

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

Jointly with the

**PLANNING & OPERATIONS COMMITTEE**

January 3, 2017, 8:30 a.m.

MWDOC Conference Room 101

**P&O Committee:**

Director L. Dick, Chair

Director J. Finnegan

Vacant

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

H. De La Torre, K. Davanaugh

Ex Officio Member: W. Osborne

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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>.

**DISCUSSION**

1. OVERVIEW AND PROCESS FOR LOCAL RESOURCES PROGRAM (LRP) PROJECTS WITHIN THE MWDOC SERVICE AREA
2. CONSIDER ADOPTION OF A JOINT RESOLUTION WITH OCWD REGARDING THE POSEIDON HUNTINGTON BEACH PROJECT

**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.)

3. OC FLOOD CONTROL DISTRICT PROPOSAL ON ENCROACHMENT PERMITS (oral report)
4. 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
5. 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.





**DISCUSSION ITEM**

January 3, 2017

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

**FROM: Robert Hunter  
General Manager**

Staff Contact: Harvey De La Torre  
Melissa Baum-Haley  
Keith Lyon

**SUBJECT: Overview and Process for Local Resources Program (LRP) Projects  
within the MWDOC Service Area**

**STAFF RECOMMENDATION**

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Staff recommends the Planning & Operations Committee review and discuss

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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The Metropolitan Water District of Southern California's (MET) Local Resources Program (LRP) provides funding to encourage the development of local resource projects, such as water recycling, groundwater recovery, and seawater desalination. The objective of the program is to help develop supplies that replace an existing demand (or prevents a new demand) on MET's imported water deliveries either through direct replacement of potable water or increased regional groundwater production.

A retail water agency within the MWDOC service area can only apply for MET's LRP financial incentives through its MET member agency - MWDOC. MWDOC staff offers assistance to local agencies to discuss potential projects that might qualify under MET's program. The current process includes application preparation and submittal by the agency to MWDOC and MET staff, review and approval of the LRP agreement by MWDOC Board and the local agency, followed by MET Board review and approval. Once the project is approved by MET and MWDOC, a monthly certification and annual reconciliation occurs to verify accurate production to properly determine the financial incentive.

|   |                       |  |                                 |
|---|-----------------------|--|---------------------------------|
| <b>Budgeted (Y/N):</b> N                      | Budgeted amount: None | Core <input checked="" type="checkbox"/> | Choice <input type="checkbox"/> |
| <b>Action item amount:</b> N/A                | Line item:            |  |                                 |
| <b>Fiscal Impact (explain if unbudgeted):</b> |                       |  |                                 |

The purpose of this Board item is to describe the evolution of MET's LRP, its current program, including the three different financial incentive structures, performance provisions, and the application approval process. Additionally, in response to a MWDOC Board inquiry, MWDOC staff has recommended a modification to its LRP application process that seeks Board review of eligible projects earlier in the process so the Board is better informed of proposed local resource projects within the District's service area seeking LRP incentives.

## **DETAILED REPORT**

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### **Program Evolution**

In 1982, MET established the Local Projects Program (LPP) to provide assistance to develop local supplies with a focus on recycled water projects. Within the LPP, MET's financial incentive was a fixed rate of \$154 per acre-foot (AF) of production.

In 1991, MET added the Groundwater Recovery Program (GRP), which was designed to improve water supply reliability through the recovery of otherwise unusable groundwater that was degraded by minerals and other contaminants, and provided access to the storage assets of the degraded groundwater. Within the GRP, MET's financial incentive was based on the project's actual unit production cost that was greater than MET's treated full service rate, on a sliding scale from \$0 to \$250 per AF.

Based on their similar objectives, in 1995 the LPP and GRP were combined into one MET program - Local Resources Program (LRP). As a result, member agencies were given the option to convert LPP agreements to the GRP-type incentive terms (sliding scale) or continue with the fixed incentive.

From 1998 through 2007, the LRP application process utilized a competitive approach, whereby potential local projects were evaluated by a panel based on criteria adopted by the MET Board. Within the LRP competitive process, as part of the application package, agencies specified their LRP financial incentive request within a range from \$0 to \$250 per AF with lower requests ranking higher.

The competitive process application was replaced with updated LRP principles in 2007, allowing for an open application process and eliminating the competitive process. The LRP was further revised in 2014, with a choice of three different financial incentive structures and the additional of ocean desalination projects. Below is a detail description of the current LRP.

### **Current LRP Incentives and Program Provisions**

The 2014 revisions extended the LRP to include ocean desalination projects as well as recycled water<sup>1</sup> and groundwater recovery projects. Continuing from previous versions of the program, project production must still replace an existing demand or prevent a new demand on MET's imported water deliveries.

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<sup>1</sup> Recycled water use costs for on-site retrofit now qualify as a project cost to determine an agency's LRP incentive amount.

Within the revised LRP, financial incentives are based on the local agency's choice between three different incentive payment structures:

1. Sliding scale from \$0 to \$340 per AF for 25 years
2. Sliding scale from \$0 to \$475 per AF for 15 years (with a 25-year term)
3. Fixed up to \$304 per AF for 25 years

Under the sliding scale incentive payment structures (payment structures 1 and 2), MET's financial incentive provided to the local agency is calculated annually based on the agency's actual unit cost of production that is greater than MET's LRP Rate (which is equivalent to the treated full service rate), and subject to the maximum incentive rate threshold.

Furthermore, under incentive payment structure 2, project production must continue during years 16 thru 25, even though no MET incentives are provided.

Additionally, the following project performance provisions are included within each LRP agreement:

- Must start construction within two years after agreement execution, or the agreement may be terminated
- Must start project operation within four years after agreement execution, or the agreement may be terminated
- Must produce at least 50% of agreement annual Ultimate Yield by seven years after Agreement execution, or Ultimate Yield may be reduced by production shortfall
- Must produce at least 75% of agreement annual Ultimate Yield by eleven years after Agreement execution, or Ultimate Yield may be reduced by production shortfall
- After 11 years after agreement execution, must produce at least 75% of agreement annual Ultimate Yield once during every four years until agreement termination

### **LRP Application Process and Board Approval**

The current process includes application preparation and submittal by the agency to MWDOC and MET staff, review and approval of the LRP agreement by MWDOC Board and the local agency, followed by MET Board review and approval. Below is a more detail description of the normal sequence for the MWDOC LRP application approval process:

#### **Project Development**

When a local agency considers development of a new or expanded local resource project, financial feasibility of the project often depends on whether or not it qualifies for LRP funds. Therefore, during project development, MWDOC and the agency's staff meet to discuss the potential project and LRP eligibility.

At the onset of discussions with the agency, MWDOC staff informs MET staff of potential future LRP projects. (In fact, member agencies are encouraged by MET staff to inform them of new local resource projects so MET can maintain a current inventory list of local resource projects.) In some occasions, subsequent meetings may be scheduled if there are complex questions regarding the project's qualification. Such meetings with local agencies and/or MET are described in the monthly MWDOC General Manager's Report.

### **Application Development and Submittal**

When the local agency is ready, MWDOC staff provide MET's LRP Application Guidelines<sup>2</sup>, and previously submitted LRP Applications as examples to help the local agency prepare their LRP Application. Some agencies develop the LRP Application in-house, while others contract the work to consultants.

Once the agency completes their LRP Application, it is submitted to MWDOC as a draft. MWDOC staff reviews the draft application for completeness and makes suggestions for improvement, where needed. An agency's final LRP Application is then re-submitted to MWDOC, whereby MWDOC submits the LRP Application to MET. Included in this application is a letter signed by MWDOC's General Manager officially submitting an LRP application and seeking an LRP incentive for the proposed local resource project. Submittal of all MWDOC LRP Application are reported in the monthly MWDOC General Manager's Report.

### **MET Staff Application Review**

Upon receiving an LRP Application, MET staff provides notification of receipt of the Application to MWDOC and the local agency. MET staff then proceeds to review the application for completeness, and requests any additional documents (e.g. permits, environmental documents) or meetings, if needed. It important to note, that during this review process there is much collaboration with between MWDOC, the local agency and MET staff to ensure the application is completed. Once the application is deemed complete following completion of all permits, including CEQA, MET staff moves forward with its recommendation for approval to the MET Board. However, it is carefully explained to the local agency that any LRP Application submitted does not signify or guarantee funding approval by MET. All LRP agreements are subject to MWDOC and MET Board approval.

### **MWDOC Board Review and Approval**

Before the project can be considered by MET's Board of Directors, an LRP agreement is developed for MWDOC and the local agency review and approval. This is the official review of the LRP Project by the MWDOC Board. The entire LRP application along with the Agreement is distributed for the Board review and approval.

### **MET Board Review and Approval**

If MET staff determines that the Project qualifies within MET's LRP criteria and all required documents, including the LRP agreement, have been provided to MET, MET staff recommends approval to its Board.

### **List of MWDOC LRP Projects**

Since the program's inception, MWDOC has had a number of local resource projects in the program. A matrix of past, current, and pending LRP projects within the MWDOC service area are listed in the table below. This list of projects by MWDOC member agency includes year the LRP agreement was executed, eligible incentive (\$/AF) amount, the Ultimate Yield

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<sup>2</sup> MET's LRP application can be found at:

[http://www.mwdh2o.com/PDF/About Your Water/2.4.3.1 Local Resources Program Application.pdf](http://www.mwdh2o.com/PDF/About%20Your%20Water/2.4.3.1%20Local%20Resources%20Program%20Application.pdf)

project production amount (AFY), average production amount during active years, and fiscal year 2015-16 production amount, if the project is still active.

**Modification to the MWDOC Review Process**

This past November, the MWDOC Board approved two LRP agreements for submittal to the MET Board. During the Board's review it was suggested that the current LRP application process be modified to include the MWDOC Board's review and input of eligible LRP projects earlier in the review process. Therefore, MWDOC staff recommends that the Board, in addition to the General Manager reports, receive an information item at the Planning and Operation Committee on the project during the time the LRP Application is being reviewed by MWDOC staff; rather than towards the end when the LRP agreement is being considered for Board approval. This will provide the Board with a better understanding of the pending LRP projects, its proposed production amounts, timeframe, as well as challenges, if any, to better assist in its approval at the MET Board.



**Matrix of past and current LRP projects with MWDOC Service Area**

| Agency                           | Project Name  | Agreement           |                         | Production (AFY)      |                |               |                    |
|----------------------------------|---|---------------------|-------------------------|-----------------------|----------------|---------------|--------------------|
|                                  |   | Year Executed       | Status                  | MET Incentive (\$/AF) | Ultimate Yield | Average Yield | Fiscal Yr. 2015-16 |
| EL Toro Water District           | Recycled Water System Expansion                                     | 2012                | Active                  | \$0-\$250/AF          | 1,175          | 309           | 542                |
|                                  | Recycled Water System Exp, Phase II                                 | 2016                | New                     | \$0-\$475/AF          | 350            | -             | -                  |
| Irvine Ranch Water District      | Irvine Ranch Reclamation Project                                    | 1986                | Expired                 | \$154/AF              | 10,000         | 8,827         | -                  |
|                                  | Irvine Desalter   | 1993                | Active                  | \$0-\$250/AF          | 6,700          | 3,229         | 3,644              |
|                                  | Reclamation Expansion   | 2005                | Active                  | \$117/AF              | 8,500          | 6,632         | 7,977              |
|                                  | Wells 21/22 Desalter  | 2011                | Active                  | \$0-\$250/AF          | 6,400          | 3,013         | 1,539              |
| Mesa Water District              | Colored Groundwater Treatment Project                               | 1999                | Active                  | \$115-\$169/AF        | 9,947          | 3,731         | 3,792              |
| Moulton Niguel Water District    | Water Reclamation System  | 2006 <sup>[a]</sup> | Active                  | \$154/AF              | 9,276          | 5,206         | 5,396              |
| Orange County Water District     | Green Acres Reclamation Project                                     | 1999 <sup>[a]</sup> | Active                  | \$0-\$250/AF          | 2,800          | 1,714         | 2,480              |
|                                  | Groundwater Replenishment System                                    | 2004                | Active                  | \$121/AF              | 72,000         | 56,426        | 70,000             |
|                                  | Water Reclamation Project   | 1990                | Expired                 | \$154/AF              | 500            | 286           | -                  |
| San Clemente                     | Water Reclamation Expansion Project                                 | 2012                | Active                  | \$0-\$250/AF          | 1,000          | 155           | 292                |
| San Juan Capistrano              | San Juan Basin Desalter   | 1998                | Active                  | \$0-\$250/AF          | 4,800          | 2,574         | 1,183              |
|                                  | Capistrano Valley Non-Domestic Water Supply Expansion               | 2000                | Inactive <sup>[b]</sup> | \$150/AF              | 1,617          | 0             | -                  |
| Santa Margarita Water District   | Water Reclamation Expansion Project                                 | 1987                | Expired                 | \$154/AF              | 3,600          | 1,681         | -                  |
|                                  | Non-domestic Water System, Ladera Ranch/Talega Valley               | 2000                | Active                  | \$114/AF              | 2,772          | 2,283         | 2,521              |
|                                  | Lake Mission Viejo Advanced Purification Water Treatment Facilities | 2016                | New                     | \$0-\$475/AF          | 300            | -             | -                  |
| South Coast Water District       | Capo Beach Desalter   | 1998                | Inactive <sup>[b]</sup> | \$0-\$250/AF          | 1,300          | 654           | -                  |
| Trabuco Canyon Water District    | Trabuco Canyon Reclamation Project                                  | 1989                | Active                  | \$154/AF              | 800            | 263           | 137                |
| Tustin                           | Tustin Desalter   | 1992                | Active                  | \$0-\$250/AF          | 3,271          | 1,867         | 1,227              |
| <b>Potential Future Projects</b> |   |                     |                         |                       |                |               |                    |
| Orange County Water District     | Huntington Beach Desalination Project                               | N/A                 | N/A                     | \$0-\$475/AF          | Pending        | -             | -                  |

[a] These projects had earlier agreements that were amended.

[b] Inactive status defines the project as not currently producing.





**DISCUSSION ITEM**

January 3, 2017

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

**FROM:** Robert Hunter  
General Manager

Staff Contacts: Karl Seckel  
Charles Busslinger

**SUBJECT: Consider Adoption of a Joint Resolution with OCWD Regarding the Poseidon Huntington Beach Project**

**STAFF RECOMMENDATION**

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It is recommended that the Committee receives and files the report and provides direction to staff.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

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MWDOC’s Executive Committee met on December 20 to discuss whether or not to adopt a joint resolution with OCWD regarding working together “for the common purpose of purchasing, distributing and integrating drinking water from the proposed Huntington Beach Desalination Project.” A wide-ranging discussion occurred and the following points were made during the discussion:

- Some Directors supported the concept of adopting a joint resolution with OCWD while others did not see the need for such a resolution. It was noted the staff from the two agencies were already working cooperatively. Some thought the joint resolution would send an appropriate message regarding moving the project forward. Others were concerned about the implications in the existing wording about MWDOC’s role in financing such a project as the MWDOC Board of Directors has not voted a resolution of support of the project.

|   |                      |        |           |
|---|----------------------|--------|-----------|
| <b>Budgeted (Y/N): n/a</b>                    | Budgeted amount: n/a | Core ✓ | Choice __ |
| <b>Action item amount: n/a</b>                | Line item:           |        |           |
| <b>Fiscal Impact (explain if unbudgeted):</b> |                      |        |           |

- Some voiced support for the Project as being in Orange County's future while others were not ready to make such a commitment.
- Other issues brought up during the discussion included:
  - We should not wait on the WaterFix and a belief that we need ocean desalination even if the WaterFix proceeds was expressed.
  - It was noted that many versions of how to integrate the water into the Orange County system were under consideration. OCWD indicated the need to know more precisely if MWDOC had an interest in moving any of the water to South County or whether OCWD would just proceed on their own and this is one of the main reasons for the Resolution to work together to clarify all of the possible integration options.
  - OCWD indicated that the Poseidon Project would help with overall reliability to South Orange County and would open up possibilities with moving emergency water to South Orange County including potentially moving groundwater to South Orange County. It was suggested that MWDOC take the primary role in this transaction with the potential for a MWDOC storage account in the groundwater basin.
  - There are many technical, engineering, and financial decisions that need to be resolved. Water quality, stranded assets, integration operations and CEQA coverage of all scenarios were discussed.
  - Some suggested the project would NOT result in stranding any of MET's assets while others pointed to a direct offset of MET water being treated at the Diemer Plant from implantation of the project.
  - It was noted that obtaining MET's LRP contribution in the amount of about \$400 million was needed or the project would not move forward. A new concept was put forth indicating OCWD's suggestion that MET retain 50% ownership in the project at the end of the Agreement. Input suggested that getting MET's LRP contribution to this project would not be an easy task.
  - The resolution was also an opportunity for the two Boards to work together on emergency supplies for South Orange County (really for all of Orange County). Having emergency supplies is very important for Orange County in the event of natural disasters.
  - CEQA issues are being studied right now and the process needs to include any possible delivery options to eliminate having to re-do CEQA at a later date.
  - Seeking Federal and State funds could reduce the overall costs of the project to OC ratepayers.
  - It was noted that we already have a resolution on working together with OCWD and that resolution provides sufficient flexibility for the two agencies to work on any reliability items.

- Some questioned the ultimate cost of the project and whether it is really a good investment while others noted the value of having water during water shortage events as being extremely valuable. Others noted the costs would only go up in the future so an investment sooner than later would be appropriate.
- OCWD noted that the intent of the resolution was to use the collective efforts of the two agencies to put the project forth to get an up or down vote.
- IRWD noted that those agencies electing to participate who benefit from the project should be the ones to pay for the project.
- It was noted that many projects are on the horizon, the California WaterFix, Eco-Restore, Carson, Poseidon, SARRCUP, Groundwater Storage, Emergency Supplies to South County – and there have been no formal positions by the Board, except just recently for the WaterFix and Eco-Restore.

### **Recommendation from the Executive Committee Discussions**

It was recommended that MWDOC staff put forth a summary report of the Executive Committee discussions for consideration at the January 3, 2017 Planning & Operations Committee that would include:

1. Bring back the Resolution with any wording changes suggested by Directors for discussion among the MWDOC Board. The General Manager will coordinate the inclusion of Directors' suggested changes to the resolution.
2. Schedule a joint discussion with OCWD for the Joint Committee to be held on January 25.
3. Target February as the time for consideration by both Boards for the Joint Resolution.
4. Consider whether to form an Ad Hoc Committee between the two Boards.
5. Direct the MWDOC staff to prepare technical analyses of the proposed options and issues, increase joint analyses with OCWD staff on the project, and provide the MWDOC Board of Directors with the results and conclusions of such efforts.
6. Consider whether to re-start the MWDOC Poseidon Working Group to help work through the technical, legal, and financial issues, especially to ensure that the CEQA document considers all options for integration of the water into the Orange County system.
7. The overall goal of the efforts would be to develop all of the necessary information to bring the Poseidon Project forward for an up or down vote by the two Boards.

### **Staff Observations**

MWDOC staff believes that the staff and Board from both MWDOC and OCWD should work together in a cooperative manner, and also with the member agencies, to fully evaluate the options, costs and implications of the Poseidon Project. Staff does not believe a resolution

is needed to bring these efforts to fruition - a simple directive is sufficient. Staff is also of the belief that much misinformation exists about what benefits the Poseidon Project will or won't bring to Orange County and when and under what conditions it may be needed from a reliability standpoint. Part of the future efforts should be for staff from the two agencies to work together to fully quantify the costs, benefits and implications of the Poseidon Project and how the water systems in Orange County will work to efficiently integrate local Santa Ana River supplies, MET supplies, Carson supplies and Poseidon supplies into the resources mix. It would be appropriate for the two staff to develop a work plan to outline the efforts needed to complete the various evaluations.

### **Attachment**

Attached is the original version of the proposed resolution as discussed at the MWDOC Executive Committee with the paragraphs numbered to facilitate reference and discussion. Staff will provide a revised document with suggested edits from the MWDOC Directors prior to the P&O meeting.

### **Suggested Technical Corrections**

MWDOC staff has identified the following factual and phrasing issues with the proposed resolution discussed at the Executive Committee meeting. Observations are listed by paragraph number.

(3) MWDOC provides water to 2.2 million people in Orange County. The total population of Orange County is 3.1 million people.

(6) The paragraph would more accurately read as "WHEREAS, MWDOC's Final 2015 Urban Water Management Plan (UWMP) Section 7.3 "Planned Water Supply Projects and Programs" identifies the proposed 50 MGD Huntington Beach Desalination Project as one of several potential future water supply projects that could improve water supply and system reliability, meet projected demands, as well as reduce the County's demand on imported water; and"

(7) This paragraph is factually correct but it should be noted that the demand for imported water in the 2015 UWMP is projected to decrease by approximately 18,000 acre-feet per year by the year 2040 under these conditions.

(9) MWD has not "endorsed" the Poseidon project. This paragraph could more accurately read as "WHEREAS, MWD listed the proposed Huntington Beach Desalination Project as one of several possible projects in MWD's 2015 Integrated Water Resources Plan (IRP) which also identified the need for 238,000 – 438,000 acre-feet from local supplies by 2040; and"

(13) There are two factual errors in this paragraph. The sentence "This policy goal can only be achieved through the development of new supplies that are locally controlled by the district..." is not factually correct as this is not the "only" way this goal can be achieved. In addition, it is not OCWD's policy to "reduce" the BPP if the overdraft reaches 350,000. It is OCWD's policy to "consider" reducing the overdraft at both 300,000 and 350,000 acre-feet. However, the consideration of reducing the BPP has also included discussions of increasing the BPP.

**JOINT RESOLUTION OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY  
BOARD OF DIRECTORS  
AND OF THE  
ORANGE COUNTY WATER DISTRICT BOARD OF DIRECTORS  
TO SUPPORT THE DISTRUBUTION AND INTEGRATION OF DRINKING WATER FROM THE  
HUNTINGTON BEACH DESALINATION PROJECT**

- (1) WHEREAS, the Municipal Water District of Orange County (MWDOC) is a member agency of the Metropolitan Water District of Southern California (MWD); and
- (2) WHEREAS, the Orange County Water District (OCWD) is a special district created by the California State Legislature in 1933; and
- (3) WHEREAS, MWDOC and OCWD jointly serve millions of consumers in Orange County, CA, with MWDOC providing water for 3.1 million people and OCWD providing water for 2.4 million people; and,
- (4) WHEREAS, MWDOC and OCWD share 19 water agency members in north and central Orange County, with MWDOC serving an additional 9 water agency members in south Orange County; and
- (5) WHEREAS, in August of 2016, the Board of Directors of MWDOC and the Board of Directors of OCWD jointly resolved that both districts shall work together for the common purpose of sourcing, treating and transmitting safe, reliable, high-quality, affordable water supplies throughout Orange County;
- (6) WHEREAS, MWDOC’s Urban Water Management Plan (“UWMP”) 2015 Update Section 7.3-4 “Planned Water Supply Projects and Programs” identifies the proposed 50 MGD Huntington Beach Desalination Project as a planned future water supply project that could meet projected demands as well as reduce the County’s demand on imported water; and
- (7) WHEREAS, MWDOC’s UWMP 2015 Update finds that under normal conditions total direct and indirect water demands are projected to increase to 515,425 by the year 2040 with Orange County still relying on imported water for over 200,000 acre feet per year without the development of new supplies; and
- (8) WHEREAS, MWDOC’s Orange County Water Reliability study found that without the California WaterFix and without any new water supply projects, Orange County would have shortages in 8 out of 10 years; even with the completion of the California WaterFix, additional water supply projects by MWD, MWD-member agencies projects or projects

developed within Orange County are needed for Orange County to be fully reliable out to the year 2040; and

- (9) WHEREAS, MWD endorsed the proposed Huntington Beach Desalination Project, and MWD's Integrated Water Resources Plan (IRP) 2015 update identifies the need for 238,000 - 438,000 acre-feet from the local supplies by 2040; and
- (10) WHEREAS, in October 2013, Orange County's MWD-member agencies; MWDOC and the Cities of Santa Ana, Fullerton and Anaheim, jointly submitted an application to MWD for Local Resource Program funding for the Huntington Beach Desalination Project; and
- (11) WHEREAS, the OCWD Long-Term Facilities Plan 2014 Update identifies the Huntington Beach desalination facility as a priority project and the single largest source of new, local drinking water supply available to the County; and
- (12) WHEREAS, OCWD's Groundwater Management Plan 2015 Update identifies the proposed Huntington Beach Desalination Project as providing the District with up to 56,000 acre feet per year (50 MGD) of new supply prior to 2020; and
- (13) WHEREAS, in January 2013, OCWD's Board of Directors adopted a policy to maintain a 75% Basin Pumping Percentage (BPP). This policy goal can only be achieved through the development of new supplies that are locally controlled by the district to ensure that the higher BPP is sustainable over time. It is the District's policy to reduce the BPP if the cumulative groundwater basin overdraft reaches 350,000 acre feet. Today the District's groundwater basin is 75% depleted and the cumulative overdraft stands at 370,000; and
- (14) WHEREAS, on May 15, 2013, OCWD's Board of Directors resolved that it is the policy of the district to consider and develop a variety of new, local water resources – including seawater desalination – to ensure sufficient water supplies are always available to the residents and businesses in the service territory; and
- (15) WHEREAS, on March 17, 2010 the OCWD signed a Memorandum of Understanding (MOU) with Poseidon Resources for the consideration of the purchase of water from the proposed desalination Project. On July 24, 2013, the District's Board of Directors voted to evaluate the financial feasibility of purchasing the full 56,000 acre feet per year capacity of drinking water that will be produced by Poseidon's proposed Project, and on May 14, 2015 the District's board of directors voted to approve a Water Reliability Agreement Term Sheet for the purchase of 50 million gallons per day of drinking water from the proposed project; and
- (16) WHEREAS, the proposed Huntington Beach Desalination Project with a locally controlled, drought-proof, high-quality supply of drinking water that will reduce the need to import water and provide flexibility in how OCWD manages the groundwater basin.



(17) WHEREAS, the proposed Huntington Beach Desalination Project has a certified Environmental Impact Report and all of its local permits from the City of Huntington Beach, and discretionary approvals from the Santa Ana Regional Water Quality Control Board and California State Lands Commission; and

(18) WHEREAS, the proposed Huntington Beach Desalination Project is in the final phase of permitting. Poseidon Resources anticipates receiving the necessary permit amendments and new permit approvals during 2017; and

(19) NOW, THEREFORE, BE IT HEREBY JOINTLY RESOLVED by the Board of Directors of MWDOC and the Board of Directors of OCWD that both districts shall work together for the common purpose of purchasing, distributing and integrating drinking water from the proposed Huntington Beach Desalination Project so that all of Orange County reasonably shares in the new water supply reliability benefits.

(20) BE IT FURTHER RESOLVED, DETERMINED, AND ORDERED AS FOLLOWS:

(21) Section 1. The Board of Directors of MWDOC and OCWD shall collaborate in support of the successful permitting and development-of the distribution system and institutional arrangements necessary to share the water supply reliability benefits from the Huntington Beach Desalination Project throughout Orange County.

(22) Section 2. The Board of Directors of MWDOC and OCWD shall convene a combined agency desalination ad hoc committee that will ensure the timely fulfillment of this resolution.

(23) Section 3: The Board of Directors of MWDOC and OCWD shall jointly engage with MWD regarding the LRP application and MWD's participation in the proposed Huntington Beach Desalination Project.

(24) Section 4. The MWDOC Secretary and OCWD Secretary will transmit a certified copy of this resolution to members of both agencies.

(25) Said Resolution was ADOPTED, SIGNED and APPROVED this xx day of October, 2016 by the following roll call vote.

AYES:

NOES:

(26) I HEREBY CERTIFY the forgoing is a full, true and correct copy of Resolution NO. xxxx adopted by the Board of Directors of xxxx at its meeting held on October, xx, 2016.



**Status of Ongoing MWDOC Reliability and Engineering and Planning Projects**

**December 20, 2016**

| <b>Description</b>   | <b>Lead Agency</b>                                | <b>Status % Complete</b> | <b>Scheduled Completion Date</b> | <b>Comments</b>   |
|--|---|--------------------------|----------------------------------|---|
| <b>Baker Treatment Plant or Expansion of Baker Water Treatment Plant</b> | IRWD,<br>MNWD,<br>SMWD,<br>ETWD<br>Trabuco<br>CWD |                          | On line date is January 2017     | The plant is scheduled to go on line to begin the 10-day performance test on January 4.   |
| <b>Doheny Desalination Project</b>                                       | South Coast Water District, Laguna Beach CWD      |                          |                                  | South Coast Water District is continuing to move the project forward and to look for potential partners and grant funding as they initiate the CEQA process.<br><br>MWDOC is in the process of awarding a contract for the decommissioning and removal of the test facilities at Doheny State Park. The construction is scheduled to begin the first week in January and be completed in about a month. |
| <b>Poseidon Resources Ocean Desalination Project in Huntington Beach</b> |   |                          |                                  | OCWD is currently working on preparation of the CEQA documentation for the Poseidon Project. Work continues on the project integration into the water supplies for OC. Poseidon is continuing to work on permitting issues which are estimated to be completed by the end of 2017.  |
| <b>Orange County Reliability Study</b>                                   |   |                          |                                  | Staff is completing the publishing of the study. Upcoming presentations are scheduled for OCBC and the City of San Juan Capistrano.   |

| Description   | Lead Agency | Status % Complete | Scheduled Completion Date | Comments   |
|---|-------------|-------------------|---------------------------|--|
| <b>OC-28 Flow Metering Issue with MET</b>           |             |                   |                           | MWDOC and OCWD are awaiting MET's analysis of the flow test to examine the metering issue from last summer.  |
| <b>Service Connection CM-1 Cost Issues with MET</b> |             |                   |                           | <p>Since September, Kevin, Karl, and Keith have coordinated between MET, Newport Beach and Laguna Beach CWD for periodic "flushing" of the last stretch of the Orange County Feeder every week or two prior to the water quality getting too bad for delivery.</p> <p>Discussions have been initiated with MET on the design and costs of a bypass flow control structure that would allow LBCWD to take low flows of water from MET concurrently with taking flows from the City of Newport Beach. However, the costs of making changes at the CM-1 meter location could reach as high as \$150k to \$200k. Based on the recent discussions with MET, Laguna Beach CWD and Newport Beach are studying another alternative.</p> <p>In addition, LBCWD has had to take one of their reservoirs out of operation which has resulted in an inability to flush the line until the reservoir is put back into operations. The reservoir is being inspected for structural issues as pieces of concrete were noticed within the reservoir.</p> |
| <b>Other Meetings/Work</b>                          |             |                   |                           |  |

| Description | Lead Agency | Status % Complete | Scheduled Completion Date | Comments  |
|-------------|-------------|-------------------|---------------------------|---|
|             |             |                   |                           | <p>Karl Seckel, Heather Baez and John Lewis have continued to pursue opposition to the terms and conditions proposed by the OC Flood Control District for NEW encroachment permits for crossing of Flood Control property. Flood control is proposing a fee based on current market real estate values, a 7% return and 35 year agreements. This is one of a number of County Initiatives to raise revenue.</p> <p>On November 22, the item was continued by the Board of Supervisors to January 10, 2017. It has been reported that an internal Task Force at the County has been established to conduct further work; this may result in the January 10 item being pulled from the agenda. Staff will continue to work on this issue.</p> |

Charles Busslinger attended the December meeting of the SJBA. The following chart on groundwater storage was shared at the meeting.

The following table shows the time-history of the spring and fall estimations of groundwater in storage for the period of fall 2012<sup>4</sup> through fall 2016.

| Calendar Year | Spring                      |                              | Fall                        |                              |
|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|
|               | Groundwater in Storage (af) | Percentage of Total Capacity | Groundwater in Storage (af) | Percentage of Total Capacity |
| 2012          |                             |                              | 28,297                      | 68%                          |
| 2013          | 28,540                      | 69%                          | 25,855                      | 62%                          |
| 2014          | 26,269                      | 63%                          | 24,864                      | 60%                          |
| 2015          | 26,555                      | 64%                          | 27,623                      | 67%                          |
| 2016          | 29,380                      | 71%                          | 28,327                      | 68%                          |

<sup>4</sup> The first storage estimation was performed in spring of 2013, which included an analysis of fall 2012 storage.

**Adaptive Pumping Management.** The Board adopted the 2016 Adaptive Pumping Management (APM) plan to manage groundwater pumping to ensure compliance with the water rights permits held by the SJBA and the South Coast Water District (SCWD), and the private agreements that settled their protests on each other's applications to appropriate water.

Based on the technical work performed in support of the development of the APM plan, the following additional pumping limitations apply with regards to the pumping allocation:

- If storage is less than 33,000 acre feet (af), the pumping allocation is zero af.
- The SJBA's 80 percent of the pumping allocation can only be produced from the City's five GWRP wells in the Alipaz well field (Kinoshita, SJBA-2, SJBA-4, CVWD-1, and Dance Hall) to ensure that water levels required to

|  |  |  |  |  |
|--|--|--|--|--|
| <p>support riparian vegetation are maintained.</p> <p>The Spring estimation of storage was less than 30,000 af and pumping was halted. The recent Fall estimation was even lower than Spring meaning that the pumping allocation continues to be zero.</p> <p>Wildermuth Environmental created a plot showing the relationship between rainfall and groundwater basin recharge based upon historical data. The data indicates that 10 to 16 inches of rainfall are needed this year for pumping to restart in the basin. (The 24 year average is about 9 inches per year [if 4 wet years of data are excluded which skew the average])</p>   |  |  |  |  |
| <p>Karl Seckel, Kevin Hostert and Melissa Baum-Haley attended the MET Manager's meeting where presentations or discussions occurred on the SWRCB Regulations, the Little Hoover Commission (awaiting the final report), quagga mussels in the West Branch, and an update on the California WaterFix Cost Allocations (very preliminary info). It was also announced by Chief of Operations Jim Green that a workgroup would be organized in 2017 on flow metering issues to consider using meter technology beyond a 10:1 turndown and to discuss other changes that might be required in the administrative code to deal with these issues. MWDOC volunteered to be part of the workgroup due to the number of agencies looking for additional flexibility in metering ranges. On the quagga mussel issue, MET is expanding the facilities to be inspected for evidence of infestations. The findings to date indicate only a small number of the quaggas in the West Branch facilities, with none discovered alive. MET will also conduct enhanced inspections of the East Branch facilities. The State Project water does not have a high enough calcium content to allow the mussels to thrive, but the concerns with infestation are still valid.</p> |  |  |  |  |
| <p>On December 8, MWDOC and MET hosted a meeting of Environmental leaders at the San Joaquin Marsh Duck Club. This meeting was a follow-up to a tour of the Delta conducted in September with the same group. The purpose of the meeting was to engage with environmentalists on the benefits of the California WaterFix and to examine issues with habitat restoration to benefit fish. A full report will be included</p>  |  |  |  |  |

|   |  |  |  |  |
|---|--|--|--|--|
| <p>in MWDOC’s PAL Committee in January.</p>   |  |  |  |  |
| <p>Karl Seckel attended the Santiago Aqueduct Commission in December. The contract between the Commission and IRWD for the O&amp;M of the Baker Pipeline was renewed. It was reported that the relation of about 3,000 feet of the Baker Pipeline by the Irvine Company had been delayed. It was also reported that the NEW Baker Treatment Plant would undergo a 5-day preliminary test in December and would begin the 10-day acceptance testing in January.</p>  |  |  |  |  |
| <p>Karl Seckel attended the IRWD Board meeting where staff reviewed with the Board the results of the IRWD Reliability Study. IRWD and MWDOC coordinated their reliability studies, but IRWD’s went into more detail on emergency outage impacts to IRWD and the potential use of their Strand Ranch Banking Program to meet shortages within the IRWD service area. The IRWD analysis indicates a very high degree of reliability for IRWD based on being able to pull “extraordinary” supplies from their Strand Ranch Project.</p> |  |  |  |  |



**Status of Ongoing WEROC Projects  
December 2016**

| <b>Description</b>                                       | <b>Comments</b>  |
|--|--|
| <b>Coordination with Member Agencies</b>                 | Four fuel trailers were delivered to MWDOC for El Toro Water District, Irvine Water District, East Orange County Water District and South Coast Water District. Kelly Hubbard coordinated with the DMV registration company and the fuel trailer company to ensure exempt license plates. Two trailers will be picked up after the New Year, thus completing the current order; staff is still hoping for funding for two additional trailers.   |
| <b>Coordination with the County of Orange</b>            | Kelly attended the December Orange County Emergency Management Organization (OCEMO) meeting. The meeting included the annual holiday luncheon and awards. Kelly was honored with OCEMO Helping Hands award for her work on Water and Commodity Point of Distribution Plans.  |
| <b>Coordination with Outside Agencies</b>                | <p>Kelly participated in the California Water and Water Agency Response Network (CaWARN) State Steering Committee conference call. The group is working on updating the CaWARN website to be more efficient for adding additional agencies to the agreement and the website. These updates should make it easier for agencies to find contacts and resources during an emergency response.</p> <p>Kelly participated in the California Office of Emergency Services (Cal OES) Southern Region EOC Point of Distribution (POD) tabletop. This was a small tabletop with just their staff and I. The discussion was regarding on how what the CalOES region offices would be involved in a major POD response.</p> |
| <b>WEROC Emergency Operations Center (EOC) Readiness</b> | <p>Staff participated in the November MARS successfully.</p> <p>Colin Eckerle, WEROC/Engineering Intern, and Kelly met with the staff of the Center for Demographic Research (CDR) to review an update of the WEROC maps and atlases. The maps were last updated in 2005/2006 and require updates. The project will take several months to review the maps, update and re-review before reproduction. The MWDOC engineering staff also met to discuss the maps and ensure that all updates needed will be included.</p>  |
| <b>Filling of WEROC Vacancies</b>                        | Quite a bit of time was spent in December in interviews for a part-time administrative position that will be shared between Administration and WEROC and in conducting interviews for the WEROC Programs Coordinator position. The administrative assistant was hired and an offer was made for the Coordinator position.  |

Status of Water Use Efficiency Projects

January 2017

| Description   | Lead Agency | Status % Complete | Scheduled Completion or Renewal Date       | Comments   |
|---|-------------|-------------------|--|--|
| <b>Smart Timer Rebate Program</b>                         | MWDSC       | Ongoing           | Ongoing                                    | <p>For November 2016, 164 residential and 93 commercial smart timers were installed in Orange County.</p> <p>For program water savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.</p>  |
| <b>Rotating Nozzles Rebate Program</b>                    | MWDSC       | Ongoing           | Ongoing                                    | <p>For November 2016, 1,850 rotating nozzles were installed in Orange County.</p> <p>For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.</p>  |
| <b>Water Smart Landscape Program</b>                      | MWDSC       | On-going          | On hold pending evaluation and RFP process | <p>This Program is currently on hold while a Process and Impact Evaluation is conducted. Once the Evaluation is complete, the results will be used to make refinements to the Program.</p> <p>For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.</p> |
| <b>SoCal WaterSmart Residential Indoor Rebate Program</b> | MWDSC       | On-going          | On-going                                   | <p>In November 2016, 400 high efficiency clothes washers and 108 premium high efficiency toilets were installed through this program.</p> <p>For program savings and implementation information, please see MWDSC Water Use Efficiency Program Savings and Implementation Report.</p>  |

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|   |              |                 |                       |   |
|---|--------------|-----------------|-----------------------|---|
| <p><b>SoCal WaterSmart Commercial Rebate Program</b></p>  | <p>MWDSC</p> | <p>On-going</p> | <p>On-going</p>       | <p>In November 2016, 70 premium high efficiency toilets and 270 multi-family high efficiency toilets were installed through this program.<br/><br/>For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.</p>   |
| <p><b>Industrial Process Water Use Reduction Program</b></p>  | <p>MWDOC</p> | <p>95%</p>      | <p>September 2016</p> | <p>A total of 41 Focused Surveys and 19 Comprehensive Surveys have been completed or are in progress. To date, 15 companies have signed Incentive Agreements. Updated discharger lists have been obtained, and outreach is continuing to sites with feasible water savings potential. As a result of this program, 359 AFY of water savings is being achieved.</p>  |
| <p><b>Turf Removal Program</b></p>  | <p>MWDOC</p> | <p>On-going</p> | <p>On-going</p>       | <p>In November 2016, 30 rebates were paid, representing \$110,111.60 in rebates paid this month in Orange County. To date, the Turf Removal Program has removed approximately 20.5 million square feet of turf.<br/><br/>For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.</p>   |
| <p><b>California Sprinkler Adjustment Notification System – Base Irrigation Schedule Calculator</b></p> | <p>MWDOC</p> | <p>On-going</p> | <p>On-going</p>       | <p>The California Sprinkler Adjustment Notification System (CSANS) will e-mail or “push” an irrigation index to assist property owners with making global irrigation scheduling adjustments. Participants voluntarily register to receive this e-mail at <a href="http://www.csans.net">www.csans.net</a> and can unsubscribe at any time.<br/><br/>Staff is currently in the process of securing an annual support contract with Enterprise Information Systems, the original developer of CSANS. Support will include annual web hosting, technical support, functional refinements, and ongoing application health and maintenance.<br/><br/>IRWD is now administering CSANS for their customers, along with developing customized messaging content for their</p> |

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|   |                     |                 |              |  |
|---|---------------------|-----------------|--------------|--|
| <p><b>California Sprinkler Adjustment Notification System – Base Irrigation Schedule Calculator (cont.)</b></p> |                     |                 |              | <p>customers. Several other agencies are considering access to the CSANS to administer their own messages to their customers: City of Brea, Mesa Water District, City of San Juan Capistrano, and Laguna Beach County WD. MWDOC will continue to work with these agencies to transition administration of CSANS to them. All other agencies are currently receiving educational messages administered by MWDOC.</p>        |
| <p><b>Spray to Drip Conversion Program</b></p>  | <p>October 2017</p> | <p>75%</p>      | <p>MWDOC</p> | <p>This is a pilot program designed to test the efficacy of replacing conventional spray heads in shrub beds with low-volume, low-precipitation drip technology. Through a rebate program format, residential and commercial sites will be encouraged to convert their existing spray nozzles to drip.</p> <p>To date, 193 residential sites and 52 commercial sites have completed spray to drip conversion projects.</p> |
| <p><b>MWDOC Conservation Meeting</b></p>  | <p>Monthly</p>      | <p>On-going</p> | <p>MWDOC</p> | <p>This month's meeting was held on December 1, 2016 at the City of Newport Beach. The next meeting will be on February 2, 2017 at County of Orange Public Works.</p>  |
| <p><b>Metropolitan Conservation Meeting</b></p>   | <p>Monthly</p>      | <p>On-going</p> | <p>MWDSC</p> | <p>This month's meeting was held on December 15, 2016. The next meeting will be January 19, 2017 at Metropolitan.</p>  |

# Orange County

## Water Use Efficiency Programs Savings and Implementation Report

### Retrofits and Acre-Foot 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               | November-16            | 400             | 1.15          | 1,746               | 15.07         | 110,529           | 3,813                   | 23,758                      |
| Smart Timer Program - Irrigation Timers                     | 2004               | November-16            | 257             | 5.74          | 1,122               | 254.30        | 18,604            | 7,044                   | 38,116                      |
| Rotating Nozzles Rebate Program                             | 2007               | November-16            | 1,850           | 7.40          | 26,449              | 105.75        | 547,807           | 2,697                   | 11,129                      |
| SoCal WaterSmart Commercial Plumbing Fixture Rebate Program | 2002               | November-16            | 340             | 0.77          | 7,837               | 67.73         | 78,119            | 3,518                   | 39,200                      |
| Water Smart Landscape Program [1]                           | 1997               | November-15            | 12,677          | 904.62        | 12,677              | 3,615.21      | 12,677            | 10,621                  | 72,668                      |
| Industrial Process Water Use Reduction Program              | 2006               | November-16            | 0               | 0.00          | 0                   | 0.00          | 15                | 359                     | 1,921                       |
| Turf Removal Program <sup>[3]</sup>                         | 2010               | November-16            | 92,237          | 1.08          | 473,142             | 780           | 20,499,811        | 2,871                   | 7,202                       |
| High Efficiency Toilet (HET) Program                        | 2005               | November-16            | 108             | 0.38          | 763                 | 32.45         | 59,348            | 2,194                   | 14,144                      |
| Home Water Certification Program                            | 2013               | November-15            | 0               | 0.000         | 53                  | 0.251         | 312               | 7,339                   | 15,266                      |
| Synthetic Turf Rebate Program                               | 2007               |                        |                 |               |                     |               | 685,438           | 96                      | 469                         |
| Ultra-Low-Flush-Toilet Programs <sup>[2]</sup>              | 1992               |                        |                 |               |                     |               | 363,926           | 13,452                  | 162,561                     |
| Home Water Surveys <sup>[2]</sup>                           | 1995               |                        |                 |               |                     |               | 11,867            | 160                     | 1,708                       |
| Showerhead Replacements <sup>[2]</sup>                      | 1991               |                        |                 |               |                     |               | 270,604           | 1,667                   | 19,083                      |
| <b>Total Water Savings All Programs</b>                     |                    |                        |                 | <b>921</b>    | <b>523,789</b>      | <b>4,871</b>  | <b>22,659,057</b> | <b>48,499</b>           | <b>391,974</b>              |

<sup>[1]</sup> Water Smart Landscape Program participation is based on the number of water meters receiving monthly Irrigation Performance Reports.

<sup>[2]</sup> Cumulative Water Savings Program To Date totals are from a previous Water Use Efficiency Program Effort.

<sup>[3]</sup> Turf Removal Interventions are listed as square feet.

<sup>[4]</sup> Cumulative & annual water savings represents both active program savings and passive savings that continues to be realized due to plumbing code changes over time.

## HIGH EFFICIENCY CLOTHES WASHERS INSTALLED BY AGENCY

through MWDOC and Local Agency Conservation Programs

| Agency                      | FY 08/09     | FY 09/10     | FY 10/11      | FY 11/12     | FY 12/13     | FY 13/14     | FY 14/15     | FY 15/16     | FY 16/17     | Total          | Current FY Water Savings Ac/Ft (Cumulative) | Cumulative Water Savings across all Fiscal Years | 15 yr. Lifecycle Savings Ac/Ft |
|-----------------------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|---|--|--------------------------------|
| Brea                        | 156          | 42           | 186           | 144          | 93           | 115          | 114          | 76           | 20           | 1,830          | 0.16  | 397.01   | 947                            |
| Buena Park                  | 146          | 59           | 230           | 145          | 105          | 106          | 91           | 76           | 19           | 1,483          | 0.14  | 306.52   | 767                            |
| East Orange CWD RZ          | 17           | 3            | 23            | 10           | 10           | 8            | 8            | 8            | -            | 189            | 0.00  | 43.34  | 98                             |
| El Toro WD                  | 130          | 32           | 162           | 112          | 134          | 121          | 111          | 65           | 16           | 1,490          | 0.14  | 309.74   | 771                            |
| Fountain Valley             | 243          | 72           | 289           | 158          | 115          | 102          | 110          | 76           | 31           | 2,366          | 0.31  | 531.74   | 1,224                          |
| Garden Grove                | 332          | 101          | 481           | 236          | 190          | 162          | 165          | 251          | 59           | 3,495          | 0.48  | 744.13   | 1,808                          |
| Golden State WC             | 447          | 168          | 583           | 485          | 265          | 233          | 359          | 260          | 70           | 4,947          | 0.63  | 1,051.36   | 2,560                          |
| Huntington Beach            | 751          | 211          | 963           | 582          | 334          | 295          | 319          | 225          | 67           | 8,133          | 0.56  | 1,865.66   | 4,208                          |
| Irvine Ranch WD             | 1,844        | 1,394        | 2,621         | 2,170        | 1,763        | 1,664        | 1,882        | 1,521        | 592          | 23,885         | 5.17  | 4,873.35   | 12,359                         |
| La Habra                    | 83           | 22           | 179           | 128          | 82           | 114          | 87           | 66           | 21           | 1,295          | 0.15  | 268.03   | 670                            |
| La Palma                    | 51           | 25           | 76            | 46           | 34           | 25           | 34           | 29           | 5            | 453            | 0.04  | 92.65  | 234                            |
| Laguna Beach CWD            | 77           | 27           | 96            | 57           | 38           | 37           | 39           | 32           | 2            | 915            | 0.02  | 204.32   | 473                            |
| Mesa Water                  | 246          | 73           | 232           | 176          | 114          | 86           | 89           | 113          | 44           | 2,482          | 0.34  | 567.82   | 1,284                          |
| Moulton Niguel WD           | 742          | 250          | 1,127         | 679          | 442          | 421          | 790          | 688          | 267          | 9,613          | 2.32  | 1,963.28   | 4,974                          |
| Newport Beach               | 259          | 57           | 197           | 142          | 116          | 92           | 95           | 66           | 30           | 2,593          | 0.24  | 608.88   | 1,342                          |
| Orange                      | 403          | 111          | 349           | 262          | 218          | 163          | 160          | 124          | 31           | 3,849          | 0.27  | 886.25   | 1,992                          |
| Orange Park Acres           | -            | -            | -             | -            | -            | -            | -            | -            | -            | 12             | 0.00  | 3.42   | 6                              |
| San Juan Capistrano         | 127          | 43           | 190           | 110          | 76           | 73           | 92           | 63           | 20           | 1,446          | 0.13  | 310.84   | 748                            |
| San Clemente                | 278          | 63           | 333           | 206          | 140          | 94           | 141          | 75           | 29           | 2,579          | 0.24  | 563.72   | 1,334                          |
| Santa Margarita WD          | 740          | 257          | 1,105         | 679          | 553          | 662          | 792          | 466          | 159          | 9,308          | 1.42  | 1,923.80   | 4,816                          |
| Seal Beach                  | 57           | 7            | 81            | 51           | 31           | 29           | 38           | 23           | 1            | 594            | 0.00  | 129.33   | 307                            |
| Serrano WD                  | 23           | 7            | 21            | 20           | 13           | 10           | 26           | 8            | 7            | 353            | 0.06  | 81.03  | 183                            |
| South Coast WD              | 148          | 43           | 183           | 112          | 89           | 79           | 68           | 43           | 20           | 1,560          | 0.16  | 338.17   | 807                            |
| Trabuco Canyon WD           | 62           | 28           | 82            | 62           | 30           | 45           | 47           | 34           | 9            | 779            | 0.08  | 167.51   | 403                            |
| Tustin                      | 144          | 45           | 174           | 97           | 78           | 59           | 80           | 66           | 24           | 1,592          | 0.23  | 357.77   | 824                            |
| Westminster                 | 233          | 74           | 329           | 208          | 121          | 82           | 109          | 149          | 45           | 2,547          | 0.39  | 552.31   | 1,318                          |
| Yuba Linda                  | 367          | 117          | 394           | 273          | 181          | 167          | 156          | 123          | 26           | 3,722          | 0.23  | 850.69   | 1,926                          |
| <b>MWDOC Totals</b>         | <b>8,106</b> | <b>3,331</b> | <b>10,686</b> | <b>7,350</b> | <b>5,365</b> | <b>5,094</b> | <b>6,002</b> | <b>4,726</b> | <b>1,614</b> | <b>93,510</b>  | <b>13.91</b>                                | <b>19,992.68</b>                                 | <b>18,066</b>                  |
| <b>Abbeville</b>            | <b>781</b>   | <b>860</b>   | <b>910</b>    | <b>477</b>   | <b>331</b>   | <b>285</b>   | <b>295</b>   | <b>266</b>   | <b>68</b>    | <b>10,537</b>  | <b>0.60</b>                                 | <b>2,372.72</b>                                  | <b>5,452</b>                   |
| <b>Fullerton</b>            | <b>330</b>   | <b>69</b>    | <b>397</b>    | <b>270</b>   | <b>200</b>   | <b>186</b>   | <b>211</b>   | <b>165</b>   | <b>41</b>    | <b>3,629</b>   | <b>0.33</b>                                 | <b>725.62</b>                                    | <b>1,878</b>                   |
| <b>Santa Ana</b>            | <b>257</b>   | <b>87</b>    | <b>355</b>    | <b>190</b>   | <b>163</b>   | <b>131</b>   | <b>132</b>   | <b>259</b>   | <b>23</b>    | <b>2,853</b>   | <b>0.22</b>                                 | <b>667.43</b>                                    | <b>1,476</b>                   |
| <b>Non-MWDOC Totals</b>     | <b>1,368</b> | <b>1,016</b> | <b>1,662</b>  | <b>937</b>   | <b>694</b>   | <b>602</b>   | <b>638</b>   | <b>690</b>   | <b>132</b>   | <b>17,019</b>  | <b>1.16</b>                                 | <b>3,765.78</b>                                  | <b>3,288</b>                   |
| <b>Orange County Totals</b> | <b>9,474</b> | <b>4,347</b> | <b>12,348</b> | <b>8,287</b> | <b>6,059</b> | <b>5,696</b> | <b>6,640</b> | <b>5,416</b> | <b>1,746</b> | <b>110,529</b> | <b>15.07</b>                                | <b>23,758.46</b>                                 | <b>21,354</b>                  |

**SMART TIMERS INSTALLED BY AGENCY**  
through MWDOC and Local Agency Conservation Programs

| Agency                      | FY 09/10   |              | FY 10/11   |            | FY 11/12     |            | FY 12/13     |            | FY 13/14   |            | FY 14/15   |              | FY 15/16     |              | FY 16/17   |            | Total Program<br>Res | Total Program<br>Comm. | Cumulative Water<br>Savings across all<br>Fiscal Years |
|-----------------------------|------------|--------------|------------|------------|--------------|------------|--------------|------------|------------|------------|------------|--------------|--------------|--------------|------------|------------|----------------------|------------------------|--|
|                             | Res        | Comm         | Res        | Comm       | Res          | Comm       | Res          | Comm       | Res        | Comm       | Res        | Comm         | Res          | Comm         | Res        | Comm       |                      |                        |  |
| Brea                        | 0          | 0            | 2          | 0          | 8            | 0          | 9            | 8          | 4          | 0          | 43         | 6            | 20           | 4            | 18         | 0          | 118                  | 76                     | 458.21   |
| Buena Park                  | 0          | 0            | 0          | 0          | 4            | 19         | 3            | 0          | 0          | 0          | 4          | 4            | 7            | 4            | 3          | 5          | 24                   | 39                     | 116.12   |
| East Orange CWD RZ          | 0          | 0            | 1          | 0          | 5            | 0          | 2            | 0          | 0          | 0          | 2          | 0            | 0            | 0            | 1          | 0          | 15                   | 0                      | 6.82   |
| El Toro WD                  | 2          | 18           | 5          | 5          | 26           | 2          | 7            | 2          | 11         | 0          | 8          | 9            | 9            | 17           | 12         | 3          | 94                   | 350                    | 2,227.63   |
| Fountain Valley             | 0          | 6            | 2          | 2          | 8            | 2          | 3            | 2          | 4          | 0          | 7          | 10           | 13           | 1            | 17         | 9          | 75                   | 37                     | 144.54   |
| Garden Grove                | 6          | 0            | 5          | 4          | 7            | 0          | 5            | 2          | 9          | 0          | 10         | 14           | 13           | 11           | 8          | 0          | 81                   | 38                     | 141.62   |
| Golden State WC             | 9          | 22           | 7          | 4          | 13           | 3          | 9            | 9          | 25         | 39         | 12         | 35           | 16           | 22           | 34         | 191        | 189                  | 668.43                 |  |
| Huntington Beach            | 6          | 27           | 6          | 36         | 15           | 4          | 18           | 33         | 20         | 35         | 19         | 2            | 42           | 12           | 44         | 228        | 200                  | 820.03                 |  |
| Invine Ranch WD             | 14         | 145          | 28         | 153        | 267          | 71         | 414          | 135        | 71         | 59         | 67         | 310          | 239          | 207          | 133        | 100        | 1,558                | 1,966                  | 9,468.90   |
| La Habra                    | 0          | 21           | 0          | 0          | 3            | 0          | 4            | 7          | 2          | 0          | 4          | 7            | 3            | 1            | 2          | 7          | 26                   | 44                     | 171.30   |
| La Palma                    | 0          | 0            | 0          | 0          | 1            | 0          | 1            | 0          | 2          | 0          | 2          | 0            | 3            | 2            | 0          | 0          | 9                    | 2                      | 4.12   |
| Laguna Beach CWD            | 2          | 14           | 4          | 1          | 109          | 2          | 76           | 2          | 71         | 0          | 86         | 0            | 86           | 1            | 3          | 0          | 473                  | 20                     | 197.45   |
| Mesa Water                  | 13         | 7            | 7          | 22         | 21           | 0          | 10           | 2          | 15         | 2          | 17         | 28           | 36           | 12           | 17         | 0          | 186                  | 113                    | 580.82   |
| Moulton Niguel WD           | 17         | 162          | 36         | 60         | 179          | 31         | 51           | 74         | 40         | 45         | 46         | 95           | 163          | 100          | 109        | 33         | 787                  | 705                    | 2,922.70   |
| Newport Beach               | 7          | 58           | 6          | 0          | 275          | 12         | 242          | 26         | 168        | 75         | 11         | 9            | 28           | 43           | 19         | 10         | 1,027                | 407                    | 2,290.12   |
| Orange                      | 2          | 13           | 5          | 8          | 25           | 0          | 20           | 24         | 13         | 9          | 18         | 31           | 51           | 13           | 27         | 1          | 243                  | 156                    | 795.11   |
| San Juan Capistrano         | 7          | 49           | 13         | 1          | 103          | 2          | 14           | 18         | 6          | 11         | 6          | 19           | 20           | 8            | 10         | 0          | 210                  | 117                    | 541.95   |
| San Clemente                | 13         | 209          | 46         | 11         | 212          | 17         | 26           | 7          | 28         | 2          | 28         | 24           | 26           | 3            | 19         | 6          | 1,033                | 367                    | 2,349.52   |
| Santa Margarita WD          | 10         | 152          | 61         | 53         | 262          | 7          | 53           | 171        | 64         | 93         | 53         | 321          | 189          | 136          | 206        | 54         | 1,034                | 1,205                  | 4,522.66   |
| Santiago CWD                | 0          | 0            | 0          | 0          | 0            | 0          | 0            | 0          | 0          | 0          | 0          | 0            | 0            | 0            | 0          | 0          | 0                    | 0                      | 0.00   |
| Seal Beach                  | 0          | 1            | 0          | 0          | 0            | 3          | 1            | 0          | 1          | 36         | 1          | 12           | 2            | 2,446        | 2          | 4          | 7                    | 2,502                  | 3,435.01   |
| Serrano WD                  | 11         | 0            | 4          | 0          | 3            | 0          | 1            | 0          | 0          | 0          | 4          | 0            | 11           | 2            | 3          | 0          | 37                   | 2                      | 10.81  |
| South Coast WD              | 3          | 10           | 13         | 3          | 78           | 10         | 13           | 16         | 8          | 4          | 104        | 73           | 9            | 11           | 1          | 0          | 272                  | 212                    | 991.77   |
| Trabuco Canyon WD           | 2          | 0            | 2          | 10         | 12           | 0          | 6            | 0          | 2          | 0          | 6          | 1            | 16           | 50           | 5          | 0          | 95                   | 154                    | 837.43   |
| Tustin                      | 10         | 14           | 10         | 0          | 11           | 0          | 8            | 4          | 9          | 1          | 18         | 14           | 33           | 8            | 13         | 1          | 123                  | 58                     | 262.87   |
| Westminster                 | 3          | 0            | 1          | 1          | 2            | 0          | 1            | 1          | 2          | 0          | 13         | 17           | 7            | 1            | 7          | 7          | 55                   | 39                     | 160.53   |
| Yorba Linda                 | 5          | 21           | 25         | 0          | 22           | 0          | 20           | 0          | 12         | 5          | 32         | 2            | 61           | 27           | 35         | 1          | 301                  | 113                    | 638.76   |
| <b>MWDOC Totals</b>         | <b>142</b> | <b>949</b>   | <b>289</b> | <b>374</b> | <b>1,671</b> | <b>185</b> | <b>1,017</b> | <b>583</b> | <b>571</b> | <b>402</b> | <b>648</b> | <b>1,026</b> | <b>1,123</b> | <b>3,136</b> | <b>736</b> | <b>301</b> | <b>8,302</b>         | <b>9,111</b>           | <b>34,765.23</b>                                       |
| Anaheim                     | 5          | 46           | 12         | 11         | 23           | 60         | 19           | 10         | 9          | 26         | 7          | 52           | 30           | 34           | 41         | 10         | 198                  | 457                    | 2,285.08   |
| Fullerton                   | 2          | 39           | 9          | 33         | 22           | 51         | 9            | 29         | 8          | 0          | 40         | 26           | 32           | 12           | 20         | 6          | 166                  | 198                    | 788.21   |
| Santa Ana                   | 1          | 8            | 8          | 0          | 6            | 5          | 8            | 19         | 7          | 8          | 9          | 27           | 22           | 26           | 6          | 2          | 73                   | 99                     | 277.88   |
| <b>Non-MWDOC Totals</b>     | <b>8</b>   | <b>93</b>    | <b>29</b>  | <b>44</b>  | <b>51</b>    | <b>116</b> | <b>36</b>    | <b>58</b>  | <b>24</b>  | <b>34</b>  | <b>56</b>  | <b>105</b>   | <b>84</b>    | <b>72</b>    | <b>67</b>  | <b>18</b>  | <b>437</b>           | <b>754</b>             | <b>3,351.17</b>  |
| <b>Orange County Totals</b> | <b>150</b> | <b>1,042</b> | <b>318</b> | <b>418</b> | <b>1,722</b> | <b>301</b> | <b>1,053</b> | <b>641</b> | <b>595</b> | <b>436</b> | <b>704</b> | <b>1,131</b> | <b>1,207</b> | <b>3,208</b> | <b>803</b> | <b>319</b> | <b>8,739</b>         | <b>9,865</b>           | <b>38,116</b>  |

|                         |          |           |           |           |           |            |           |           |           |           |           |            |           |           |           |           |            |            |                 |
|-------------------------|----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|------------|------------|-----------------|
| Anaheim                 | 5        | 46        | 12        | 11        | 23        | 60         | 19        | 10        | 9         | 26        | 7         | 52         | 30        | 34        | 41        | 10        | 198        | 457        | 2,285.08        |
| Fullerton               | 2        | 39        | 9         | 33        | 22        | 51         | 9         | 29        | 8         | 0         | 40        | 26         | 32        | 12        | 20        | 6         | 166        | 198        | 788.21          |
| Santa Ana               | 1        | 8         | 8         | 0         | 6         | 5          | 8         | 19        | 7         | 8         | 9         | 27         | 22        | 26        | 6         | 2         | 73         | 99         | 277.88          |
| <b>Non-MWDOC Totals</b> | <b>8</b> | <b>93</b> | <b>29</b> | <b>44</b> | <b>51</b> | <b>116</b> | <b>36</b> | <b>58</b> | <b>24</b> | <b>34</b> | <b>56</b> | <b>105</b> | <b>84</b> | <b>72</b> | <b>67</b> | <b>18</b> | <b>437</b> | <b>754</b> | <b>3,351.17</b> |

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

| Agency              | FY 11/12      |              | FY 12/13     |               | FY 13/14      |          | FY 14/15      |               | FY 15/16 |               | FY 16/17      |          | Total Program |               | Cumulative Water Savings across all Fiscal Years |              |               |          |                |                |               |                  |
|---------------------|---------------|--------------|--------------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|--|--------------|---------------|----------|----------------|----------------|---------------|------------------|
|                     | Small         | Large        | Small        | Large         | Small         | Large    | Small         | Large         | Small    | Large         | Small         | Large    | Small         | Large         |  |              |               |          |                |                |               |                  |
|                     | Res           | Comm.        | Res          | Comm.         | Res           | Comm.    | Res           | Comm.         | Res      | Comm.         | Res           | Comm.    | Res           | Comm.         |  |              |               |          |                |                |               |                  |
| Brea                | 130           | 0            | 65           | 120           | 84            | 0        | 157           | 45            | 0        | 74            | 2,484         | 0        | 0             | 572           | 2,749  | 0            | 32.68         |          |                |                |               |                  |
| Buena Park          | 32            | 0            | 65           | 0             | 53            | 0        | 248           | 0             | 0        | 45            | 98            | 0        | 0             | 509           | 173  | 2,555        | 453.42        |          |                |                |               |                  |
| East Orange         | 340           | 0            | 65           | 0             | 30            | 0        | 221           | 0             | 0        | 0             | 0             | 0        | 0             | 751           | 0  | 0            | 10.83         |          |                |                |               |                  |
| El Toro             | 357           | 76           | 23           | 6,281         | 56            | 3,288    | 1,741         | 28,714        | 0        | 730           | 4,457         | 0        | 242           | 3,369         | 46,222   | 890          | 820.63        |          |                |                |               |                  |
| Fountain Valley     | 108           | 0            | 35           | 0             | 0             | 0        | 107           | 0             | 0        | 222           | 0             | 0        | 0             | 710           | 0  | 0            | 10.22         |          |                |                |               |                  |
| Garden Grove        | 119           | 0            | 95           | 0             | 80            | 0        | 88            | 50            | 0        | 110           | 0             | 0        | 55            | 933           | 299  | 0            | 19.72         |          |                |                |               |                  |
| Golden State        | 294           | 0            | 257          | 2,595         | 192           | 0        | 583           | 1,741         | 0        | 1,088         | 0             | 0        | 176           | 3,417         | 10,009   | 0            | 152.29        |          |                |                |               |                  |
| Huntington Beach    | 458           | 0            | 270          | 0             | 120           | 0        | 798           | 1,419         | 0        | 1,345         | 2,836         | 0        | 149           | 3,797         | 10,629   | 2,681        | 790.51        |          |                |                |               |                  |
| Irvine Ranch        | 1,715         | 4,255        | 25,018       | 1,014         | 11,010        | 4,257    | 1,421         | 632           | 0        | 1,989         | 5,047         | 0        | 287           | 47,089        | 89,722   | 2,004        | 2,900.68      |          |                |                |               |                  |
| La Habra            | 33            | 90           | 0            | 0             | 15            | 0        | 109           | 338           | 0        | 300           | 0             | 0        | 0             | 481           | 1,236  | 900          | 221.65        |          |                |                |               |                  |
| La Palma            | 0             | 0            | 0            | 0             | 0             | 0        | 0             | 0             | 0        | 46            | 505           | 0        | 0             | 56            | 505  | 0            | 4.65          |          |                |                |               |                  |
| Laguna Beach        | 763           | 0            | 3,596        | 0             | 2,948         | 878      | 2,879         | 1,971         | 0        | 1,390         | 0             | 0        | 0             | 12,139        | 2,896  | 0            | 224.61        |          |                |                |               |                  |
| Mesa Water          | 297           | 277          | 270          | 0             | 361           | 0        | 229           | 0             | 0        | 166           | 0             | 0        | 70            | 1,987         | 385  | 343          | 121.99        |          |                |                |               |                  |
| Moulton Niguel      | 1,225         | 0            | 512          | 1,385         | 361           | 227      | 1,596         | 4,587         | 0        | 5,492         | 1,441         | 0        | 76            | 11,797        | 20,252   | 2,945        | 1,016.16      |          |                |                |               |                  |
| Newport Beach       | 640           | 3,273        | 25,365       | 50            | 19,349        | 6,835    | 460           | 3,857         | 0        | 348           | 670           | 0        | 0             | 46,678        | 21,473   | 0            | 1,178.02      |          |                |                |               |                  |
| Orange              | 343           | 0            | 264          | 0             | 245           | 120      | 304           | 668           | 0        | 631           | 91            | 0        | 0             | 3,170         | 1,072  | 0            | 69.27         |          |                |                |               |                  |
| San Clemente        | 4,266         | 117          | 631          | 172           | 415           | 5,074    | 326           | 0             | 426      | 0             | 0             | 0        | 0             | 9,989         | 7,538  | 1,343        | 415.75        |          |                |                |               |                  |
| San Juan Capistrano | 949           | 0            | 684          | 30            | 370           | 0        | 495           | 737           | 0        | 310           | 593           | 0        | 75            | 5,495         | 8,729  | 0            | 256.54        |          |                |                |               |                  |
| Santa Margarita     | 4,817         | 0            | 983          | 0             | 389           | 0        | 1,207         | 1,513         | 0        | 1,820         | 837           | 0        | 15            | 16,165        | 6,921  | 611          | 450.33        |          |                |                |               |                  |
| Seal Beach          | 0             | 0            | 0            | 0             | 0             | 0        | 40            | 5,261         | 0        | 2,300         | 0             | 0        | 0             | 155           | 7,852  | 0            | 90.55         |          |                |                |               |                  |
| Serrano             | 58            | 0            | 190          | 0             | 105           | 0        | 377           | 0             | 695      | 0             | 0             | 0        | 0             | 3,405         | 0  | 0            | 55.23         |          |                |                |               |                  |
| South Coast         | 688           | 359          | 435          | 0             | 70            | 0        | 4,993         | 13,717        | 0        | 1,421         | 2,889         | 0        | 16            | 8,130         | 18,870   | 0            | 323.31        |          |                |                |               |                  |
| Trabuco Canyon      | 379           | 0            | 34           | 0             | 0             | 0        | 56            | 0             | 0        | 130           | 0             | 0        | 0             | 2,086         | 791  | 0            | 53.52         |          |                |                |               |                  |
| Tustin              | 476           | 1,013        | 378          | 0             | 329           | 0        | 408           | 0             | 317      | 386           | 0             | 0        | 65            | 3,371         | 1,399  | 0            | 69.73         |          |                |                |               |                  |
| Westminster         | 26            | 0            | 15           | 0             | 0             | 0        | 54            | 0             | 73       | 0             | 0             | 0        | 105           | 464           | 0  | 0            | 6.53          |          |                |                |               |                  |
| Yorba Linda         | 559           | 0            | 730          | 0             | 40            | 990      | 921           | 0             | 1,715    | 0             | 0             | 0        | 213           | 6,081         | 4,359  | 500          | 278.38        |          |                |                |               |                  |
| <b>MWDOC Totals</b> | <b>19,072</b> | <b>9,460</b> | <b>1,343</b> | <b>59,970</b> | <b>11,647</b> | <b>0</b> | <b>36,622</b> | <b>21,669</b> | <b>0</b> | <b>19,818</b> | <b>65,250</b> | <b>0</b> | <b>20,883</b> | <b>24,634</b> | <b>0</b>   | <b>1,357</b> | <b>16,787</b> | <b>0</b> | <b>192,796</b> | <b>264,021</b> | <b>14,752</b> | <b>10,027.17</b> |

|                         |              |               |          |            |            |          |            |              |          |              |              |          |              |               |          |            |              |          |              |               |              |                 |
|-------------------------|--------------|---------------|----------|------------|------------|----------|------------|--------------|----------|--------------|--------------|----------|--------------|---------------|----------|------------|--------------|----------|--------------|---------------|--------------|-----------------|
| Anaheim                 | 742          | 38,554        | 0        | 459        | 813        | 0        | 338        | 0            | 498      | 712          | 0            | 794      | 5,221        | 0             | 4,020    | 49,799     | 105          | 630.16   |              |               |              |                 |
| Fullerton               | 409          | 0             | 119      | 0          | 107        | 0        | 107        | 0            | 684      | 1,196        | 0            | 521      | 7,015        | 0             | 2,910    | 11,309     | 1,484        | 386.40   |              |               |              |                 |
| Santa Ana               | 22           | 65            | 0        | 99         | 86         | 2,533    | 86         | 2,533        | 0        | 310          | 0            | 0        | 1,420        | 0             | 859      | 5,752      | 0            | 85.35    |              |               |              |                 |
| <b>Non-MWDOC Totals</b> | <b>1,173</b> | <b>38,619</b> | <b>0</b> | <b>677</b> | <b>813</b> | <b>0</b> | <b>531</b> | <b>2,533</b> | <b>0</b> | <b>1,492</b> | <b>1,908</b> | <b>0</b> | <b>1,315</b> | <b>13,656</b> | <b>0</b> | <b>212</b> | <b>8,093</b> | <b>0</b> | <b>7,789</b> | <b>66,860</b> | <b>1,589</b> | <b>1,101.91</b> |

|                             |               |               |              |               |               |          |               |               |          |               |               |          |               |               |          |              |               |          |                |                |               |                  |
|-----------------------------|---------------|---------------|--------------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|----------|--------------|---------------|----------|----------------|----------------|---------------|------------------|
| <b>Orange County Totals</b> | <b>20,245</b> | <b>48,079</b> | <b>1,343</b> | <b>60,647</b> | <b>12,460</b> | <b>0</b> | <b>37,153</b> | <b>24,202</b> | <b>0</b> | <b>21,310</b> | <b>67,158</b> | <b>0</b> | <b>22,198</b> | <b>38,290</b> | <b>0</b> | <b>1,569</b> | <b>24,880</b> | <b>0</b> | <b>200,585</b> | <b>330,881</b> | <b>16,341</b> | <b>11,129.08</b> |
|-----------------------------|---------------|---------------|--------------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|----------|---------------|---------------|----------|--------------|---------------|----------|----------------|----------------|---------------|------------------|



**SOCAL WATER\$MART COMMERCIAL PLUMBING FIXTURES REBATE PROGRAM<sup>[1]</sup>  
INSTALLED BY AGENCY**

through MWDOC and Local Agency Conservation Programs

| Agency                      | FY 07/08     | FY 08/09     | FY 09/10     | FY 10/11     | FY 11/12     | FY 12/13     | FY 13/14     | FY 14/15     | FY 15/16      | FY 16/17     | Totals        | Cumulative Water Savings across all Fiscal Years |
|-----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|--|
| Brea                        | 27           | 113          | 24           | 4            | 1            | 234          | 0            | 10           | 91            | 0            | 631           | 394  |
| Buena Park                  | 153          | 432          | 122          | 379          | 290          | 5            | 23           | 56           | 591           | 0            | 2,356         | 1,070  |
| East Orange CWD RZ          | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0             | 0            | 0             | 0  |
| El Toro WD                  | 0            | 92           | 143          | 1            | 137          | 0            | 212          | 6            | 268           | 25           | 1,052         | 586  |
| Fountain Valley             | 17           | 35           | 0            | 2            | 314          | 0            | 0            | 1            | 249           | 0            | 872           | 584  |
| Garden Grove                | 5            | 298          | 130          | 22           | 4            | 0            | 1            | 167          | 676           | 310          | 2,351         | 1,480  |
| Golden State WC             | 46           | 414          | 55           | 68           | 135          | 0            | 1            | 0            | 1,008         | 53           | 2,865         | 1,896  |
| Huntington Beach            | 48           | 104          | 126          | 96           | 156          | 104          | 144          | 7            | 783           | 0            | 2,313         | 1,541  |
| Irvine Ranch WD             | 121          | 789          | 2,708        | 1,002        | 646          | 1,090        | 451          | 725          | 11,100        | 3,701        | 25,609        | 7,281  |
| La Habra                    | 191          | 75           | 53           | 4            | 0            | 0            | 0            | 0            | 340           | 0            | 883           | 544  |
| La Palma                    | 0            | 140          | 21           | 0            | 0            | 0            | 0            | 0            | 0             | 446          | 612           | 100  |
| Laguna Beach CWD            | 20           | 137          | 189          | 0            | 0            | 0            | 27           | 0            | 0             | 0            | 446           | 312  |
| Mesa Water                  | 141          | 543          | 219          | 669          | 41           | 6            | 0            | 79           | 661           | 763          | 4,235         | 2,068  |
| Moulton Niguel WD           | 9            | 69           | 151          | 6            | 0            | 0            | 0            | 3            | 413           | 0            | 996           | 811  |
| Newport Beach               | 98           | 27           | 245          | 425          | 35           | 0            | 0            | 566          | 0             | 0            | 1,834         | 1,279  |
| Orange                      | 18           | 374          | 67           | 1            | 73           | 1            | 271          | 81           | 275           | 1,535        | 3,714         | 1,769  |
| San Juan Capistrano         | 2            | 1            | 1            | 0            | 0            | 0            | 14           | 0            | 0             | 0            | 260           | 397  |
| San Clemente                | 2            | 18           | 43           | 0            | 19           | 0            | 0            | 1            | 0             | 0            | 432           | 381  |
| Santa Margarita WD          | 6            | 23           | 11           | 0            | 0            | 0            | 0            | 2            | 90            | 0            | 207           | 206  |
| Santiago CWD                | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0             | 0            | 0             | 0  |
| Seal Beach                  | 1            | 2            | 124          | 0            | 0            | 0            | 0            | 0            | 0             | 184          | 538           | 427  |
| Serrano WD                  | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0             | 0            | 0             | 0  |
| South Coast WD              | 9            | 114          | 56           | 422          | 84           | 148          | 0            | 382          | 0             | 0            | 1,320         | 509  |
| Trabuco Canyon WD           | 0            | 4            | 0            | 0            | 0            | 0            | 0            | 0            | 0             | 0            | 11            | 15   |
| Tustin                      | 115          | 145          | 25           | 230          | 0            | 0            | 0            | 75           | 358           | 0            | 1,190         | 814  |
| Westminster                 | 40           | 161          | 16           | 63           | 35           | 1            | 28           | 0            | 146           | 79           | 1,040         | 995  |
| Yorba Linda                 | 10           | 24           | 8            | 30           | 0            | 1            | 0            | 0            | 226           | 0            | 511           | 555  |
| <b>MWDOC Totals</b>         | <b>1,079</b> | <b>4,134</b> | <b>4,537</b> | <b>3,424</b> | <b>1,966</b> | <b>1,594</b> | <b>1,172</b> | <b>2,161</b> | <b>17,275</b> | <b>7,096</b> | <b>56,278</b> | <b>26,014</b>                                    |
| Anaheim                     | 766          | 3,298        | 582          | 64           | 48           | 165          | 342          | 463          | 3,072         | 39           | 13,483        | 6,897  |
| Fullerton                   | 133          | 579          | 29           | 4            | 0            | 94           | 0            | 178          | 476           | 472          | 2,629         | 1,622  |
| Santa Ana                   | 493          | 815          | 728          | 39           | 12           | 16           | 17           | 5            | 1,293         | 230          | 5,729         | 4,667  |
| <b>Non-MWDOC Totals</b>     | <b>1,392</b> | <b>4,692</b> | <b>1,339</b> | <b>107</b>   | <b>60</b>    | <b>275</b>   | <b>359</b>   | <b>646</b>   | <b>4,841</b>  | <b>741</b>   | <b>21,841</b> | <b>13,186</b>                                    |
| <b>Orange County Totals</b> | <b>2,471</b> | <b>8,826</b> | <b>5,876</b> | <b>3,531</b> | <b>2,026</b> | <b>1,869</b> | <b>1,531</b> | <b>2,807</b> | <b>22,116</b> | <b>7,837</b> | <b>78,119</b> | <b>39,200</b>                                    |

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

## Water Smart Landscape Program

Total Number of Meters  
in Program by Agency

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

# INDUSTRIAL PROCESS WATER USE REDUCTION PROGRAM

## Number of Process Changes by Agency

| Agency              | FY 09/10 | FY 10/11 | FY 11/12 | FY 12/13 | FY 13/14 | FY 14/15 | FY 15/16 | FY 16/17 | Overall Program Interventions | Annual Water Savings[1] | Cumulative Water Savings across all Fiscal Years[1] |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-------------------------------|-------------------------|---|
| Brea                | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Buena Park          | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1                             | 54                      | 428   |
| East Orange         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| El Toro             | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Fountain Valley     | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Garden Grove        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Golden State        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1                             | 3                       | 26  |
| Huntington Beach    | 0        | 0        | 0        | 2        | 0        | 1        | 0        | 0        | 3                             | 127                     | 382   |
| Irvine Ranch        | 2        | 1        | 1        | 1        | 1        | 0        | 0        | 0        | 6                             | 98                      | 480   |
| La Habra            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| La Palma            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Laguna Beach        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Mesa Water          | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Moulton Niguel      | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Newport Beach       | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 1                             | 21                      | 42  |
| Orange              | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 2                             | 45                      | 383   |
| 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   |
| <b>MWDOC Totals</b> | <b>2</b> | <b>1</b> | <b>1</b> | <b>3</b> | <b>1</b> | <b>2</b> | <b>1</b> | <b>0</b> | <b>14</b>                     | <b>348</b>              | <b>1741</b>   |
| Anaheim             | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Fullerton           | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0                             | 0                       | 0   |
| Santa Ana           | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 1                             | 11                      | 180   |
| <b>OC Totals</b>    | <b>2</b> | <b>1</b> | <b>1</b> | <b>3</b> | <b>1</b> | <b>2</b> | <b>2</b> | <b>0</b> | <b>15</b>                     | <b>359</b>              | <b>1921</b>   |

[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<sup>(1)</sup>**  
through MWDOC and Local Agency Conservation Programs

| Agency              | FY 11/12       |                | FY 12/13       |                | FY 13/14       |                | FY 14/15         |                  | FY 15/16         |                  | FY 16/17       |                | Total Program    |                   | Cumulative Water Savings across all Fiscal Years |
|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|------------------|-------------------|--|
|                     | Res            | Comm.          | Res            | Comm.          | Res            | Comm.          | Res              | Comm.            | Res              | Comm.            | Res            | Comm.          | Res              | Comm.             |  |
| Brea                | 3,397          | 9,466          | 7,605          | 0              | 5,697          | 0              | 71,981           | 30,617           | 118,930          | 404,411          | 3,556          | 0              | 211,166          | 444,494           | 209,444  |
| Buena Park          | 0              | 0              | 0              | 0              | 0              | 0              | 11,670           | 1,626            | 77,127           | 16,490           | 3,741          | 0              | 92,538           | 18,116            | 32,32  |
| East Orange         | 0              | 0              | 0              | 0              | 1,964          | 0              | 18,312           | 0                | 27,844           | 0                | 0              | 0              | 48,120           | 0                 | 16,59  |
| El Toro             | 4,723          | 0              | 4,680          | 72,718         | 4,582          | 0              | 27,046           | 221,612          | 63,546           | 162,548          | 2,852          | 23,019         | 107,429          | 479,897           | 232,07   |
| Fountain Valley     | 1,300          | 0              | 682            | 7,524          | 4,252          | 0              | 45,583           | 5,279            | 65,232           | 0                | 418            | 0              | 117,467          | 12,803            | 48,90  |
| Garden Grove        | 14,013         | 0              | 4,534          | 0              | 8,274          | 0              | 67,701           | 22,000           | 177,408          | 49,226           | 11,504         | 0              | 283,434          | 117,403           | 167,57   |
| Golden State        | 42,593         | 30,973         | 31,813         | 3,200          | 32,725         | 8,424          | 164,507          | 190,738          | 310,264          | 112,937          | 0              | 0              | 581,902          | 346,272           | 377,04   |
| Huntington Beach    | 27,630         | 48,838         | 9,219          | 12,437         | 20,642         | 0              | 165,600          | 58,942           | 305,420          | 270,303          | 8,057          | 21,534         | 537,369          | 415,705           | 354,96   |
| Irvine Ranch        | 6,450          | 1,666          | 32,884         | 32,384         | 36,584         | 76,400         | 234,905          | 317,999          | 782,844          | 2,675,629        | 86,480         | 38,722         | 1,185,570        | 3,155,594         | 1,351,72   |
| La Habra            | 0              | 8,262          | 0              | 0              | 0              | 0              | 14,014           | 1,818            | 49,691           | 72,164           | 0              | 0              | 63,705           | 90,019            | 55,33  |
| La Palma            | 0              | 0              | 0              | 0              | 0              | 0              | 4,884            | 0                | 10,257           | 59,760           | 0              | 0              | 15,141           | 59,760            | 21,66  |
| Laguna Beach        | 2,533          | 0              | 2,664          | 1,712          | 4,586          | 226            | 13,647           | 46,850           | 47,614           | 0                | 0              | 0              | 72,022           | 48,788            | 47,58  |
| Mesa Water          | 6,777          | 0              | 10,667         | 0              | 22,246         | 0              | 131,675          | 33,620           | 220,815          | 106,896          | 3,006          | 42,848         | 395,186          | 183,364           | 193,22   |
| Moulton Niguel      | 4,483          | 26,927         | 11,538         | 84,123         | 14,739         | 40,741         | 314,250          | 1,612,845        | 889,748          | 1,059,279        | 107,274        | 0              | 1,342,988        | 2,840,054         | 1,511,26   |
| Newport Beach       | 3,454          | 0              | 3,548          | 2,346          | 894            | 0              | 33,995           | 65,277           | 76,675           | 375,404          | 953            | 0              | 119,519          | 443,027           | 175,93   |
| Orange              | 12,971         | 0              | 15,951         | 8,723          | 11,244         | 0              | 120,093          | 281,402          | 289,990          | 106,487          | 1,271          | 2,366          | 451,520          | 398,978           | 314,61   |
| San Clemente        | 21,502         | 0              | 16,062         | 13,165         | 18,471         | 13,908         | 90,349           | 1,137            | 215,249          | 438,963          | 3,228          | 0              | 364,861          | 467,173           | 278,70   |
| San Juan Capistrano | 22,656         | 103,692        | 29,544         | 27,156         | 12,106         | 0              | 101,195          | 32,366           | 197,290          | 143,315          | 2,624          | 40,748         | 365,415          | 347,277           | 310,13   |
| Santa Margarita     | 1,964          | 11,400         | 10,151         | 11,600         | 17,778         | 48,180         | 211,198          | 514,198          | 534,048          | 550,420          | 8,822          | 25,912         | 788,444          | 1,167,271         | 686,40   |
| Seal Beach          | 0              | 0              | 3,611          | 0              | 0              | 0              | 15,178           | 504              | 17,349           | 15,911           | 0              | 0              | 36,138           | 16,415            | 18,43  |
| Serrano             | 0              | 0              | 0              | 0              | 2,971          | 0              | 41,247           | 4,403            | 127,877          | 4,403            | 0              | 0              | 172,095          | 4,403             | 56,02  |
| South Coast         | 6,806          | 0              | 9,429          | 4,395          | 15,162         | 116,719        | 84,282           | 191,853          | 181,102          | 128,290          | 3,312          | 0              | 300,093          | 457,581           | 308,31   |
| Trabuco Canyon      | 272            | 0              | 1,542          | 22,440         | 2,651          | 0              | 14,771           | 0                | 42,510           | 88,272           | 0              | 0              | 61,746           | 110,712           | 61,32  |
| Tustin              | 0              | 0              | 9,980          | 0              | 1,410          | 0              | 71,285           | 14,137           | 232,697          | 33,362           | 9,043          | 0              | 324,415          | 47,499            | 119,41   |
| Westminster         | 0              | 0              | 0              | 0              | 0              | 0              | 14,040           | 34,631           | 71,833           | 23,902           | 5,894          | 0              | 91,767           | 58,533            | 48,07  |
| Yorba Linda         | 0              | 0              | 0              | 0              | 0              | 0              | 112,136          | 12,702           | 360,279          | 116,985          | 15,958         | 0              | 499,722          | 129,687           | 199,42   |
| <b>MWDOC Totals</b> | <b>183,524</b> | <b>241,224</b> | <b>216,104</b> | <b>303,923</b> | <b>238,978</b> | <b>304,598</b> | <b>2,195,544</b> | <b>3,692,153</b> | <b>5,493,639</b> | <b>7,015,357</b> | <b>277,993</b> | <b>195,149</b> | <b>8,629,772</b> | <b>11,860,825</b> | <b>7,196,41</b>                                  |

|                         |          |          |          |          |          |              |          |          |          |          |          |          |          |              |             |
|-------------------------|----------|----------|----------|----------|----------|--------------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|
| Anaheim                 | 0        | 0        | 0        | 0        | 0        | 0            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0            | 0           |
| Fullerton               | 0        | 0        | 0        | 0        | 0        | 0            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0            | 5,16        |
| Santa Ana               | 0        | 0        | 0        | 0        | 0        | 0            | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0            | 0           |
| <b>Non-MWDOC Totals</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>9,214</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>9,214</b> | <b>5,16</b> |

|                             |                |                |                |                |                |                |                  |                  |                  |                  |                |                |                  |                   |              |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|------------------|-------------------|--------------|
| <b>Orange County Totals</b> | <b>183,524</b> | <b>241,224</b> | <b>216,104</b> | <b>303,923</b> | <b>238,978</b> | <b>313,812</b> | <b>2,195,544</b> | <b>3,692,153</b> | <b>5,493,639</b> | <b>7,015,357</b> | <b>277,993</b> | <b>195,149</b> | <b>8,629,772</b> | <b>11,870,039</b> | <b>7,202</b> |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|------------------|------------------|------------------|----------------|----------------|------------------|-------------------|--------------|

<sup>(1)</sup> Installed device numbers are listed as square feet

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

| Agency                      | FY05-06   | FY 06-07     | FY 07-08     | FY 08-09      | FY 09-10     | FY 10-11   | FY 11-12   | FY 12-13     | FY 13-14     | FY 14-15      | FY 15-16      | FY 16-17   | Total         | Cumulative Water Savings across all Fiscal Years |
|-----------------------------|-----------|--------------|--------------|---------------|--------------|------------|------------|--------------|--------------|---------------|---------------|------------|---------------|--|
| Brea                        | 0         | 2            | 7            | 43            | 48           | 8          | 0          | 0            | 38           | 146           | 154           | 0          | 446           | 77.33  |
| Buena Park                  | 0         | 1            | 2            | 124           | 176          | 7          | 0          | 0            | 96           | 153           | 112           | 3          | 674           | 156.36   |
| East Orange CWD RZ          | 0         | 0            | 10           | 12            | 1            | 0          | 0          | 0            | 13           | 26            | 24            | 0          | 86            | 16.77  |
| EI Toro WD                  | 0         | 392          | 18           | 75            | 38           | 18         | 0          | 133          | 218          | 869           | 264           | 10         | 2,035         | 437.46   |
| Fountain Valley             | 0         | 69           | 21           | 262           | 54           | 17         | 0          | 0            | 41           | 132           | 220           | 3          | 819           | 207.73   |
| Garden Grove                | 0         | 14           | 39           | 443           | 181          | 24         | 0          | 0            | 63           | 350           | 363           | 2          | 1,479         | 348.01   |
| Golden State WC             | 2         | 16           | 36           | 444           | 716          | 37         | 80         | 2            | 142          | 794           | 512           | 5          | 2,786         | 638.90   |
| Huntington Beach            | 2         | 13           | 59           | 607           | 159          | 76         | 0          | 0            | 163          | 1,190         | 628           | 2          | 2,899         | 574.72   |
| Irvine Ranch WD             | 29        | 1,055        | 826          | 5,088         | 2,114        | 325        | 0          | 1,449        | 810          | 1,777         | 2,798         | 478        | 16,749        | 4,557.31   |
| Laguna Beach CWD            | 0         | 2            | 17           | 91            | 28           | 11         | 0          | 0            | 45           | 112           | 81            | -1         | 386           | 84.65  |
| La Habra                    | 0         | 3            | 18           | 296           | 34           | 20         | 0          | 0            | 37           | 94            | 83            | 2          | 587           | 165.43   |
| La Palma                    | 0         | 1            | 10           | 36            | 26           | 13         | 0          | 0            | 21           | 59            | 52            | 0          | 218           | 46.77  |
| Mesa Water                  | 0         | 247          | 19           | 736           | 131          | 7          | 0          | 0            | 147          | 162           | 162           | 2          | 1,613         | 511.90   |
| Moulton Niguel WD           | 0         | 20           | 104          | 447           | 188          | 46         | 0          | 0            | 400          | 2,497         | 1,939         | 35         | 5,676         | 855.99   |
| Newport Beach               | 0         | 5            | 19           | 163           | 54           | 13         | 0          | 0            | 49           | 168           | 243           | 4          | 718           | 145.76   |
| Orange                      | 1         | 20           | 62           | 423           | 79           | 40         | 0          | 0            | 142          | 978           | 416           | 8          | 2,170         | 422.10   |
| San Juan Capistrano         | 0         | 10           | 7            | 76            | 39           | 11         | 0          | 0            | 35           | 140           | 202           | 0          | 520           | 94.35  |
| San Clemente                | 0         | 7            | 22           | 202           | 66           | 21         | 0          | 0            | 72           | 225           | 246           | 11         | 872           | 181.13   |
| Santa Margarita WD          | 0         | 5            | 14           | 304           | 151          | 44         | 0          | 0            | 528          | 997           | 1,152         | 104        | 3,299         | 508.92   |
| Seal Beach                  | 0         | 678          | 8            | 21            | 12           | 1          | 0          | 2            | 17           | 50            | 69            | -1         | 857           | 348.77   |
| Serrano WD                  | 2         | 0            | 1            | 13            | 5            | 0          | 0          | 0            | 2            | 40            | 55            | 3          | 121           | 18.39  |
| South Coast WD              | 2         | 2            | 29           | 102           | 41           | 12         | 23         | 64           | 102          | 398           | 235           | 6          | 1,016         | 178.83   |
| Trabuco Canyon WD           | 0         | 0            | 4            | 23            | 23           | 0          | 0          | 0            | 10           | 108           | 169           | 1          | 338           | 48.26  |
| Tustin                      | 0         | 186          | 28           | 387           | 479          | 17         | 0          | 0            | 64           | 132           | 201           | 13         | 1,507         | 460.79   |
| Westminster                 | 0         | 17           | 25           | 541           | 167          | 23         | 0          | 0            | 35           | 161           | 359           | 2          | 1,330         | 346.69   |
| Yorba Linda WD              | 0         | 14           | 89           | 323           | 96           | 18         | 0          | 0            | 40           | 280           | 379           | 6          | 1,245         | 281.27   |
| <b>MWDOC Totals</b>         | <b>38</b> | <b>2,779</b> | <b>1,494</b> | <b>11,282</b> | <b>5,106</b> | <b>809</b> | <b>103</b> | <b>1,651</b> | <b>3,330</b> | <b>12,038</b> | <b>11,118</b> | <b>698</b> | <b>50,446</b> | <b>11,714.60</b>                                 |
| Anaheim                     | 0         | 255          | 78           | 2,771         | 619          | 114        | 0          | 0            | 156          | 1,188         | 614           | 37         | 5,832         | 1,690.74   |
| Fullerton                   | 0         | 4            | 28           | 286           | 60           | 23         | 0          | 0            | 61           | 293           | 286           | 11         | 1,052         | 223.22   |
| Santa Ana                   | 0         | 11           | 25           | 925           | 89           | 23         | 0          | 0            | 33           | 602           | 293           | 17         | 2,018         | 515.39   |
| <b>Non-MWDOC Totals</b>     | <b>0</b>  | <b>270</b>   | <b>131</b>   | <b>3,982</b>  | <b>768</b>   | <b>160</b> | <b>0</b>   | <b>0</b>     | <b>250</b>   | <b>2,083</b>  | <b>1,193</b>  | <b>65</b>  | <b>8,902</b>  | <b>2,429.36</b>                                  |
| <b>Orange County Totals</b> | <b>38</b> | <b>3,049</b> | <b>1,625</b> | <b>15,264</b> | <b>5,874</b> | <b>969</b> | <b>103</b> | <b>1,651</b> | <b>3,580</b> | <b>14,121</b> | <b>12,311</b> | <b>763</b> | <b>59,348</b> | <b>14,143.95</b>                                 |

**HOME WATER SURVEYS PERFORMED BY AGENCY**  
through MWDOC and Local Agency Conservation Programs

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

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

**SYNTHETIC TURF INSTALLED BY AGENCY<sup>[1]</sup>**  
 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  |
| <b>MWDOC Totals</b> | <b>132,820</b> | <b>18,033</b> | <b>181,848</b> | <b>89,642</b> | <b>97,806</b> | <b>8,624</b> | <b>20,184</b> | <b>0</b> | <b>432,658</b> | <b>116,299</b> | <b>384.83</b>                                    |

|                         |              |            |               |               |               |               |              |          |               |               |              |
|-------------------------|--------------|------------|---------------|---------------|---------------|---------------|--------------|----------|---------------|---------------|--------------|
| 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         |
| <b>Non-MWDOC Totals</b> | <b>9,400</b> | <b>876</b> | <b>16,282</b> | <b>20,093</b> | <b>20,303</b> | <b>65,300</b> | <b>4,227</b> | <b>0</b> | <b>50,212</b> | <b>86,269</b> | <b>83.81</b> |

|                             |                |               |                |                |                |               |               |          |                |                |               |
|-----------------------------|----------------|---------------|----------------|----------------|----------------|---------------|---------------|----------|----------------|----------------|---------------|
| <b>Orange County Totals</b> | <b>142,220</b> | <b>18,909</b> | <b>198,130</b> | <b>109,735</b> | <b>118,109</b> | <b>73,924</b> | <b>24,411</b> | <b>0</b> | <b>482,870</b> | <b>202,568</b> | <b>468.63</b> |
|-----------------------------|----------------|---------------|----------------|----------------|----------------|---------------|---------------|----------|----------------|----------------|---------------|

[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  |
| Laquna 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          | 2,987.73   |
| 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         | 7,684.27   |
| 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              | 988            | 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   |
| <b>MWDOC Totals</b> | <b>24,256</b>  | <b>12,879</b> | <b>18,778</b> | <b>20,765</b> | <b>21,136</b> | <b>30,242</b> | <b>24,918</b> | <b>27,175</b> | <b>31,827</b> | <b>27,568</b> | <b>3,654</b> | <b>3,242</b> | <b>2,031</b> | <b>861</b> | <b>4</b> | <b>249,336</b> | <b>113,878.61</b>                                |

|                         |              |              |              |              |              |               |               |               |               |               |            |            |            |            |          |                |                  |
|-------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|------------|------------|------------|------------|----------|----------------|------------------|
| 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        |
| <b>Non-MWDOC Totals</b> | <b>3,011</b> | <b>4,161</b> | <b>3,687</b> | <b>7,583</b> | <b>5,207</b> | <b>18,477</b> | <b>12,133</b> | <b>19,298</b> | <b>22,636</b> | <b>15,988</b> | <b>924</b> | <b>582</b> | <b>531</b> | <b>369</b> | <b>3</b> | <b>114,590</b> | <b>48,682.70</b> |

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