATER SURVEYS PERFORMED BY AGENCY

through MWDOC and Local Agency Conservation Programs

Agency	FY 13/14		FY 14/15		Total		Cumulative Water Savings
	Surveys	Cert Homes	Surveys	Cert Homes	Surveys	Cert Homes	
Brea	1	0	1	0	2	0	0.07
Buena Park	0	0	0	0	0	0	0.00
East Orange	19	0	1	0	20	0	0.92
El Toro	0	0	3	0	3	0	0.07
Fountain Valley	3	0	4	0	7	0	0.24
Garden Grove	0	0	6	0	6	0	0.14
Golden State	0	0	0	0	0	0	0.00
Huntington Beach	2	0	3	0	5	0	0.16
Irvine Ranch	1	0	0	0	1	0	0.05
La Habra	0	0	1	0	1	0	0.02
La Palma	0	0	0	0	0	0	0.00
Laguna Beach	4	0	6	0	10	0	0.33
Mesa Water	0	0	0	0	0	0	0.00
Moulton Niguel	4	0	4	0	8	0	0.28
Newport Beach	2	0	7	0	9	0	0.26
Orange	2	0	14	0	16	0	0.42
San Clemente	15	0	8	0	23	0	0.89
San Juan Capistrano	4	0	12	0	16	0	0.47
Santa Margarita	15	0	26	1	41	1	1.32
Seal Beach	0	0	1	0	1	0	0.02
Serrano	0	0	2	0	2	0	0.05
South Coast	6	0	3	0	9	0	0.35
Trabuco Canyon	0	0	3	0	3	0	0.07
Tustin	0	0	8	0	8	0	0.19
Westminster	0	0	0	0	0	0	0.00
Yorba Linda	0	0	7	0	7	0	0.16
MWDOC Totals	78	0	120	1	198	1	6.49

Anaheim	0	0	0	0	0	0	0.00
Fullerton	0	0	13	0	13	0	0.31
Santa Ana	0	0	0	0	0	0	0.00
Non-MWDOC Totals	0	0	13	0	13	0	0.31

Orange County Totals	78	0	133	1	211	1	6.798
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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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