

**MEETING OF THE  
BOARD OF DIRECTORS OF THE  
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**  
Jointly with the  
**PLANNING & OPERATIONS COMMITTEE**  
April 14, 2014, 8:30 a.m.  
MWDOC Conference Room 101

**P&O Committee:**

Director Osborne, Chair  
Director Barbre  
Director Hinman

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

Ex Officio Member: L. Dick

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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>.

**ACTION ITEMS**

1. AGREEMENT WITH FRASER COMMUNICATIONS FOR PROFESSIONAL COMMUNICATIONS SERVICES

**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.)

2. DRAFT OF BAY DELTA CONSERVATION PLAN COMMENT LETTER

3. STATUS OF ONGOING MWDOC RELIABILITY AND ENGINEERING/PLANNING PROJECTS
4. WEROC REPORTS
  - a. Status of Ongoing WEROC Projects
  - b. California and Orange County Drought Task Force
  - c. WEROC EOC Communications and Radio Update
  - d. WEROC Response to LaHabra Earthquake (March 29, 2014)
5. WATER USE EFFICIENCY REPORTS
  - a. Status of Water Use Efficiency Projects
  - b. Water Use Efficiency Programs Savings and Implementation Report
6. REVIEW OF ISSUES RELATED TO CONSTRUCTION PROGRAMS, FACILITY AND EQUIPMENT MAINTENANCE, WATER STORAGE, WATER QUALITY, CONJUNCTIVE USE PROGRAMS, EDUCATION, DISTRICT FACILITIES, and MEMBER-AGENCY RELATIONS

## ADJOURNMENT

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

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



**ACTION ITEM**

April 16, 2014

**TO:** Board of Directors

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

Robert Hunter, General Manager

Staff Contact: Darcy M. Burke

**SUBJECT:** **Agreement with Fraser Communications for Professional Communications Services**

**STAFF RECOMMENDATION**

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Staff recommends the Board of Directors review and approve the attached agreement with Fraser Communications for Professional Communications Services for the Value of Water Communications Plan.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**DETAILED REPORT**

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In February, the Board approved Request for Qualifications for Professional Communications Services for the Value of Water Communications Plan (RFQ) was distributed to a number of communications firms, MWDOC Member Agencies for distribution, Metropolitan Member Agencies for distribution and posted on the MWDOC website.

As part of the process, firms were able to submit clarifying questions prior to the submittal deadline. Those questions and answers were distributed to all of the firms that notified MWDOC of their intent to submit. Seven proposals were received; six of them within the allotted timeframe. A review panel was held on Friday, March 28<sup>th</sup>. The Public Affairs Workgroup was invited to participate on the review panel as part of the selection process. The review panel consisted of MWDOC's Public Affairs staff and Stacy Taylor from Mesa Water District.

<b>Budgeted (Y/N):</b>	Budgeted amount: \$154,965	Core X__	Choice __
<b>Action item amount: \$132,795</b>		Line item: 32-7040	
<b>Fiscal Impact (explain if unbudgeted):</b>			

Each submittal was reviewed and evaluated on the following criteria as define in the RFQ:

EXPERIENCE (Maximum 20 points) : \_\_\_\_\_

APPROACH (Maximum 20 points) : \_\_\_\_\_

EDUCATION (Maximum 20 points) : \_\_\_\_\_

BUDGET (Maximum 20 points) : \_\_\_\_\_

TEAM (Maximum 10 points) : \_\_\_\_\_

REFERENCE (Maximum 10 points) : \_\_\_\_\_

TOTAL SCORE:\_\_\_\_\_

In addition, Metropolitan Water District of Southern California also recently entered into an agreement with Fraser Communications for similar work. Staff has been in contact with both Metropolitan staff and Renee Fraser on exploring ways to share information and seek to achieve cost savings for both organizations as appropriate.

The review panel unanimously selected Fraser Communications. Based on this recommendation, staff is requesting the Board review and approve the attached agreement for Professional Communications Services with Fraser Communications in the amount of \$132, 795 for Phase 2 of the Value of Water Communications Plan.

## STANDARD AGREEMENT FOR CONSULTANT SERVICES

This **AGREEMENT** for consulting services dated April 16, 2014, which includes all exhibits and attachments hereto, "**AGREEMENT**" is made on the last day executed below by and between **MUNICIPAL WATER DISTRICT OF ORANGE COUNTY**, hereinafter referred to as "**DISTRICT**," and, Fraser Communications hereinafter referred to as "**CONSULTANT**" for Professional Communications Services hereinafter referred to as "**SERVICES**."<sup>1</sup> **DISTRICT** and **CONSULTANT** are also referred to collectively herein as the "**PARTIES**" and individually as "**PARTY**". The **PARTIES** agree as follows:

### **I      PURPOSE AND SCOPE OF WORK**

#### **A.      Consulting Work.**

**DISTRICT** hereby contracts with **CONSULTANT** to provide general or special **SERVICES** as more specifically set forth in **Exhibit "B"** attached hereto and incorporated herein. Tasks other than those specifically described therein shall not be performed without prior written approval of **DISTRICT's** General Manager.

#### **B.      Independent Contractor.**

**CONSULTANT** is retained as an independent contractor for the sole purpose of rendering professional and/or special **SERVICES** described herein and is not an agent or employee of **DISTRICT**. **CONSULTANT** shall be solely responsible for the payment of all federal, state and local income tax, social security tax, Workers' Compensation insurance, state disability insurance, and any other taxes or insurance **CONSULTANT**, as an independent contractor, is responsible for paying under federal, state or local law. **CONSULTANT** is thus not eligible to receive workers' compensation, medical, indemnity or retirement benefits, including but not limited to enrollment in CalPERS. Unless, expressly provided herein, **CONSULTANT** is not eligible to receive overtime, vacation or sick pay. **CONSULTANT** shall not represent or otherwise hold out itself or any of its directors, officers, partners, employees, or agents to be an agent or employee of **DISTRICT**. **CONSULTANT** shall have the sole and absolute discretion in determining the methods, details and means of performing the **SERVICES** required by **DISTRICT**. **CONSULTANT** shall furnish, at his/her own expense, all labor, materials, equipment and transportation necessary for the successful completion of the **SERVICES** to be performed under this **AGREEMENT**. **DISTRICT** shall not have any right to direct the methods, details and means of the **SERVICES**; however, **CONSULTANT** must receive prior written approval from **DISTRICT** before using any sub-consultants for **SERVICES** under this **AGREEMENT**.

#### **C.      Changes in Scope of Work**

If **DISTRICT** requires changes in the tasks or scope of work shown in **Exhibit "B"** or additional work not specified therein, **DISTRICT** shall prepare a written change order. If **CONSULTANT** believes work or materials are required outside the tasks or scope of work described in **Exhibit "B,"** it shall submit a written request for a change order to the **DISTRICT**. A change order must be approved and signed by the **PARTIES** before **CONSULTANT** performs any work outside the scope of work shown in **Exhibit "B."** **DISTRICT** shall have no responsibility to compensate **CONSULTANT** for such work without an approved and signed change order. Change orders shall specify the change in the budgeted amount for **SERVICES**.

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<sup>1</sup> Pursuant to Section 8002 of the District's Administrative Code, the District's "Ethics Policy" set forth at sections 7100-7111 of the Administrative Code is attached hereto as Exhibit "A" and incorporated herein by this reference.

## **II      TERM**

This **AGREEMENT** shall commence upon the date of its execution and shall extend thereafter for the period specified in **Exhibit "B"** or, if no time is specified, until terminated on thirty (30) days notice as provided herein.

## **III      BUDGET, FEES, COSTS, BILLING, PAYMENT AND RECORDS**

### **A.      Budgeted Amount for SERVICES**

**CONSULTANT** is expected to complete all **SERVICES** within the Budgeted Amount set forth on **Exhibit "B."** The total compensation for the **SERVICES** to be performed under this **AGREEMENT** shall not exceed the Budgeted Amount unless modified as provided herein. Upon invoicing the **DISTRICT** 80% of the Budgeted Amount, **CONSULTANT** shall prepare and provide to **DISTRICT** a "cost to complete" estimate for the remaining **SERVICES**. The **PARTIES** shall work together to complete the project within the agreed-upon Budgeted Amount, but the obligation to complete the **SERVICES** within the Budgeted Amount lies with the **CONSULTANT**.

### **B.      Fees**

Fees shall be billed per the terms and conditions and at the rates set forth on **Exhibit "B"** for the term of the **AGREEMENT**. Should the term of the **AGREEMENT** extend beyond the period for which the rates are effective, the rates specified in **Exhibit "B"** shall continue to apply unless and until modified by consent of the **PARTIES**.

### **C.      Notification Clause**

Formal notices, demands and communications to be given hereunder by either **PARTY** shall be made in writing and may be effected by personal delivery or by registered or certified mail, postage prepaid, return receipt requested and shall be deemed communicated as of the date of mailing. If the name or address of the person to whom notices, demands or communication shall be given changes, written notice of such change shall be given, in accordance with this section, within five(5) working days.

#### **Notices shall be made as follows:**

Municipal Water District of Orange County  
Name: Darcy M. Burke  
Title: Director of Public Affairs  
18700 Ward Street, P.O.Box 20895  
Fountain Valley, CA 92708

Company: Fraser Communications  
Contact Name: Renee Fraser  
Title: President & CEO  
Address:  
City, State, Zip: Santa Monica, CA

### **D.      Billing and Payment**

**CONSULTANT's** fees shall be billed by the 25<sup>th</sup> day of the month and paid by **DISTRICT** on or before the 15<sup>th</sup> of the following month. Invoices shall reference the Purchase Order number from the **DISTRICT**.

**DISTRICT** shall review and approve all invoices prior to payment. **CONSULTANT** agrees to submit additional supporting documentation to support the invoice if requested by **DISTRICT**. If **DISTRICT** does not approve an invoice, **DISTRICT** shall send a notice to **CONSULTANT** setting forth the reason(s) the invoice was not approved. **CONSULTANT** may re-invoice **DISTRICT** to cure the defects identified in the **DISTRICT** notice. The revised invoice

will be treated as a new submittal. If **DISTRICT** contests all or any portion of an invoice, **DISTRICT** and **CONSULTANT** shall use their best efforts to resolve the contested portion of the invoice.

#### **E. Billing Records**

**CONSULTANT** shall keep records of all **SERVICES** and costs billed pursuant to this **AGREEMENT** for at least a period of seven (7) years and shall make them available for review and audit if requested by **DISTRICT**.

### **IV DOCUMENTS**

All **MATERIALS** as defined in Paragraph XI below, related to **SERVICES** performed under this **AGREEMENT** shall be furnished to **DISTRICT** upon completion or termination of this **AGREEMENT**, or upon request by **DISTRICT**, and are the property of **DISTRICT**.

### **V TERMINATION**

Each **PARTY** may terminate this **AGREEMENT** at any time upon thirty (30) days written notice to the other **PARTY**, except as provided otherwise in **Exhibit "B."** In the event of termination: (1) all work product prepared by or in custody of **CONSULTANT** shall be promptly delivered to **DISTRICT**; (2) **DISTRICT** shall pay **CONSULTANT** all payments due under this **AGREEMENT** at the effective date of termination; (3) **CONSULTANT** shall promptly submit a final invoice to the **DISTRICT**, which shall include any and all non-cancelable obligations owed by **CONSULTANT** at the time of termination, (4) neither **PARTY** waives any claim of any nature whatsoever against the other for any breach of this **AGREEMENT**; (5) **DISTRICT** may withhold 125 percent of the estimated value of any disputed amount pending resolution of the dispute, consistent with the provisions of section III D above, and; (6) **DISTRICT** and **CONSULTANT** agree to exert their best efforts to expeditiously resolve any dispute between the **PARTIES**.

### **VI INSURANCE REQUIREMENTS**

**CONSULTANT** shall obtain prior to commencing work and maintain in force and effect throughout the term of this **AGREEMENT**, all insurance set forth below.

#### **A. Workers' Compensation Insurance**

By his/her signature hereunder, **CONSULTANT** certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and that **CONSULTANT** will comply with such provisions before commencing the performance of the **SERVICES** under this **AGREEMENT**.

**CONSULTANT** and sub-consultant will keep workers' compensation insurance for their employees in effect during all work covered by this **AGREEMENT**. An ACORD certificate of insurance or other certificate of insurance satisfactory to **DISTRICT**, evidencing such coverage must be provided (1) by **CONSULTANT** and (2) by sub-consultant's upon request by **DISTRICT**.

## **B. Professional Liability Insurance**

**CONSULTANT** shall file with **DISTRICT**, before beginning professional **SERVICES**, an ACORD certificate of insurance, or any other certificate of insurance satisfactory to **DISTRICT**, evidencing professional liability coverage of not less than \$1,000,000 per claim and \$1,000,000 aggregate, requiring 30 days notice of cancellation (10 days for non-payment of premium) to **DISTRICT**.

Such coverage shall be placed with a carrier with an A.M. Best rating of no less than A: VII, or equivalent. The retroactive date (if any) of such insurance coverage shall be no later than the effective date of this **AGREEMENT**. In the event that the **CONSULTANT** employs sub-consultants as part of the **SERVICES** covered by this **AGREEMENT**, **CONSULTANT** shall be responsible for requiring and confirming that each sub-consultant meets the minimum insurance requirements specified herein.

## **C. Other Insurance**

**CONSULTANT** will file with **DISTRICT**, before beginning professional **SERVICES**, ACORD certificates of insurance, or other certificates of insurance satisfactory to **DISTRICT**, evidencing general liability coverage of not less than \$1,000,000 per occurrence for bodily injury, personal injury and property damage; automobile liability (owned, scheduled, non-owned or hired) of at least \$1,000,000 for bodily injury and property damage each accident limit; workers' compensation (statutory limits) and employer's liability (\$1,000,000) (if applicable); requiring 30 days (10 days for non payment of premium) notice of cancellation to **DISTRICT**. For the coverage required under this paragraph, the insurer(s) shall waive all rights of subrogation against **DISTRICT**, and its directors, officers, agents, employees, attorneys, consultants or volunteers. **CONSULTANT's** insurance coverage shall be primary insurance as respects **DISTRICT**, its directors, officers, agents, employees, attorneys, consultants and volunteers for all liability arising out of the activities performed by or on behalf of the **CONSULTANT**. Any insurance pool coverage, or self-insurance maintained by **DISTRICT**, and its directors, officers, agents, employees, attorneys, consultants or volunteers shall be excess of the **CONSULTANT's** insurance and shall not contribute to it.

The general liability coverage shall give **DISTRICT**, its directors, officers, agents, employees, attorneys, consultants and authorized volunteers additional insured status using ISO endorsement CG2010, CG2033, or equivalent. Coverage shall be placed with a carrier with an A.M. Best rating of no less than A: VII, or equivalents. In the event that the **CONSULTANT** employs sub-consultant as part of the work covered by the **AGREEMENT**, it shall be the **CONSULTANT's** responsibility to require and confirm that each sub-consultant meets the minimum insurance requirements specified herein.

## **D. Expiration of Coverage**

If any of the required coverages expire during the term of the **AGREEMENT**, **CONSULTANT** shall deliver the renewal certificate(s) including the general liability additional insured endorsement to **DISTRICT** at least ten (10) days prior to the expiration date.



## **INDEMNIFICATION**

To the fullest extent permitted by applicable law, **CONSULTANT** shall indemnify, defend and hold harmless **DISTRICT**, its officers, Directors and employees and authorized volunteers, and each of them from and against:

- a. When the law establishes a professional standard of care for the **CONSULTANT's** services, all claims and demands of all persons that arise out of, pertain to, or relate to the **CONSULTANT's** negligence, recklessness or willful misconduct in the performance (or actual or alleged non-performance) of the work under this agreement. **CONSULTANT** shall defend itself against any and all liabilities, claims, losses, damages, and costs arising out of or alleged to arise out of **CONSULTANT's** performance or non-performance of the work hereunder, and shall not tender such claims to **DISTRICT** nor its directors, officers, employees, or authorized volunteers, for defense or indemnity.
- b. Any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of **CONSULTANT**.
- c. Any and all losses, expenses, damages (including damages to the work itself), attorney's fees and other costs, including all costs of defense, which any of them may incur with respect to the failure, neglect, or refusal of **CONSULTANT** to faithfully perform the work and all of the **CONSULTANT'S** obligations under the agreement. Such costs, expenses, and damages shall include all costs, including attorneys' fees, incurred by the indemnified parties in any lawsuit to which they are a party.
- d. **DISTRICT** agrees to be responsible for the accuracy, completeness, and propriety of information concerning **DISTRICT'S** organization, industry and products which **DISTRICT** furnishes to **CONSULTANT** in connection with the performance of this Agreement. **DISTRICT** agrees that with regard to any and all claims or representations regarding **DISTRICT'S** business, product(s), service(s) or message(s) as contained in any and all material which **CONSULTANT** creates or produces for **DISTRICT** or in which **CONSULTANT** is involved on **DISTRICT'S** behalf, and which has been approved by **DISTRICT**, **DISTRICT** shall indemnify, defend (through counsel reasonably acceptable to **CONSULTANT**) and hold **CONSULTANT** free and harmless from and against all claims, actions, causes of action, disputes, debts, obligations, liabilities, losses, costs and expenses, including attorneys' fees arising from or pertaining in any manner whatsoever to said material provided, however, in no event shall **DISTRICT** be liable for any consequential, incidental, punitive, special or exemplary damages to **CONSULTANT** hereunder.

**CONSULTANT** shall defend, at **CONSULTANT's** own cost, expense and risk, any and all such aforesaid suits, actions, or other legal proceedings of every kind that may be brought or instituted against **DISTRICT** or its directors, officers, employees, or authorized volunteers with legal counsel reasonably acceptable to **DISTRICT**.

**CONSULTANT** shall pay and satisfy any judgment, award or decree that may be rendered against **DISTRICT** or its directors, officers, employees, or authorized volunteers, in any and all such suits, actions, or other legal proceedings.

**CONSULTANT** shall reimburse **DISTRICT** or its directors, officers, employees, or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing indemnity herein provided.

**CONSULTANT's** obligation to indemnify shall not be restricted to insurance proceeds, if any, received by **DISTRICT**, or its directors, officers, employees, or authorized volunteers.

## **VII     FINANCIAL DISCLOSURE AND CONFLICTS OF INTEREST**

Although **CONSULTANT** is retained as an independent contractor, **CONSULTANT** may still be required, under the California Political Reform Act and **DISTRICT's** Administrative Code, to file annual disclosure reports. **CONSULTANT** agrees to file such financial disclosure reports upon request by **DISTRICT**. Further, **CONSULTANT** shall file the annual summary of gifts required by Section 7105 of the **DISTRICT's** Ethics Policy, attached hereto as **Exhibit "A."**

Failure to file financial disclosure reports upon request and failure to file the required gift summary are grounds for termination of this **AGREEMENT**. Any action by **CONSULTANT** that is inconsistent with **DISTRICT's** Ethics Policy current at the time of the action is grounds for termination of this **AGREEMENT**. The Ethics Policy as of the date of this **AGREEMENT** is attached hereto as **Exhibit "A."**

## **VIII PERMITS AND LICENSES**

**CONSULTANT** shall procure and maintain all permits, licenses and other government-required certification necessary for the performance of its **SERVICES**, all at the sole cost of **CONSULTANT**. None of the items referenced in this section shall be reimbursable to **CONSULTANT** under the **AGREEMENT**. **CONSULTANT** shall comply with any and all applicable local, state, and federal regulations and statutes including Cal/OSHA requirements.

## **IX LABOR AND MATERIALS**

**CONSULTANT** shall furnish, at its own expense, all labor, materials, equipment, tools, transportation and other items or services necessary for the successful completion of the **SERVICES** to be performed under this **AGREEMENT**. **CONSULTANT** shall give its full attention and supervision to the fulfillment of the provisions of this **AGREEMENT** by its employees and sub-consultant and shall be responsible for the timely performance of the **SERVICES** required by this **AGREEMENT**. All compensation for **CONSULTANT's SERVICES** under this **AGREEMENT** shall be pursuant to **Exhibit "B"** to the **AGREEMENT**.

Only those **SERVICES**, materials, administrative, overhead and travel expenses specifically listed in **Exhibit "B"** will be charged and paid. No other costs will be paid. **CONSULTANT** agrees not to invoice **DISTRICT** for any administrative expenses, overhead or travel time in connection with the **SERVICES**, unless agreed upon and listed in **Exhibit "B"**.

## **X CONFIDENTIALITY AND RESTRICTIONS ON DISCLOSURE**

### **A. Confidential Nature of Materials**

**CONSULTANT** understands that all documents, records, reports, data, or other materials (collectively "**MATERIALS**") provided by **DISTRICT** to **CONSULTANT** pursuant to the **AGREEMENT**, including but not limited to draft reports, final report(s) and all data, information, documents, graphic displays and other items that are not proprietary to **CONSULTANT** and that are utilized or produced by **CONSULTANT** pursuant to the **AGREEMENT** are to be considered confidential for all purposes.

### **B. No Disclosure of Confidential Materials**

**CONSULTANT** shall be responsible for protecting the confidentiality and maintaining the security of **DISTRICT MATERIALS** and records in its possession. All **MATERIALS** shall be deemed confidential and shall remain the property of **DISTRICT**. **CONSULTANT** understands the sensitive nature of the above and agrees that neither its officers, partners, employees, agents or sub-consultants will release, disseminate, or otherwise publish said reports or other such data, information, documents, graphic displays, or other materials except as provided herein or as authorized, in writing, by **DISTRICT's** representative. **CONSULTANT** agrees not to make use of such **MATERIALS** for any purpose not related to the performance of the **SERVICES** under the **AGREEMENT**. **CONSULTANT** shall not make written or oral disclosures thereof, other than as necessary for its performance of the **SERVICES** hereunder, without the prior written approval of **DISTRICT**. Disclosure of confidential **MATERIALS** shall not be made

to any individual, agency, or organization except as provided for in the **AGREEMENT** or as provided for by law.

### **C. Protections to Ensure Control Over Materials**

All confidential **MATERIALS** saved or stored by **CONSULTANT** in an electronic form shall be protected by adequate security measures to ensure that such confidential **MATERIALS** are safe from theft, loss, destruction, erasure, alteration, and any unauthorized viewing, duplication, or use. Such security measures shall include, but not be limited to, the use of current virus protection software, firewalls, data backup, passwords, and internet controls.

The provisions of this section survive the termination or completion of the **AGREEMENT**.

## **XI OWNERSHIP OF DOCUMENTS AND DISPLAYS**

All original written or recorded data, documents, graphic displays, reports or other **MATERIALS** which contain information relating to **CONSULTANT's** performance hereunder and which are originated and prepared for **DISTRICT** pursuant to the **AGREEMENT** are instruments of service and shall become the property of **DISTRICT** upon completion or termination of the Project. **CONSULTANT** hereby assigns all of its right, title and interest therein to **DISTRICT**, including but not limited to any copyright interest. In addition, **DISTRICT** reserves the right to use, duplicate and disclose in whole, or in part, in any manner and for any purpose whatsoever all such data, documents, graphic displays, reports or other **MATERIALS** delivered to **DISTRICT** pursuant to this **AGREEMENT** and to authorize others to do so.

To the extent that **CONSULTANT** utilizes any of its property (including, without limitation, any hardware or software of **CONSULTANT** or any proprietary or confidential information of **CONSULTANT** or any trade secrets of **CONSULTANT**) in performing **SERVICES** hereunder, such property shall remain the property of **CONSULTANT**, and **DISTRICT** shall acquire no right or interest in such property.

## **XII EQUAL OPPORTUNITY**

**DISTRICT** is committed to a policy of equal opportunity for all and to providing a work environment that is free of unlawful discrimination and harassment. In keeping with this commitment, **DISTRICT** maintains a policy prohibiting unlawful discrimination and harassment in any form based on race, religious creed, color, national origin, ancestry, physical or mental disability, medical condition, pregnancy or childbirth, marital status, gender, sex, sexual orientation, veteran status or age by officials, employees and non-employees (vendors, contractors, etc.).

This policy applies to all employees, consultants and contractors of the **DISTRICT** whom the **DISTRICT** knows or has reason to know are violating this policy. Appropriate corrective action will be taken against all offenders, up to and including immediate discharge or termination of this **AGREEMENT**. During, and in conjunction with, the performance of this **AGREEMENT**, **CONSULTANT** shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, marital status or national origin.

### **XIII INTEGRATION OF ALL OTHER AGREEMENTS**

This **AGREEMENT**, including any Exhibits and Addenda, contains the entire understanding of the **PARTIES**, and there are no further or other agreements or understandings, written or oral, in effect between the **PARTIES** hereto relating to the subject matter hereof. Any prior understanding or agreement of the **PARTIES** shall not be binding unless expressly set forth herein and, except to the extent expressly provided for herein, no changes of this **AGREEMENT** may be made without the written consent of both **PARTIES**.

### **XIV ATTORNEYS' FEES**

In any action at law or in equity to enforce any of the provisions or rights under this **AGREEMENT**, the prevailing **PARTY** shall be entitled to recover from the unsuccessful **PARTY** all costs, expenses and reasonable attorney's fees incurred therein by the prevailing **PARTY** (including, without limitations, such costs, expense and fees on any appeals), and if such prevailing **PARTY** shall recover judgment in any such action or proceeding, such costs, expenses, including those of expert witnesses and attorneys' fees, shall be included as part of this judgment.

### **XV JURISDICTION AND VENUE SELECTION**

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

This Agreement may be subject to suspension of payments or termination, or both, and the CONSULTANT may be subject to debarment if the DISTRICT determines that: CONSULTANT has made a false certification, or;

- ii. CONSULTANT violates the certification by failing to carry out the requirements noted above.

**IN WITNESS WHEREOF**, the **PARTIES** have hereunto affixed their names as of the day and year thereafter, which shall be and is the effective date of this **AGREEMENT**.

**APPROVED BY:**

**CONSULTANT ACCEPTANCE:**

\_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

Robert Hunter,  
General Manager  
Municipal Water District of Orange County  
18700 Ward Street, P.O.Box 20895  
Fountain Valley, CA 92708  
(714) 963-3058

Name: Renee Fraser  
Fraser Communications  
Address: 1631 Pontius Avenue  
Los Angeles, CA 90025  
Phone: 310-319-9101  
Tax I.D. # 95-4683679

## EXHIBIT "A"

### ETHICS POLICY

§7100-§7111

#### §7100 PURPOSE

The policy of MWDOC is to maintain the highest standards of ethics from its Board members, officers and employees (all shall be referred to as employees for the purposes of this section). The proper operation of MWDOC requires decisions and policy to be made in the proper manner, that public office not be used for personal gain, and that all individuals associated with MWDOC remain impartial and responsible toward the public. Accordingly, all employees are expected to abide by the highest ethical standards and integrity when dealing on behalf of MWDOC with fellow Board members or employees, vendors, contractors, customers, and other members of the public.

#### §7101 RESPONSIBILITIES OF BOARD MEMBERS

Board members are obliged to uphold the Constitution of the United States and the Constitution of

Internal Use Only:
Program No. _____
Line Item: _____
Funding Year: _____
Contract Amt.: _____
Purchase Order # _____

the State of California and shall comply with all applicable laws regulating Board member conduct, including conflicts of interest and financial disclosure laws. No Board member or officer shall grant any special consideration, treatment, or advantage to any person or group beyond that which is available to every other person or group in the same circumstances.

#### §7102 PROPER USE OF MWDOC PROPERTY AND RESOURCES

Except as specifically authorized, no employee shall use or remove or permit the use or removal of MWDOC property, including MWDOC vehicles, equipment, telephones, office supplies, and materials for personal convenience or profit. No employee shall require another MWDOC employee to perform services for the personal convenience or profit of another employee. Each employee must protect and properly use any MWDOC asset within his/her control, including information recorded on paper or in electronic form. Employees shall safeguard MWDOC property, equipment, monies, and assets against unauthorized use or removal, as well as from loss due to criminal act or breach of trust.

Employees are responsible for maintaining written records, including expense reports, in sufficient detail to reflect accurately and completely all transactions and expenditures made on MWDOC's behalf. Creating a document with misleading or false information is prohibited.

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Motion - 1/17/96;

#### §7103 CONFLICT OF INTEREST

All MWDOC Directors, officers, and employees at every level shall comply with the requirements of Section 1090 of the California Government Code which prohibits such persons from being financially interested in any contract made by them in their official capacity, or by any body or board of which they are members, or from being a purchaser at any sale or a vendor at any purchase made by them in their official capacity.

All Directors and employees designated under MWDOC's Conflict of Interest Code ("designated employees") and employees required to report under Chapter 7, Article 2 of the Political Reform Act (Government Code Section 7300 et seq.) shall promptly and fully comply with all requirements thereof.

MWDOC employees who are not designated employees under MWDOC's Conflict of Interest Code shall refrain from participating in, making a recommendation, or otherwise attempting to influence MWDOC's selection of a contractor, consultant, product, or source of supply if the non-designated employee, or an immediate family member, has a direct or indirect financial interest in the outcome of the selection process. No employee shall use his/her position with MWDOC in any manner for the purpose of obtaining personal favors, advantages or benefits for him/herself or an immediate family member from a person or entity doing business or seeking to do business with MWDOC. Such favors, advantages, or benefits would include, but are not limited to: 1) offers of employment; 2) free or discounted goods or services; or 3) gifts.

#### **§7104 GIFTS**

No employee shall accept, directly or indirectly, any compensation, reward or gift from any source except from MWDOC, for any action related to the conduct of MWDOC business, except as set forth below:

1. Acceptance of food and refreshments of nominal value on infrequent occasions in the ordinary course of a breakfast, luncheon or dinner meeting or other meeting or on an inspection tour where the arrangements are consistent with the transaction of official business.\*
2. Acceptance of transportation, lodging, meals or refreshments, in connection with attendance at widely attended gatherings sponsored by industrial, technical or professional organizations; or in connection with attendance at public ceremonies or similar activities financed by nongovernmental sources where the employee's participation on behalf of MWDOC is the result of an invitation addressed to him or her in his/her official capacity, and the transportation, lodging, meals or refreshment accepted is related to, and is in keeping with, his/her official participation.\*
3. Acceptance of unsolicited advertising or promotional materials such as pens, pencils, note pads, calendars, or other items of nominal value.\*
4. Acceptance of plaques and commemorative mementoes, of nominal value, or of value only to the recipient, such as service pins, recognition awards, retirement mementoes.
5. Acceptance of incidental transportation from a private organization provided it is furnished in connection with an employee's official duties and is of the type customarily provided by the private organization.

\* Nothing herein shall be deemed to relieve any Director or designated employee from reporting the value of such meals, transportation, lodging or gifts and abstaining from participation in any decision of MWDOC which could foreseeably have a material financial effect on the donor when the value of such gifts reaches the limits set forth in MWDOC's Conflict of Interest Code and the Political Reform Act.

In no event shall any employee accept gifts from any single source, the cumulative value of which exceeds the applicable gift limit under California law.

A gift or gratuity, the receipt of which is prohibited under this section, shall be returned to the donor. If return is not possible, the gift or gratuity shall be turned over to a public or charitable institution without being claimed as a charitable deduction and a report of such action and the

reasons why return was not feasible shall be made on MWDOC records. When possible, the donor also shall be informed of this action.

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Motion - 1/17/96;

#### **§7105 PERSONS OR COMPANIES REPORTING GIFTS**

All persons and companies doing business with MWDOC, with the exception of public agencies, shall submit a summary, by January 31 of each calendar year, of all gifts claimed for internal vendor audits (including meals) made to, or on behalf of, employees or Directors of MWDOC, or their immediate family members, that have occurred in the normal course of business during the previous calendar year. Failure to provide this information to MWDOC may result in the termination of MWDOC business with that person or company.

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Motion - 7/21/93; Motion - 8/18/93;

#### **§7106 USE OF CONFIDENTIAL INFORMATION**

Confidential information (i.e., information which is exempt from disclosure under the California Public Records Act) shall not be released to unauthorized persons unless the disclosure is approved by the Board, President of the Board, or General Manager. Employees are prohibited from using any confidential information for personal advantage or profit.

#### **§7107 POLITICAL ACTIVITIES**

Employees are free to endorse, advocate, contribute to, or otherwise support any political party, candidate, or cause they may choose; however, employees are prohibited from soliciting political funds or contributions at MWDOC facilities. In any personal political activity an employee may be involved in, it shall be made clear that the employee is acting personally and not for MWDOC.

#### **§7108 IMPROPER ACTIVITIES**

Employees shall not interfere with the proper performance of the official duties of others, but are strongly encouraged to fulfill their own moral obligations to the public, MWDOC, and its member agencies by disclosing, to the extent not expressly prohibited by law, improper activities within their knowledge. No employee shall directly or indirectly use or attempt to use the authority or influence of his/her position for the purpose of intimidating, threatening, coercing, commanding, or influencing any person with the intent of interfering with that person's duty to disclose improper activity.

#### **§7109 VIOLATION OF POLICY – STAFF AND STAFF OFFICERS**

If an employee is reported to have violated MWDOC's Ethics Policy, the matter shall be referred to the General Manager for investigation and consideration of any appropriate action warranted which may include employment action such as demotion, reduction in salary, or termination. If a Board appointed officer (Secretary, Treasurer or General Manager) is reported to have violated MWDOC's Ethics Policy, the matter shall be referred to the Executive Committee for investigation and consideration of any appropriate action.

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Motion - 1/17/96;



## **§7110 VIOLATION OF POLICY -- DIRECTORS**

A perceived violation of this policy by a Director should be referred to the President of the Board or the full Board of Directors for investigation, and consideration of any appropriate action warranted. A violation of this policy may be addressed by the use of such remedies as are available by law to MWDOC, including, but not limited to: (a) adoption of a resolution expressing disapproval of the conduct of the Director who has violated this policy, (b) injunctive relief, or (c) referral of the violation to MWDOC Legal Counsel and/or the Grand Jury.

## **§7111 PERIODIC REVIEW OF CONFLICT OF INTEREST AND ADMINISTRATIVE GUIDELINES**

During the first quarter of the year immediately following an election (every two years), the Board shall meet to review and/or receive a presentation that addresses principles relating to reporting guidelines on compensation, conflict of interest issues, and standards for rules of conduct.

**Please note** If using Consultant's proposal as Exhibit "B" please attach the proposal or or complete the standard Exhibit "B" Form below, BOTH Parties must verify that all sections of this form are FULLY ADDRESSED and the appropriate Exhibit is attached and labeled accordingly

**EXHIBIT "B"**

**SCOPE OF WORK, TERMS OF AGREEMENT  
AND TERMS AND CONDITIONS FOR BILLING**

<b>Company: Fraser Communications</b> <b>Name: Renee Fraser</b> <b>Address: 1631 Pontius Avenue</b> <b>Los Angeles, CA 90025</b> <b>Phone: 310-3199101</b> <b>Tax I.D. #95-4683679</b>
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1. Term – Commencement April 16, 2014 Termination September 30 2014

2. Fees/Rates to be billed –as follows:

**Task 1. Project Administration and Management**

Staff Member and Title	No. of Hours	Hourly Rate	Cost per Staff Member
Renee Fraser - Account Management Partner	36	\$240	\$8,640
Ilene Prince - Account Management Senior	28	\$180	\$5,040
Kristin Barker - Assistant	24	\$75	\$1,800
Neelam Tolani - Controller	4	\$125	\$500
Amitesh Krishna	2	\$95	\$190
<b>Total</b>			<b>\$16,170</b>

**Task 2. Develop Question Guide**

Staff Member and Title	No. of Hours	Hourly Rate	Cost per Staff Member
Renee Fraser - Research Director	27	\$200	\$5,400
Caryn Goldsmith - Research Senior	14	\$175	\$2,450
Kristin Barker - Research Assistant	14	\$75	\$1,050

<b>Total</b>			<b>\$8,900</b>
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**Task 3. Conduct Focus Groups and Write Report**

Staff Member and Title	No. of Hours	Hourly Rate	Cost per Staff Member
Renee Fraser - Research Director	72	\$200	\$14,400
Caryn Goldsmith - Research Senior/Moderator	64	\$175	\$11,200
Kristin Barker - Research Assistant	43	\$75	\$3,225
<b>Total</b>			<b>\$28,825</b>

**Focus Group Recruiting, Incentives and Facility**

Total Cost	<b>\$37,750</b>
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**Task 4. Subject Matter Expertise**

Staff Member and Title	No. of Hours	Hourly Rate	Cost per Staff Member
Renee Fraser - Research Director	50	\$200	\$10,000
Caryn Goldsmith - Research Senior	32	\$175	\$5,600
Ed Means - Water Expert	32	\$175	\$5,600
Lisa Schellenbach - Media Planning	24	\$175	\$4,200
<b>Total</b>			<b>\$25,400</b>

**Task 5. Creative Materials Development**

Staff Member and Title	No. of Hours	Hourly Rate	Cost per Staff Member
Sergio Belletini - Creative Director	18	\$200	\$3,600
Lisa Ansis - Senior Copywriter	16	\$175	\$2,800
Amber Gusa - Art Director	26	\$175	\$4,550

Paul Davis - Studio Artist	18	\$125	\$2,250
Laura Bearer - Production Manager	12	\$150	\$1,800
<b>Total</b>			<b>\$15,000</b>

#### **Task 6 Final Report Copies**

Total Cost	<b>\$750</b>
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**TOTAL PROJECT GRAND TOTAL** **\$132,795**

- Budgeted Amount – Compensation is to be on a “time and material” basis, not to exceed \$132,795. **CONSULTANT's** fees shall be billed by the 25<sup>th</sup> day of the month and paid by **DISTRICT** on or before the 15th of the following month. Invoices shall reference the Purchase Order number from the **DISTRICT**

Upon invoicing **DISTRICT** 80% of the contract amount, **CONSULTANT** shall prepare and provide to **DISTRICT** a “cost to complete” estimate for the remaining work.

- Scope of Work/Services – (Insert **SPECIFIC** description – do not list “refer to Exhibit “ )

#### **Development of discussion guide**

The development of the discussion guide will include several stages. We would begin with an initial briefing with MWDOC. At that meeting we would define goals and objectives, gather any additional input, review all past research, and review any current news items and recent data from secondary sources. After digesting that information and any new data, we propose developing a draft outline of the discussion guide that includes learning from past research and the values study conducted by MWDOC. The values research gives good guidance as to what people value most (jobs, education, public safety and transparency in government).

In addition to discussion guide input, we are proposing a workshop for messaging. This is described in greater detail in the next section, but essentially it would enable PIOs to bring the messaging they have utilized to the session so that all ideas are considered for the focus group.

The recommended path for discussion guide development and review is:

- Develop draft to be reviewed by MWDOC team
- Refine draft
- Present draft to MWDOC PIOs
- Obtain input/refine draft
- Share draft, messaging to be tested and research design with selected member agencies
- Prepare final discussion guide for focus groups

## **Focus group design and approach**

The goal of this research project is to develop insights and understanding of the diverse customer base and stakeholders served by MWDOC and its member agencies. Focus groups will be used to determine attitudes, motivations and preferences for creative messaging. Eight focus groups are proposed.

## **Our approach**

Discussion topics would include:

- Consumer attitudes and behaviors toward water consumption/conservation in California
- Current ways participants conserve; awareness of rebates, etc.
- Potential ways to affect and ultimately change attitudes/behaviors related to water usage; use of social media, attention to bloggers, etc.
- Current perceptions of the need for water conservation
- The power of different motivators (building off the “value of water survey” findings) for water conservation and promoting understanding the value of water
- Evaluation of messaging approaches (built from “value of water” findings and values research)
- Different taglines and images will be shown to gauge comprehension of the message, reactions, preferences and ability to motivate

## **Methodology**

We are proposing a total of eight groups, five conducted in English, three in Spanish, in three regions of Orange County. The respondents will be separated according to income breakouts in order to get the broadest group of consumers possible, representing potentially differing opinions about the issues. Also, two groups of water conservation mavens will be included to better understand the best strategies to communicate about these issues. The location of the actual groups will be determined with input from MWDOC. The recommended research design is as follows:

The segments are defined as follows:

- **Affluent:** HHI \$150K if cohabitating; \$100K if single. 25-65 years old. Own home, limit to 2-3 condo/townhome owners per group.
  - **Orange County North**
  - **Orange County East**
  - **Orange County South**
  - **Cross-section general market**
  - **Asian**
  - **Spanish in language**
  - **Mavens/opinion leaders**
- **Middle Income:** HHI \$50-\$100K/co-habitating; \$40K-\$100K/single. 25-60 years old. Mix of owners and renters. Limit to renters no more than half the group.
- **Lower Income:** HHI <\$50K/cohabitating; <\$40K/single. 25-50 years old.

- **Mavens:** High knowledge base on Southern California water issues. Will segment based on a screener to be approved by client, which will “test” respondents’ knowledge on water issues. We will identify younger “mavens” to be included.

We will look to recruit a mix of men and women as well as age ranges. We would recruit 10 for eight to show.

All consumers will be screened to ensure that they will be fully articulate and enthusiastic contributors. Articulate consumers who are able to talk about their feelings and passions in a group setting are important for any research project – and much of the success of the research relies on each one of these consumers being a quality respondent.

The focus group will be led by one of Fraser Communications’ professional moderators.

### **Development of creative components for messaging**

The development of the creative messaging will occur in three stages. For the first stage, we recommend having an input session with MWDOC and the water agency conservation members/PIOs so that they can offer creative messaging ideas and elements they have utilized or tested or those that have been suggested to them. In order to obtain the highest level of buy-in, it is important to gain everyone’s involvement. We will do this in a workshop that allows participants to share their messages, why they worked, and any supporting data or rationale.

In the second phase, we will take all of the information gathered and develop a range of creative options. This will include some of the ideas brought forward by the PIOs as well as fresh ideas based on Fraser’s knowledge and experience. Each of the ideas will be developed as messaging platforms or statements to be tested in the focus groups. We will also develop posters or concept images that include taglines to be tested for reaction by the focus groups.

The third phase occurs after we have input from the focus groups. Once people have reacted to the messaging and we have the insights from the discussion, we will refine the creative elements. We will then turn those into posters, print ads and other elements needed by the member agencies. These would be created in electronic form, housed in an archive for downloading and available for local agencies to customize.

### **Project timeline**

Implementation of research and messaging - May

Research report – End of June

Media recommendations and creative elements finalized – Finished by July 31

### **Discovery and preparation**

Briefing and design of research and sample; discussion guide development; meetings to review and share design

Contract signature date through early May

**Implementation**

Development of screener; identification of research facilities; recruitment of focus group respondents

May 1 – 31, 2014

Development and review with MWDOC of creative stimuli

May 1 – 31, 2014

Conducting of focus groups

May 2014

Meetings with stakeholder groups to provide update, assessment and progress report, opportunity for inclusion of new questions

May 2014

**Reporting and presentation of messaging**

MWDOC presentation of research results

June 30, 2014

Presentation to MWDOC of creative refinements of messaging

June 30, 2014

Presentation of research findings and creative refinements to PIOs and member agencies

June 30, 2014

Handoff and distribution of electronic material

June 30, 2014

**Creative elements and media recommendations**

Recommendations for media channels

July 31, 2014

All electronic materials archived and available to MWDOC

July 31, 2014

5. Consultant Representative: Renee Fraser



**INFORMATION ITEM**

April 14, 2014

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

**FROM: Robert Hunter, General Manager**

Staff Contact: Karl Seckel/Richard Bell

**SUBJECT: DRAFT of BDCP Comment Letter**

**STAFF RECOMMENDATION**

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Staff recommends the Planning & Operations Committee provide input into the DRAFT letter. The comment letter will be brought back at a later date as an ACTION item.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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Staff has been working with a group of volunteers on preparation of a Comment Letter on the BDCP. The attached letter is NOT complete at this time, but is nearing completion. This would be a good time for the Board to weigh in.

Workgroup Participants have included:

- Karl Seckel & Richard Bell, MWDOC
- Paul Cook, Christine Compton & Director Steve LaMar, IRWD
- Dan Ferons & Jim Leach, SMWD
- Andy Brunhart, South Coast WD
- Joone Lopez, MNWD
- West Curry, City of San Juan Capistrano

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



- Robert Ennis, OCWD
- Ed Means, Means Consulting
- Steve Arakawa, MET
- Heather Dion, TPA

The letter has a short synopsis at the beginning and then includes a variety of comments on the process. The letter was drafted in a manner to require a response to the comments noted, hence the length. The due date for comments is June 13, however, the Implementing Agreement, which is an important document, has not yet been released. Our understanding is that the Implementing Agreement is supposed to receive a 60-day review as part of the BDCP process.

Key aspects of the comment letter have to do with:

- This may be the best opportunity for a comprehensive solution (partial solution) for the Statewide water issues and therefore, the letter supports the BDCP Preferred Alternative No. 4.
- The documents are incredibly complex and lengthy and truly beyond any one human being to comprehend. We have done our best to boil down our comments to what we believe are the key ones. In such a complex process with much having to do with NEW science and understanding of the implications changes in one area will have in other areas, there will ALWAYS be a significant amount of on-going debate. Even though these documents have been in preparation for years, there is still much debate over the science of habitat and species dynamics.
- Equal standing of the coequal goals – the coequal goals of enhancing the Delta Ecosystem and achieving water supply reliability must be achieved on independent paths, meaning that one cannot be sacrificed for the other and the game and rules cannot keep changing.
- Assurances regarding supply reliability, changed conditions & decision-making – this is central to all of the comments, assurances that what is planned to happen will happen. A lot of the details of the future operations are speculative at this time. The letter advocates for having the water Permittees at the decision-making table; it should be noted that the future governance and decision-making process involves many tables, processes, meetings, solicitations, scientific input, etc. and hence having a solid foothold by our representatives, MET and the State Water Contractors, is imperative. An important aspect of assurances means:
  - It is virtually impossible to predict the outcome of the BDCP habitat restoration efforts and endangered species population dynamics, and such a standard should not be required in the DEIR/DEIS.
  - Furthermore, this means that changed circumstances under the operation of the BDCP, including the potential for new species listing, be incorporated in such a manner to result in a minimum impact on future water supply exports.
- The comments discuss “self-reliance”. The letter has staked out the position that the 2009 Delta Legislation called for water agencies to reduce future reliance on the Delta, not to become 100 percent “self-reliant”. While efforts in these areas will continue, it is important to note that “reduced reliance” does not equate to and was

never intended to require a move to 100 percent “self-reliance” and the notion of co-equal goals was never intended to result in a future with significant reduction in exports from levels achieved before the 2008 bio-opinions.

- Orange County and Southern California do not want to be “penalized” for having mandates to make additional investments in local resources without receiving credit for all that has already been done.
- From an operational scenario impacts to endangered species are controlled today by reducing exports. The BDCP Tunnel System will provide a physical means to minimize south Delta diversions and will result in greatly reduced reverse flows thereby, improving south Delta water quality and export water quality. The implementing agreement needs to recognize these benefits to allow export diversions to be restored.

Attached is a working copy of the current comment letter on BDCP.

## DRAFT ORANGE COUNTY BDCP COMMENT LETTER

### Comments of (to be inserted by entity or organization) on the Draft Public Review Bay-Delta Conservation Plan (BDCP) and Draft Environmental Impact Report/Environmental Impact Statement

Comments can be provided via mail or email as follows:

**MAIL TO:**

**BDCP Comments**

**Ryan Wulff, National Marine Fisheries Services**

**650 Capitol Mall, Suite 5-100**

**Sacramento, CA 95814**

**EMAIL TO:**

**BDCP.comments@noaa.gov**

**This version does not include a review of the  
“Implementing Agreement” as it has not yet been yet  
released.**

### **SUMMARY OVERVIEW**

The main points covered in this comment letter are:

1. MWDOC strongly supports the BDCP Preferred Alternative (No. 4) and Opposes the No Action Alternative: It is critical to the state’s economy and environment that both the State and Federal Government expeditiously follow through with the decision for adopting and implementing the BDCP.
2. Co-Equal Goals: The BDCP must be implemented in a manner consistent with the co-equal goals. Preferred Alternative (No. 4) is consistent with the Delta Reform Act of 2009's co-equal goals.
3. New Facilities and In-Delta Operational Flexibility: The modernization of the Delta conveyance system is essential in

order for habitat restoration and conservation to have its intended effect; Preferred Alternative (No. 4), which incorporates the 9,000 cfs three intake, twin tunnel conveyance system, provides the best balance between operational flexibility and modernizing the conveyance system for environmental benefit and water supply reliability.

4. Reduced Future Reliance: The 2009 Delta Legislation called for water agencies to reduce future reliance on the Delta, not to become 100 percent “self-reliant”. While efforts in these areas will continue, it is important to note that “reduced reliance” does not equate to and was never intended to require a move to 100 percent “self-reliance” and the notion of co-equal goals was never intended to result in a future with significant reduction in exports from levels achieved before the 2008 bio-opinions.
5. Plan Implementation and Regulatory Assurance: The BDCP must provide the needed implementation and regulatory structure and assurances to achieve the co-equal goals.
  - a. To us, this means that it is virtually impossible to predict the outcome of the BDCP habitat restoration efforts and endangered species population dynamics, and such a standard should not be required in the DEIR/DEIS.
  - b. Furthermore, this means that changed circumstances under the operation of the BDCP, including the potential for new species listing, be incorporated in such a manner to result in a minimum impact on future water supply exports.
6. Cost Allocation: MWD OC supports the “beneficiary pays principle” in cost allocation for all responsible parties and beneficiaries.
7. Economy, Environment and Water Management: The State Water Project is critically important to the Orange County economy, environment and water management. Implementation of the BDCP is critical to Orange County’s future.
  - a. Orange County has invested heavily to diversify our water portfolio but the SWP is a critical source of low salinity

water supply that is currently unacceptably jeopardized by the unsustainability of the current Bay-Delta system.

- b. Orange County relies on the SWP to support groundwater conjunctive use programs and water recycling programs - it is an essential part of our water reliability strategy that sustains our citizens and businesses.
- c. It is time to adopt and move the BDCP to implementation in order that we can achieve the co-equal goals of a reliable water supply for California and ecosystem restoration for the Delta.
- d. The 9,000 cfs twin tunnel BDCP Preferred Alternative (No. 4) will improve export water supply operations, reliability and water quality from the Delta in a manner that is protective of endangered species in the Delta.
- e. We support the 9,000 cfs twin tunnel Preferred Alternative (No. 4) provided reasonable assurances are included regarding governance and future decision-making in the process. We strongly advocate for a seat at the table for the water Permittees in the various oversight groups. The investment and decision-making must be structured to achieve a positive outcome for both the SWP and Permittees and the ecosystem restoration in a collaborative, partnership manner.

Detailed comments follow:

## INTRODUCTION OF FULL COMMENTS

### **(DRAFTED FOR MWDOC – AGENCIES CAN INSERT THEIR OWN BACKGROUND IN THIS SECTION)**

The Municipal Water District of Orange County (MWDOC) is pleased to submit comments on the Draft Bay Delta Conservation Plan (BDCP) and Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS).

Please note that our comments on the BDCP and Draft EIR/EIS interchangeably use the terminology “BDCP”, “BDCP process”, “the Bay-Delta Fix” and the “decision-making process” to reflect the entire suite of efforts and decisions in a comprehensive manner.

The Municipal Water District of Orange County (MWDOC) is a wholesale water supplier and resource-planning agency governed by a publicly elected seven-member Board of Directors representing seven divisions. MWDOC is the third largest member agency of Metropolitan Water District of Southern California (MET). Its service area covers all of Orange County with the exception of the three original MET member cities of Anaheim, Fullerton, and Santa Ana. MWDOC and the “Three Cities” coordinate water management planning. MWDOC serves Orange County through 28 water supply agencies, including the Orange County Water District who manages the Lower Santa Ana River Groundwater Basin.

MWDOC’s mission is “to provide reliable, high-quality supplies [of water] from Metropolitan and other sources to meet the present and future needs [of Orange County] at an equitable and economical cost, and to promote water use efficiency for all of Orange County.” This mission is implemented through coordinated water management and planning with appropriate investments in water use efficiency, water supply development, system reliability improvements and emergency preparedness. Our mission is supported by collaboration with our member agencies and through public outreach, water education, and legislative advocacy.

**MWDOC strongly supports the BDCP Preferred Alternative (No. 4) and Opposes the No Action Alternative: It is critical to the state's economy and environment that both the State and Federal Government expeditiously follow through with the decision for adopting and implementing the BDCP.**

MWDOC strongly supports the BDCP Preferred Alternative (No. 4) with the expectation that the State and Federal Government will move steadily forward with its adoption by issuing the Record of Decision and Notice of Determination by the end of this year, and by implementing the Preferred Alternative in accordance with the BDCP schedule.

We compliment the State and Federal agencies and stakeholders in developing a thorough, comprehensive and balanced BDCP Preferred Alternative that will achieve the co-equal goals of ecosystem restoration and water supply reliability. It is vital that the State of California and Federal Government follow through with this tremendous effort in collaborative planning as it is a once in a lifetime opportunity to resolve the long-standing Delta problems, and the cost of no action is too high. Our expectations are that the \$25 billion investment to implement and carry out the BDCP will result in greater certainty in California's water supply reliability, will make measurable improvements in water quality, and will restore the Delta. The Preferred Alternative appropriately achieves the proper balance between the environmental needs of the Delta watershed with the water supply reliability needs of the Delta and export areas.

In spite of the world-class efforts of Orange County to provide greater water supply certainty for eight percent of California's population and the \$200 billion economy they represent, Orange County remains dependent on imported water to meet approximately 45 percent of our average annual demand, with the State Water Project (SWP) deliveries from the Delta meeting approximately half of those needs. The Delta ecosystem and water supply conveyance problems have long been recognized, and have remained in a continuing state of degradation, conflict, and stalemate. This stalemate has been punctuated by droughts, floods, economic losses, environmental degradation and litigation every decade since the construction of the SWP in the 1960's.

We can no longer delay action in the Delta, and urge the State and Federal Government to quickly move forward with the Preferred Alternative.

MWDOC also supports the proposed governance and implementation structure for the BDCP, as the large-scale Habitat Conservation Plan and Natural Community Conservation Plan (HCP/NCCP) to be formed under federal and state Endangered Species Act (ESA). Using the HCP/NCCP governance structure proposal will ensure that all of the project's environmental and water supply reliability goals and objectives are realized.

The bottom line is that the BDCP Preferred Alternative (No. 4) offers the best solution to achieve greater supply certainty and the governance structure to provide necessary regulatory assurances. Moreover, it provides for a sustainable and balanced solution to achieve the State's policy of co-equal goals.

## COMMENTS ON THE DRAFT BDCP AND DEIR/DEIS

**Co-Equal Goals: *The BDCP must be implemented in a manner consistent with the co-equal goals. Preferred Alternative (No. 4) is consistent with the Delta Reform Act of 2009's co-equal goals.***

The BDCP and Preferred Alternative (No. 4) should be adopted and implemented because they comply with State law and the Sacramento-San Joaquin Delta Reform Act of 2009. The Delta Reform Act establishes one of the basic state goals for the Delta as seeking to:

“Achieve the two coequal goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.” Ref: California Public Resources Code Section 29702(a).



The BDCP and the Preferred Alternative balance the co-equal goals established by the Legislature in the Delta Reform Act by proposing to improve 145,000 acres of Delta habitat and permitting new conveyance facilities which will provide operational flexibility and will improve water supply reliability from the Delta.

While some critics of the BDCP have claimed that the plan unduly favors water supply interests and will permit State Water Contractors to export more water than is currently allowed, the BDCP and the Preferred Alternative do not provide a greater amount of water for export. The BDCP estimates that the average water supplies available for export will be 4.7 million acre-feet (MAF) to 5.6 MAF per year. This is the same average currently permitted for export through the Delta today.

The Delta Reform Act of 2009 established co-equal goals to provide a more reliable water supply and to protect, restore and enhance the Delta ecosystem. Orange County's primary interests in the successful implementation of the BDCP are:

1. Restoration of SWP supply to pre-2008 capabilities before imposition of the 2008 Delta smelt and salmon/steelhead biological opinions,
2. Assurances that the BDCP will provide greater supply certainty into the future without further significant mandated reductions in exports due to endangered species issues without a fair and balanced procedure, and
3. Protection of the export supply from both catastrophic outages to the Delta levee system from earthquakes and floods and from long-term sea level rise.

While the project will not expand average annual exports, it will provide certainty in the water supply, protect export supplies from catastrophic outages, and allow for a "big gulp, little sip" approach to exports. Construction of a new north Delta intake for the SWP and Central Valley Project (CVP), at high cost to the export water users, would protect this critical supply from earthquake, flood and seawater intrusion risks. It also would restore a greater level of export supply certainty and

reliability by providing operational flexibility that will minimize environmentally damaging south Delta diversions and reverse flows. The "big gulp, little sip" approach will allow for greater exports when excess river flows would normally discharge to the ocean and smaller, but consistent and predetermined export levels when Delta flows at normal or lower than normal levels. This approach makes sense and helps mitigate the impact of the 2008 opinions, but not at the expense of the environment.

**New Facilities and In-Delta Operational Flexibility: *The modernization of the Delta conveyance system is essential in order for habitat restoration and conservation to have its intended effect; Preferred Alternative (No. 4), which incorporates the 9,000 cfs three intake, twin tunnel conveyance system, provides the best balance between operational flexibility and modernizing the conveyance system for environmental benefit and water supply reliability.***

The 9,000 cfs three intake, twin tunnel conveyance system will add a new point of diversion in the north Delta area which will provide operational flexibility in how water is conveyed across the Delta. This will mitigate entrainment of fish under the current south Delta operations and will significantly curtail reverse flows. In addition, an improved conveyance system will allow the Delta to operate more naturally by minimizing conflicts between fish and water operations. This will better enable conveyance of high flows while minimizing fishery impacts. The project would substantially reduce the take of endangered species and would protect exports from earthquake, flood and sea level rise into the future. We strongly support this foundational conservation element of the BDCP, and believe that the Proposed Alternative (No. 4) proposes the best option for modernization of the conveyance system.

Proposed Alternative (No. 4) provides the best option for operational flexibility, and will allow for the "big gulp, little sip" approach. Southern California has made significant investment in water storage and

conveyance facilities, such as the Diamond Valley Reservoir, Inland Feeder and groundwater storage facilities, to allow conjunctive use storage during periods of high flows in the system. Implementation of the Preferred Alternative (No. 4) will enable a more efficient and protective location for diversion of high flows for downstream storage and subsequent dry period use than the current system can provide.

The three proposed screened intakes in the northern Delta and proposed twin tunnels, combined with the enlarged and improved SWP Clifton Court forebay intake in the southern Delta, will provide the necessary flexibility to greatly reduce conflicts between fish and water operations. Reliance solely on the existing system is not sustainable and would cause significant long-term harm to the fishery as well as adverse impacts on SWP deliveries, as has occurred since 2008. The screened intakes proposed by BDCP in the northern Delta will significantly mitigate reverse flows and south Delta diversion impacts. The Preferred Alternative (No. 4) will enable a more natural flow pattern through the Delta estuary.

The existing system is vulnerable to future sea level rise. Salinity intrusion, especially during extended dry periods, will worsen with sea level rise. With sea level rise, the ability of the existing system to meet the co-equal goals will be increasingly difficult. The Preferred Alternative (No. 4) system will help mitigate future salinity risks to water supply. In addition, the projected change in precipitation patterns to increasing rain and decreasing snow will limit the time availability windows for diversion and capture of available river flows. This change will require increased diversion rates and storage during periods when higher flows occur. This should be a recognized benefit of the BDCP and placed within its climate adaption strategy.

The Preferred Alternative (No. 4) should also provide facility protection from major flood events, up to a 200-year storm event. This will require establishing protective elevations at the Clifton Court Forebay as well as providing similar levels of protection at the recommended new north Delta diversion facilities. 200-year storm protection should be included in the BDCP.

The 9,000 cfs three intake, twin tunnel conveyance system would also protect the critical SWP and CVP supplies if massive Delta island levee failures should occur in the future from a major earthquake. The body of independent scientific evidence of the seismic risks in the Delta is growing. The best available science and engineering analysis of the Delta levee system has found that a major earthquake in the region would likely cause massive soil liquefaction, and failure of numerous levees resulting in relatively rapid seawater intrusion into Delta waterways and saltwater flooding of many islands. Under this scenario, SWP and CVP deliveries would be interrupted and significantly curtailed for up to three years resulting in severe economic damage to the state. The best available temporary solution would be a patchwork levee “pathway” that could only deliver a fraction of traditional supplies in the best-case scenario.

Seismic preparedness is crucial for this vulnerable segment of the statewide water delivery system, especially in the intervening years prior to completion of the tunnel system. The new northern Delta intakes and twin tunnels will protect future SWP deliveries and the economy of the state— providing a valuable insurance policy to improve the reliability of the system from natural disasters. Delays in its implementation of the BDCP should be avoided and the project implementation should be expedited. Approvals should not be unreasonably withheld.

**Reduced Future Reliance: *The 2009 Delta Legislation called for water agencies to reduce future reliance on the Delta, not to become 100 percent “self-reliant”. The 2009 water package called for both reduced reliance and construction of improvements in the Delta.***

As part of the 2009 Delta legislation, water agencies are required to reduce their future dependence on the Delta. Over the past several years, agencies have worked to improve water use efficiency, develop alternative local supplies, and reduce their dependence on the Delta by changing the timing of water exports. These efforts are in compliance with California’s policy “to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of

investing in improved regional supplies, conservation, and water use efficiency.” Ref: California Water Code Section 85021.

While efforts in these areas will continue, it is important to note that “reduced reliance” does not equate to and was never intended to require a move to 100 percent “self reliance.” The 2009 Delta legislation did not intend or envision reduction or elimination in water exports from the Delta, but balanced the need for all of California to use its water resources more wisely, and to reduce future pressures on the Delta ecosystem from future population and economic growth in the State.

We have grown concerned over references to “self-reliance” as this is markedly different than “reduced future reliance,” which was the intent of the law. The concept of “self-reliance” is troubling as the notion of co-equal goals was never intended to result in a future with significant reduction in exports from levels achieved before the 2008 bio-opinions. We would question whether this line of reasoning seeks to establish the pretext for ever-declining yields out of the SWP and ever increasing unit costs, further stranding imported supply investments onto our ratepayers.

We hope this is not the co-equal goal interpretation for the BDCP – to only provide a conveyance system that protects against catastrophic earthquake outages and rising sea levels – without restoration of water supplies and instead would move the State towards greater levels of ever increasingly costly and more difficult to implement “self-reliance” options.

It is our considered opinion that both improvement in supply that should be expected from the BDCP implementation and new local resource developments are necessary, as well as other longer-term federal/multi-state supply and conservation projects if we are to secure and improve our water and economic future for the benefit of a growing population.

The recently released California Water Action Plan promotes increasing self-reliance through several measures, including providing a more reliable water supply that protects export supplies from catastrophic

outages from earthquakes, major floods and rising sea levels. The California Water Action Plan focus highlights the importance of the BDCP to improve operational flexibility, protect water supplies and water quality, and restore the Delta ecosystem within a stable regulatory framework. It also goes on to state that as the Delta ecosystem improves in response to the implementation of the BDCP conservation measures, water operations would become more reliable, offering more secure water supplies. These are laudable goals of the BDCP, including restoration of export water supplies to levels that were realized before the 2008 biological opinions.

With these goals in mind, it is now time for the State and Federal Government to implement the BDCP, which was also envisioned as part of the 2009 legislation in order to improve supply reliability and ecosystem function.

**Plan Implementation and Regulatory Assurance: *The BDCP must provide the needed implementation and regulatory structure and assurances to achieve the co-equal goals. MWDOC submits the following comments related to plan implementation, governance and assurances.***

### ***Regulatory Assurances***

It is important to establish a more stable regulatory environment, which is one of the key goals of the BDCP. The BDCP offers a clear choice between a stable future and today's ineffective and adversarial species-by-species approach to regulation and ESA enforcement under Section 7 of the ESA. Under the BDCP, ESA regulations and provisions of the HCP/NCCP would provide for regulatory and economic assurances, and greater certainty for public water supply and fish and wildlife agencies. The core Adaptive Management and Monitoring program is encouraged and should help to realize achievement of the co-equal goals. It is virtually impossible to ascertain and predict with any precision the outcome of the BDCP habitat restoration efforts and endangered species population dynamics, and such a standard should not be required in the DEIR/DEIS.



The BDCP must provide regulatory assurances commensurate with the enormous investment to be made both in improved habitat and facilities that would be implemented under the plan. We generally concur with BDCP Chapter 6 Plan Implementation structure and process. It is important that under the operation of the BDCP the identified changed circumstances, including the potential for new species listing, be incorporated within the BDCP with minimum impact on future water supply exports.

Further, it is likely that unforeseen circumstances will be caused by factors other than water diversions. The plan recognizes this under Section 6.4.1 which states “... if unforeseen circumstances occur that adversely affect species covered by an HCP or NCCP, the fish and wildlife agencies will not require additional land, water or financial compensation or impose additional restrictions on the use of land, water or other natural resources.” These provisions must be retained to assure fairness in the process.

### ***Balancing and Proportionality***

In the discussion of Alternatives 4, 7 and 8 in DEIR/EIS Chapter 31 (starting at line 42, pg 31-7 and ending at line 32 on pg 31-8), the rationale for the Preferred Alternative (No. 4) is provided in terms of its balancing and proportionality between upstream salmonids, in-Delta species, and export area economy and environmental needs. In addition, the incidental take limits (ITL) should be set in some proportion to the population size of the listed species and should be adjusted accordingly based on population dynamics.

This section further indicates that Preferred Alternative (No. 4) would be subject to the “scientific decision tree” mechanism to “...ensure minimization of adverse environmental effects to water exports in response to changing conditions and evolving scientific information.” It is our understanding that the scientific decision tree analysis process would apply only to the Delta smelt (fall outflow issue from 2008 USFWS Biological Opinion “Reasonable and Prudent Alternative”) and Longfin smelt (spring outflow operations effects) (CM1). We would hope that improved data collection of the presence and abundance of these fish be monitored over a reasonable habitat range rather than be limited to historical sampling points and procedures. We also

recommend that flow changes must also be based on balancing and proportionality to the maximum extent practicable between upstream salmonids, in-Delta, and export area economy and environmental needs.

### ***Sound Science***

Sound science is critical to the success of the BDCP. We strongly support the inclusion of independent scientific investigation and research to be included in the BDCP process. The current process of reliance on agency staffs and consultants, the Delta Science Program, and independent science review panels, is very good, but it can further benefit from the inclusion of scientific investigations by researchers not part of these groups. We are also concerned that the models being used for the effects analyses may not fully consider all elements of the BDCP, as the models have recognized limitations and would likely underestimate the benefits of the BDCP. Outside expert opinions and independent research can only help the process and the process should be open to the inclusion of new scientific data and findings.

We note on page pg 31-8 the statement “Although Alternatives 7 and 8 do not include operations based on the (scientific) decision tree concept, these two alternatives would include greater levels of guaranteed spring and fall Delta outflows, which have demonstrated strong correlations with increased abundances of Delta and Longfin smelt.” We disagree with this assertion and do not believe this has been supported at an accepted scientific level. This statement should be clarified for each species where it occurs in the BDCP and DEIR/EIS. Only necessary outflows for migrating fish should be required.

### ***Habitat Conservation Plan (HCP)/Natural Community Conservation Plan (NCCP) Structure and Governance***

Establishing an HCP/NCCP in the Delta is the best vehicle for achieving the Delta’s co-equal goals, and providing assurances that both environmental protection and water supply reliability will be achieved.

It is important that the BDCP is being developed as a 50-year habitat conservation plan with the co-equal goals of restoring the Delta ecosystem and securing California water supplies. A habitat conservation plan is a proper vehicle for reaching these co-equal goals because it will bring the interested parties to the same table, and



establish clear operating rules and conservation measures for the 50-year term proposed in the BDCP and its associated EIR/EIS. It is also important to note that the 50-year term proposed meets the objective declared by the Legislature in Water Code Section 85020, which requires that the water and environmental resources of the Delta be managed over the long term.

There must be a strong voice for participating public water agencies in the BDCP process. There are good examples of multiple Permittee interests working collaboratively with resource agencies in southern California on Federal Habitat Conservation Plans (HCP) and State Natural Community Conservation Plans (NCCP) implementation. For example, MET has Permittee status as part of a multi-state, multi-species HCP on the Colorado River because southern California's water supply reliability is tied to the success of the plan.

In Orange County, agencies have successfully implemented HCP/NCCPs incorporating assurances and representation for all participants. For example, in Orange County both the Santa Margarita Water District and Irvine Ranch Water District are participants in HCP/NCCP processes.

As one of the first communities in California to implement a HCP/NCCP, Orange County and the Central/Coastal HCP/NCCP demonstrated how the private and public sectors, including water agencies, can successfully partner with the resource agencies to allow for a holistic and broad-based ecosystem approach to habitat conservation and ecological protection while allowing for appropriate development and urban planning. The Central/Coastal HCP/NCCP in Orange County has demonstrated how substantial amounts of habitat can be conserved and restored based on an ecosystem approach, which better protects biological diversity and improves habitat for species of concern. Ultimately, the use of a similar HCP/NCCP, as proposed in the BDCP, will provide better ecosystem protection and restoration outcomes in the Delta.

Orange County's Central/Coastal HCP/NCCP is also a prime example of how HCP/NCCPs ensure that the habitat protection and other operating parameters agreed to in an HCP/NCCP are binding on all of the parties involved. Like the process proposed in the BDCP and the long-term 50-

year permit discussed in its associated documents, the Central/Coastal HCP/NCCP is a long-term agreement with a permit in effect until 2071.

As the coordinating entity for the management of the 37,000-acre reserve system under the Central/Coastal HCP/NCCP, the Nature Reserve of Orange County serves the important role of working to implement the HCP/NCCP on behalf of its signatories. Its role is to ensure that the agreed upon natural communities and species are protected, and that the permit requirements for the reserve are met. After more than a decade, the Nature Reserve of Orange County has continued to bring all of the interested parties to the same table to ensure that the agreement reached in the HCP/NCCP is respected. We believe that the BDCP HCP/NCCP can do the same for the interests in the Delta.

### ***Authorized Entity Group***

Permittees, such as water providers, must have a strong voice in the governance of the BDCP because water providers have a huge vested interest in the success of the effort as they are directly affected by the risk to water supply by its failure. Permittees are currently envisioned as key members of the “Authorized Entity Group” which, according to the BDCP documents, “will provide input and guidance on general policy and program-related matters, monitor and assess the effectiveness of the Implementation Office in implementing the Plan and foster and maintain collaborative and constructive relationships with fish and wildlife agencies, other public agencies, stakeholders, local governments and interested parties.” This is good and effective governance and these provisions must be retained in the final plan.

### ***Permit Oversight Group***

Our understanding is that the Permit Oversight Group, consisting of representatives of state and federal fish and wildlife agencies, will ensure “that the BDCP is being properly implemented.” This group has “final decision-making about real-time operations.” The Permit Oversight Group is apparently empowered to shut down the water exports and change the permits without Permittee recourse. We believe this is flawed and inconsistent with the co-equal goals of the Plan.

In early administrative draft versions of the plan that were available to the public, there was an appeals process that would enable decisions to be reviewed by the Secretary of the Interior and Secretary of Commerce. We believe this appeals step is critical, as Orange County and others across the state substantially depend on the SWP for their water supply. This change from earlier drafts would impose an unacceptable veto power without adequate recourse. The appeals process must be provided as before. Our concern is best alleviated via a balanced process including the ability for appeals. The process must avoid the more rigid and case by case Section 7 consultation approach that we have experienced and the uncertainty it can create.

The investment is too great to be vulnerable to unilateral actions driven solely by regulators without allowing the functioning of the BDCP plan to achieve the co-equal goals. As currently written, this provision appears to undermine the BDCP, and it needs to be revised along the lines as described.

### ***Implementing Agreement***

The “Implementing Agreement” is necessary to provide a contractual, legally-binding agreement that spells out the commitments and assurances as well as the terms and conditions for on-going implementation of the BDCP. Given the high level of BDCP investment, the water community needs reasonable certainty regarding the expected amount of water supply to be restored that was lost as a result of the 2008 biological opinions.

It should be clearly recognized in the implementation structure and agreement decision-making process that the new, screened North Delta intake system will not only greatly improve salinity control and water supply reliability from catastrophic levee failure and future sea level rise, but will avoid entrainment losses of fish as well as minimizing impingement losses from current south Delta diversions. In addition, the new intake system will provide much needed operational flexibility that will enable significant protections to endangered species as well as maintaining environmental and water quality benefits to the south Delta that are provided by the SWP and CVP. These benefits will be made possible through the ability to curtail south Delta endangered species

take by changing the timing and diversion rate by use of the new North Delta intake system.

Currently, endangered species take by the existing south Delta unscreened forebay diversion operations are controlled by reducing exports. The BDCP will provide a physical means to minimize south Delta diversions. In addition, the added operational flexibility will result in greatly reduced reverse flows and related, improved south Delta water quality, and improved export water quality. The implementing agreement needs to recognize these benefits to allow export diversions to be restored.

### ***Salinity Control***

Before the construction of the CVP and SWP reservoirs, salinity intrusion far into the Delta was a common occurrence during very dry years. Since the construction of Shasta and Oroville Reservoirs and with the 1978 SWRCB D-1485 water quality control decision, the CVP and SWP have provided broad salinity control benefits to the Delta that have helped to protect in-Delta agriculture and domestic uses as well as export water quality, even as San Joaquin River flows were depleted by upstream diversion. We concur that salinity control is an important component of the BDCP. We also note that natural variability must be recognized within the BDCP and some relaxation of salinity control objectives must be allowed during severe droughts.

In addition, with future sea level rise, the BDCP needs to provide for a gradual relaxation of the X2 salinity control point, as releasing more and more stored water, which is made possible by both the CVP and SWP, will cause increasingly greater shortages in water supply at increasingly greater economic impact to the state. The estuary would be expected to shift upstream with sea level rise and this should be accounted for in the 50 year permit period. The BDCP must recognize that the existing Delta agricultural areas may require some form of land use conversion into the future.

### ***Recognize Need for Additional Upstream Storage***

At this time, storage is not part of the BDCP; however, additional north of Delta and south of Delta storage will be critical in the future to enable the capture of high flows during wet periods for subsequent use. This will be especially important during periods of prolonged drought. Such facilities would be of statewide and national benefit, and both the State and Federal Government should financially contribute to their development. The BDCP should recognize the need and capacity of additional upstream and downstream surface storage that would realize their full benefits with the implementation of Preferred Alternative (No. 4). The benefits to upstream, in-Delta, and downstream environments and their economies should be described.

The BDCP should also recognize that additional upstream storage would provide additional benefits to achieving both co-equal goals of the plan. These include environmental flows, new drought water supply, and water quality improvement. Additional upstream storage can provide for environmental flows to help to stem sea level rise effects, but a gradual adaption will be required and should be recognized in the plan. The proposed Sites Reservoir would provide significant benefits through storage of high flows in wet years.

### ***Scientific Decision Tree and Project Yield***

The BDCP holds the potential to stabilize SWP and CVP annual deliveries to between a range of 4.7 to 5.6 MAF (Prior 20-year average deliveries were 5.2 MAF) and to stabilize them within this range over the 50 year permit period, but this depends upon the future outcome of “Scientific Decision Tree” studies that will refine future spring and fall outflows. The BDCP indicates that without the BDCP the Delta will continue in ecosystem decline, future deliveries would be reduced between 3.4 to 3.9 MAF as the result of new listings, higher requirements for outflows during wet and above-normal precipitation years would be required, and using fixed limits on take rather than proportionate take based on actual population size and dynamics would be likely.

The Decision Tree process is critical; water agencies require a seat at the table to represent the water supply and economic interests of the public that we, as public agencies, serve. Further, the water agencies

have a high level of interest in ensuring that adaptability will result in regulatory agencies working collaboratively with the Permittees as provided for under the state and federal ESA laws for habitat and natural community conservation plans. It is important to ensure that the process is not skewed and has not established pre-determined outflows and compliance locations.

**Plan Implementation and Regulatory Assurance: *The BDCP must provide the needed implementation and regulatory structure and assurances to achieve the co-equal goals. MWDOC submits the following comments related to plan implementation, governance and assurances.***

The BDCP and the 9,000 cfs three intake, twin tunnel conveyance system would significantly improve export water quality by reducing total dissolved solids (TDS), bromide, dissolved organic carbon (DOC) and other contaminants that currently impact the south Delta. This is especially important for Orange County for a broad range of water management purposes. It is our understanding, that future SWP deliveries under the Preferred Alternative (No. 4) would realize a reduction in concentrations, on average, of approximately 20 percent from existing conditions. Reductions in TDS, bromide and DOC will help to sustain Orange County's groundwater basins, enhance recycling usage, and reduce treatment and consumer costs. Improving source water quality is an important value of BDCP.

Reductions in DOC and bromide in SWP water will lower disinfection by-product formation in public water systems. Compliance with these U.S. Environmental Protection Agency and California Department of Public Health regulated compounds requires expensive water treatment to meet public health requirements. Reducing DOC levels will also significantly reduce chemical and energy usage in ozone or chlorine based disinfection processes saving the ratepayer money and reducing environmental impact.

Further, given the high TDS and hardness levels in Colorado River water, lower TDS and softer SWP water is essential to help manage the long-term salt balance in southern California and Orange County



groundwater basins, thereby, minimizing treatment costs, reducing penalty costs to consumers, and lowering the cost of recycled water projects. Lower TDS source water helps many of the elements of our Southern California reliability strategy, as well as achieving compliance with Regional Water Quality Control Board Basin Plan objectives and discharge limitations.

### ***Water Quality Improvements and Regional Compliance with Section 85021***

The Water Code directs that “Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts”, reference California Water Code Section 85021. Orange County and Southern California have complied with the California Water Code by taking great strides to improve its regional self-reliance, but the BDCP and a reliable supply of imported water is still needed.

Many of the opponents of the proposed BDCP process state that development of local supplies, water reuse, conservation and water use efficiency can take the place of the supply and reliability projects proposed in the BDCP. The reality is that the solution to California’s water problems requires action on all of these fronts in addition to the BDCP. While California should continue to develop local supplies, improve water reuse, and move towards greater water use efficiency and conservation, those efforts would be hampered without the BDCP Preferred Alternative (No. 4) and the water quality improvements which will be obtained as a result of those projects and changes in operations.

Expected water quality improvements in SWP supplies from the BDCP in reduced salinity, total organic carbon and bromide would result in water quality benefits and would promote water recycling and reuse. A reduction at the source means that these water quality challenges are less of a problem once the water is recycled, and would allow for better quality in the recycled water produced in Orange County and Southern California. A better quality recycled water will allow water to be used

for a greater number of cycles, and will result in reduced future reliance on the Delta.

Orange County's future depends on high quality, reliable and affordable imported water supplies. If we do not have the expected high quality and reliable supply from the SWP that would be made possible by the BDCP, it would seriously jeopardize groundwater basin management and expanded local recycling projects, many of which may not be economically feasible without the high quality water received from the SWP. Moreover, a high quality SWP supply also supports long-term economic management and protection of groundwater basins from salinization and reduces overall consumer penalty costs from corrosion and scaling.

**Cost Allocation: MWDOC supports the “beneficiary pays principle” in cost allocation for all responsible parties and beneficiaries**

It is recommended that all beneficiaries and responsible parties of the BDCP must contribute to the solution, including any diverter of water from the system (north or south of the Delta). Moreover, in Delta interests have been significant contributors to the modification of habitat, continue to discharge pollutants into the waterways, have caused the subsidence of the Delta islands and need for ever higher and unstable levees that risk both habitat and exports, and have benefited from operations of the projects. Accordingly, these interests have a moral and financial responsibility to directly participate in any solutions as do other responsible parties. Where habitat is to be created by modifying or restoring Delta islands to a more natural state, the in-Delta interests should work collaboratively to facilitate such actions.

Further, any recipient of water should pay the cost of water conveyance improvements in line with the proportion of overall water supplies they receive. Economic values associated with end uses of the water should have no bearing on the cost allocation of the BDCP; it is solely a matter of paying one's share of the cost of development of the water supply.

Furthermore, all Californians will benefit from a solution in the Delta through the improved habitat and reliable water supply that will be



created; a stronger overall economy benefits everyone. Consequently, the State and Federal Government should step up to fund the costs of environmental and habitat improvements as well as providing funding support for flood control, levee improvements, fisheries, invasive species control and other programs within their jurisdictions.

**Economy, Environment and Water Management: The State Water Project is critically important to the Orange County economy, environment and water management.**

***Economic Impacts***

The BDCP and DEIR/DEIS "No Project Alternative" analysis should include an evaluation of the economic impact of not strengthening California's water supply and the impact that "no action" has on the state's economic hubs as part of its overall evaluation. The BDCP evaluates the economic impact of the project's potential for growth inducement; however, it does not adequately take into account the economic impact of failing to secure water reliability for the state's economic centers. MWDOC urges inclusion of these impacts.

The economy of California is largely driven by economic activity in the San Francisco Bay Area and Southern California. To put the economic contributions of these areas in perspective it is important to note that Los Angeles and Orange counties contribute roughly \$766 billion to California's gross state product (GSP). The Bay Area contributes \$534 billion, and San Diego County contributes \$177 billion. These three areas alone comprise nearly 75% of the state's \$2 trillion GSP.

Orange County has a population of 3.1 million people, approximately eight percent of California's entire population, and an economy with a gross domestic product of about \$200 billion or 10 percent of the state's overall economy of \$2 trillion. Orange County's share of California's non-farm businesses was about 10 percent in 2011, and in 2007 Orange County accounted for \$49 billion (10 percent) of California's manufacturer's shipments and \$98 billion (16 percent) of California's merchant wholesaler sales. In addition, Orange County is a major regional employment, higher education and tourism center.

Orange County is an economic powerhouse for the state; the lifeblood of any economy is a reliable and secure water supply. MWDOC's 2010 Urban Water Management Plan indicates water demand for municipal and industrial use is expected to increase from approximately 485,000 acre-feet per year (AFY) to nearly 568,000 AFY by 2035. For all of Orange County, the total demand of 627,000 AFY is expected to increase to 726,000 AFY by 2035. Regional and local innovative programs and investments in water use efficiency has saved an estimated 75,000 AFY to date in the county.

The San Francisco Bay Area and Southern California depend heavily on the Bay-Delta with nearly one third of their water supplies coming from Delta exports, and the economic vitality of these areas is dependent upon a secure and reliable water supply. The bottom line is that a dependable water supply is essential to business operations and expansion that will continue to strengthen our state's economy and increase employment. The BDCP should take into account the economic cost of not providing a secure and dependable water supply in its economic impacts analysis. Given the importance of Southern California and the Bay Area to California's economy, the cost of no BDCP, without the Preferred Alternative (No. 4), would be extremely large and would greatly exceed any economic benefits of other alternatives that were considered.

It is also noteworthy that the Delta is a key water supply for 25 million California residents, largely located in the economic centers discussed above. The risk of a large earthquake in Northern California causing severe damage to the Delta grows greater with each day a comprehensive Delta solution is not implemented. If the State and Federal Government do not move forward on the BDCP, we are risking great environmental damage, a loss of substantial water supply to more than two-thirds of California's residents and businesses, and associated economic losses into the future.

We also risk severe and possibly permanent damage to our State's agricultural economy. The water from the Delta supports more than 5 million acres of California agriculture. These 5 million acres represents more than 80 percent of the United States's food production and more

than 500,000 jobs. Loss of water as a result of failure in the Delta will mean California's agriculture will lose an essential water supply.

That loss of water will result in millions of acres of unproductive land and a loss of jobs in communities which have already suffered great losses as a result of our most recent economic downturn and during the current severe drought. Without implementing the comprehensive environmental and conveyance solution proposed by the BDCP, we risk permanent damage to California's \$44.7 billion agriculture industry.

The development of a secure and reliable water supply for the citizens of California is important to the economic vitality of our state. The BDCP will provide stability in California's water infrastructure by providing a process that can result in a more dependable, high quality SWP water supply.

### ***Orange County Environment and Water Management***

The recent droughts of 1977-78, 1987-92, 1999-00, 2007-08 and the current drought demonstrate the precarious nature of the federal, state, regional and local water supply systems serving California. Throughout the state, the current acute drought, natural climate variability and climate change, agricultural cutbacks due to lack of water and continuing groundwater overdraft, increasing population and need for an ever growing economy, have brought to the light that water supply solutions and challenges are looming larger and more complex. This has led many to an increasing recognition that we have entered an era of uncertainty and potential era of water scarcity if we do not plan for the future.

Recent droughts and a greater understanding of climate change impacts have demonstrated that supply uncertainty and variability pose great risks to our economy and the natural environment. We remain confident that we have the combined ability to help solve these long-term problems. One key part of this solution is to fix the "broken Delta" through the program developed and recommended in the BDCP.

MWDOC and its member agencies have made significant investments in local resources and water management. Orange County water agencies are recognized leaders in water use efficiency, storm water

conservation, groundwater basin management, wastewater management, water recycling and reuse, and advanced water treatment technologies. In north Orange County, the Orange County Water District is recognized as a world leader in indirect water recycling through their award winning Groundwater Replenishment System, a project that now recycles 72,000 AFY, is under construction to be expanded to recycle 100,000 AFY with plans to recycle up to 130,000 AFY in the near future. These programs with imported water enable OCWD groundwater producers to meet about 70% of their water supply needs from the groundwater production. Conjunctive use of the basin with imported water and its utilization remains dependent on the availability of high quality imported water that can be replenished during wet periods.

Through innovative, multi-agency approaches, MWDOC and its agencies develop, implement, and evaluate water use efficiency programs that provide multiple benefits, including improved irrigation efficiency, increased utilization of California Friendly landscapes, and pollution prevention through programs that help to reduce dry weather urban runoff. Our programs include educational classes on water-wise landscaping, irrigation performance reporting, water use surveys for hotels and industrial customers, and consumer incentives for water-efficient devices. To evaluate the effectiveness of such devices, MWDOC conducts studies to monitor water savings and urban runoff reduction.

Through these efforts, Orange County's water use today is less than it was in 1990 even with population growth of 683,000 and jobs growth of 204,000 respectively. Overall, MWDOC has documented conservation of about 75,000 AF per year (active and passive). Despite these efforts, Orange County is still reliant on purchases of imported water from MET to meet about 45 percent of our current needs. About one-half this need is met from the SWP.

South Orange County is much more reliant on imported water, having few local resources other than water recycling and a few small groundwater basins that are nearly fully developed. Regional recycling planning is underway to evaluate how best to maximize the use of recycled water in South Orange County. In addition, studies are underway for evaluating the feasibility of augmenting the groundwater supply from the San Juan Creek alluvial basin through replenishment

with recycled water. The southern portion of Orange County despite its best efforts remains heavily dependent upon the Delta.

A number of retail agencies in south Orange County are recognized leaders in water use efficiency and conservation based rate structures, water recycling, and water reliability projects. For example, Irvine Ranch Water District, Moulton Niguel Water District, El Toro Water District, Santa Margarita Water District, Trabuco Canyon Water District and the cities of San Juan Capistrano and San Clemente are recognized leaders in water recycling and management through the use of dual distribution systems and community planning.

Orange County ratepayers have invested heavily in local resources in past years both directly and through MET. These investments through MET water supply purchases helped fund the \$2 billion Diamond Valley Reservoir and \$1 billion Inland Feeder that allow SWP deliveries during wet periods to be delivered into storage Southern California reservoirs. In addition, at least \$1 billion in local recycling and groundwater recovery projects have been made, including water use efficiency and conjunctive use since 1991. Combined, these investments provide the ability to efficiently use existing supplies, develop additional local supplies, and to store water in wet years for subsequent dry year use.

Orange County is also exploring ocean desalination, another potential local supply. It is also a key feature of planning in Orange County with the innovative subsurface intake system being examined for the planned 15 million gallon per day Doheny Ocean Desalination Project in Dana Point and permitting of the 50 million gallon per day Poseidon Resources desalination plant in Huntington Beach.

Despite all of these efforts and investments, Orange County remains dependent upon imported water. Completion and successful implementation of the BDCP is paramount to achieving the reliability that supports water management in Southern California. These local investments have already resulted in reduced reliance on imported supplies - our agencies should not be “penalized” by additional mandated investments that do not recognize and account for investments that have already been made.

**Summary: *Implementation of the BDCP is critical to Orange County's future***

- Orange County has invested heavily to diversify our water portfolio but the SWP is a critical source of low salinity water supply that is currently unacceptably jeopardized by the unsustainability of the current Bay-Delta system.
- Orange County relies on the SWP to support groundwater conjunctive use programs and water recycling programs - it is an essential part of our water reliability strategy that sustains our citizens and businesses.
- It is time to adopt and move the BDCP to implementation in order that we can achieve the co-equal goals of a reliable water supply for California and ecosystem restoration for the Delta.
- The 9,000 cfs twin tunnel BDCP Preferred Alternative (No. 4) will improve export water supply operations, reliability and water quality from the Delta in a manner that is protective of endangered species in the Delta.
- We support the 9,000 cfs twin tunnel Preferred Alternative (No. 4) provided reasonable assurances are included regarding governance and future decision-making in the process. We strongly advocate for a seat at the table for the water Permittees in the various oversight groups. The investment and decision-making must be structured to achieve a positive outcome for both the SWP and Permittees and the ecosystem restoration in a collaborative, partnership manner.

Thank you for your time and consideration of these comments.

Sincerely,

(Letter Signatory)

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

*April 8, 2014*

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
<b>Baker Treatment Plant or Expansion of Baker Water Treatment Plant</b>	IRWD, MNWD, SMWD, ETWD Trabuco CWD		On line date is late 2016	MWDOC has been asked to help secure MET's concurrence on the quality of water being introduced into the South County Pipeline. Karl Seckel and SMWD's GM, Dan Feron, met with MET Operations and Legal staff to discuss the item (both Karl and Dan are very familiar with the multiple agreements covering the South County Pipeline dating back to the late 1980's and early 1990's and including the AMP Sale Agreement in 1994). A myriad of prior agreements and MET Board actions have covered MET participation in the South County Pipeline. Because of the number of agreements involved, MET has initially indicated a simple amendment may be in order to put into place the approval for the Baker Water Treatment Plant water to be conveyed in the South County Pipeline. MET is taking the lead in drafting the document. At this time, MET staff have indicated that because the amendment pulls from many existing agreements, the agreement will be able to be executed by the General Manager.
<b>MET Interconnections – Second Lower Cross Feeder</b>	MWDOC			Karl Seckel will be organizing what is planned to be the final meeting of the 10 Participants for the Second Lower Cross Feeder. The information developed from the project could be useful in considering future pipeline alignments in Orange County.

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
<b>Doheny Desalination Project</b>	MWDOC			<p>The Phase 3 operations occurred from May 2010 to May 2012; the Phase 3 reports were completed in 2013; MWDOC is now working on the MET Foundational Action work with South Coast Water District, Laguna Beach CWD and the San Juan Basin Authority.</p> <p>The five Doheny Desal Participants are still involved in discussions and efforts with respect to the project moving forward.</p> <p>MWDOC staff met with MWH Constructors, Inc. regarding the receipt bid they had submitted for a similar sized plant in Monterey, California.</p>
<b>Poseidon Resources Ocean Desalination Project in Huntington Beach</b>				<p>MWDOC and OCWD staff met with Poseidon and MET to continue discussions related to MWDOC's application to the Local Resources Program by MET.</p> <p>OCWD approved their staff seeking financial consultants to help with the evaluation of the Poseidon Project. OCWD is sending out RFP's at this time. The selected consultant will complete the following specific work tasks:</p> <ul style="list-style-type: none"> <li>• Review and assess all aspects of the projects financing plan developed by Poseidon, estimated cost of debt issuance, equity to debt mix and source of funds,</li> <li>• Assess the risk transfer and project savings with OCWD issuing all or a portion of the project debt and/or providing all or a portion of the project equity under</li> </ul>



Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				<p>different options,</p> <ul style="list-style-type: none"> <li>• Develop financing alternatives,</li> <li>• Provide types of debt instruments that can be considered,</li> <li>• Provide debt shaping alternatives,</li> <li>• Assess current and future market conditions for the debt programs being considered and the impact to the project's unit cost,</li> <li>• Develop spreadsheet models of the alternatives being considered,</li> <li>• Consider project savings, additional risk and other issues with using variable rate debt, and</li> <li>• Assist OCWD in determining the optimum financing alternative and involvement in the project funding that is acceptable to all parties.</li> <li>• Using statistical probability analysis software, determine the estimated project capital cost with a 50% and 90% certainty,</li> <li>• Provide a statistical probability analysis of when the projected future cost of imported water from the Metropolitan Water District could become more expensive than the future projected cost of water from the desalination project.</li> </ul> <p>The above work will be comprehensively provided in a written report to OCWD; the work is expected to take several months.</p>

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
<b>Other Meetings</b>				
				Karl Seckel and Richard Bell attended a SMWD workshop on water recycling in South Orange County. The meeting had good representation from all agencies in SOC and was designed to both respond to the drought situation and to examine the synergy from all agencies in cooperating in a regional effort to expand recycling efforts, including purple pipe, indirect potable and direct potable recycling.
				Richard Bell and Director Jeff Thomas attended the Santiago Aqueduct Commission where the upcoming budget as discussed and the need for about \$600,000 of cathodic protection work will be needed for the Baker Pipeline.
				Karl Seckel and Harvey De La Torre attended a staff meeting with representative GM's from SOC to discuss budget issues prior to the March 25 meeting. At the March 25 meeting with staff and elected from SOC, MWDOC was represented by Directors Jeff Thomas and Susan Hinman and staff members Rob Hunter and Karl Seckel. The discussions were wide ranging and the exchange of perspectives was good.
				Karl Seckel attended the Newport Beach City Council meeting where the Council approval the transfer agreement to house and maintain a water trailer. Keith Lyon attended the Buena Park City Council meeting where the Council approved the transfer agreement to house and maintain a water trailer.

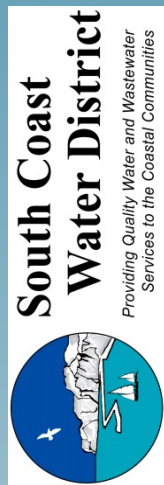
Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				Karl Seckel and Director Susan Hinman had an opportunity to participate in a 40 minute StoryCorps process (story/conversation between two participants) to share about the 40 years of the MWDOC School Program, serving over 3 million students, and the partnership we have with Discovery Science Center in hosting the program. This was part of an award DSC won in 2013 from the Institute of Museum and Library Services. The conversation will become part of the StoryCorps library.
				Karl Seckel and Lee Jacobi coordinated on a City of Newport Beach Coast Highway shutdown to replace a water main from 1923. The shutdown required coordination with MET at its CM-1 and CM-1A service connections and required discussions among the engineering staff.
				Karl Seckel and Legal Counsel will be meeting with EOCWD and their legal Counsel on the AMP Sale Agreement and the implications for service connection OC-70. At issue is the contention of whether or not the Sale Agreement requires MET to provide emergency power at the OC-70 location. This meeting is in advance of meeting with MET.
				Karl Seckel and Legal Counsel will be meeting on the terms and conditions of the East Orange County Feeder No. 2 pipeline agreement with MET to review issues relative to conveyance of water from alternative sources in the facility. This will be part of discussions related to the Poseidon Project as well as other projects in Orange County.

Description	Lead Agency	Status % Complete	Scheduled Completion Date	Comments
				Keith Lyon is conducting a survey of “shovel ready projects” from our agencies.
				Keith Lyon is coordinating a meeting with our agencies regarding energy efficiency. The goal of the Program is to reduce energy costs by engaging all levels within an organization, making everyone aware of energy and empowering them to work together to improve energy performance – thereby reducing the organization’s costs. The Program is co-sponsored by Southern California Edison and Southern California Gas Company.

Please attach the SMWD Presentation after this page.



# SOUTH ORANGE COUNTY REGIONAL RECYCLED WATER WORKSHOP

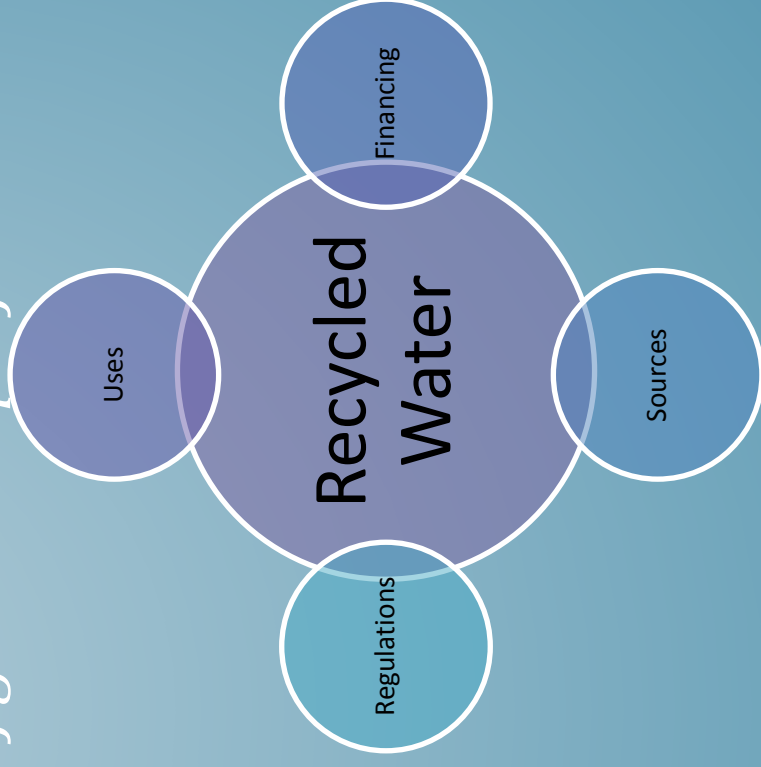


*Santa Margarita Water District  
Finance Committee Meeting  
March 21, 2014*



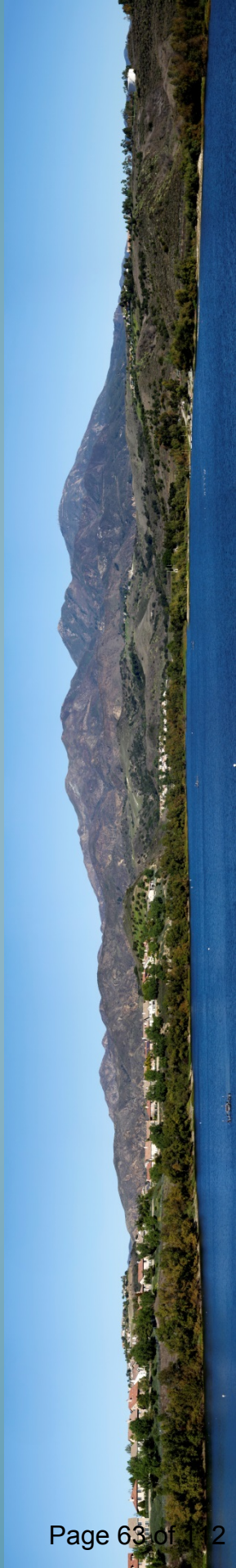
# PURPOSE

- *Recycled water is an integral part of the South County Water supply picture*
- *Take a moment to step back from the local view to understand the larger view of recycled water*
- *Identify commonality of goals and projects across the region*
- *Examine*
  - *Uses*
  - *Regulations*
  - *Sources*
  - *Financing*



# SMWD RECYCLED WATER

- *Important part of the Water Reliability Planning*
- *Currently meeting 17% of demand*
- *Increase to 33%, utilize 100% of the wastewater at build out of the District*
- *Seasonal storage is required to meet the goals*



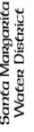


## RECYCLED WATER DEMANDS

- ## RECYCLED WATER DEMANDS



current  
future





# REGULATIONS

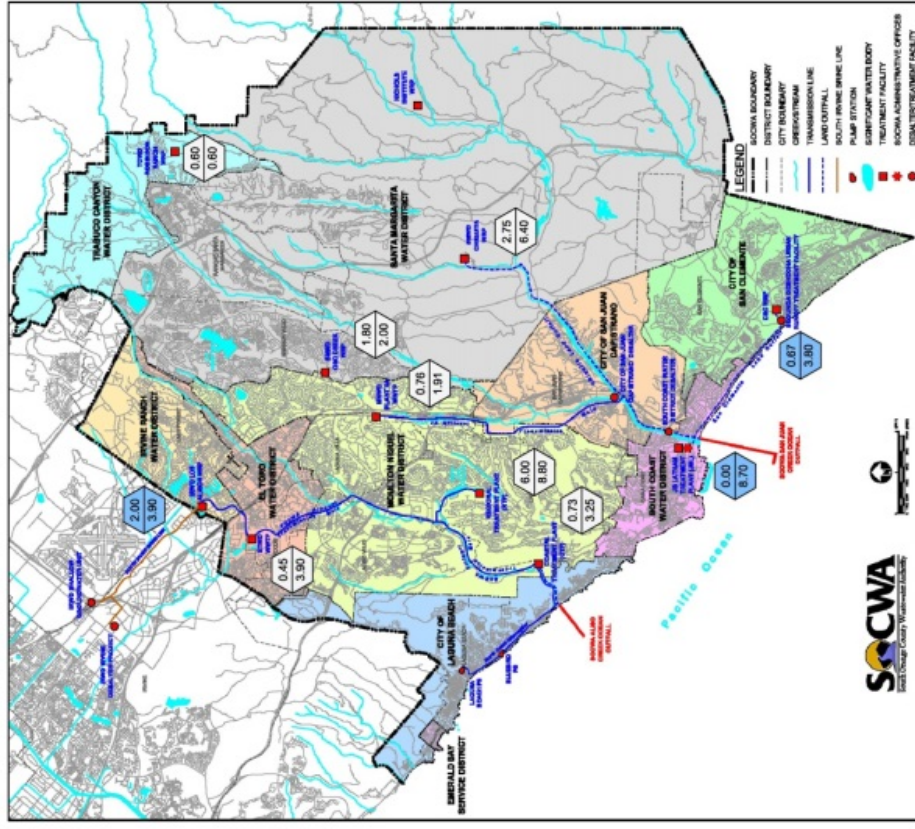
- *Mike Marcus, OCWD General Manager*
  - *Groundwater Replenishment System*
- *Mike Wehner, OCWD Assistant General Manager and Director of Water Quality & Technology*
  - *Direct Reuse Regulations*
- *Oliver Pacifico, District Engineer*
  - *State Drinking Water Program*
- *San Diego RWQB*
  - *Salt and Nutrient Management Plan*



# CURRENT SUPPLIES

- 11 treatment plants
  - 43 MGD
  - 17,700 AF recycled
  - 30,800 AF ocean disposal
- San Juan Watershed
  - 18,900 AF Outfall
- Aliso Creek
  - 11,900 AF Outfall

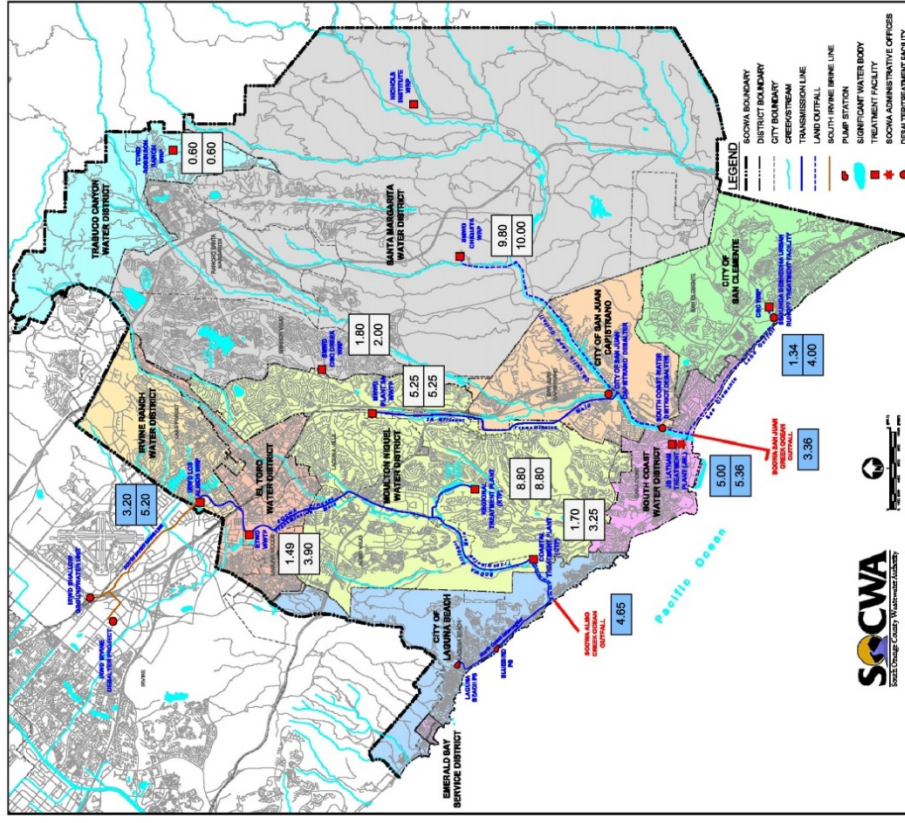
## CURRENT TREATMENT ACTIVITIES



# FUTURE SUPPLIES

- 11 treatment plants
  - 48 MGD
  - 44,100 AF recycled
  - 10,100 AF ocean disposal
  - SJBA
- San Juan Watershed
  - 3,400 AF Outfall
- Aliso Creek
  - 6,700 AF Outfall

## FUTURE TERTIARY TREATMENT GOALS





# FUTURE SUPPLY PROJECTS

- *Expansion of Chiquita WRP*
- *Expansion of El Toro WRP*
- *Coordination of flows between OCWRP, 3A and Latham Plants*
- *Expansion of 3A Plant*
- *SMWD Ortega Area seasonal storage reservoir*
- *IRWD Syphon Reservoir expansion*



## Trampas Lake Reservoir and Dam



Santa Margarita  
Water District

Presented to: **Santa Margarita Water District**

Presented by: **URS Corporation**

– Richard Hart, PE

March 21, 2014

# Ortega Area Seasonal Storage

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- Provide seasonal storage to meet seasonal irrigation demands
- Allows for capture of flows currently being lost to the ocean
- Potential Regional Resource
  - City of San Clemente
  - City of San Juan Capistrano
  - SMWD
  - Indirectly
    - Moulton Niguel Water District
    - South Coast Water District
- Two Potential Sites
  - Ortega Site – Previously Studied
  - Trampas



# Site Location



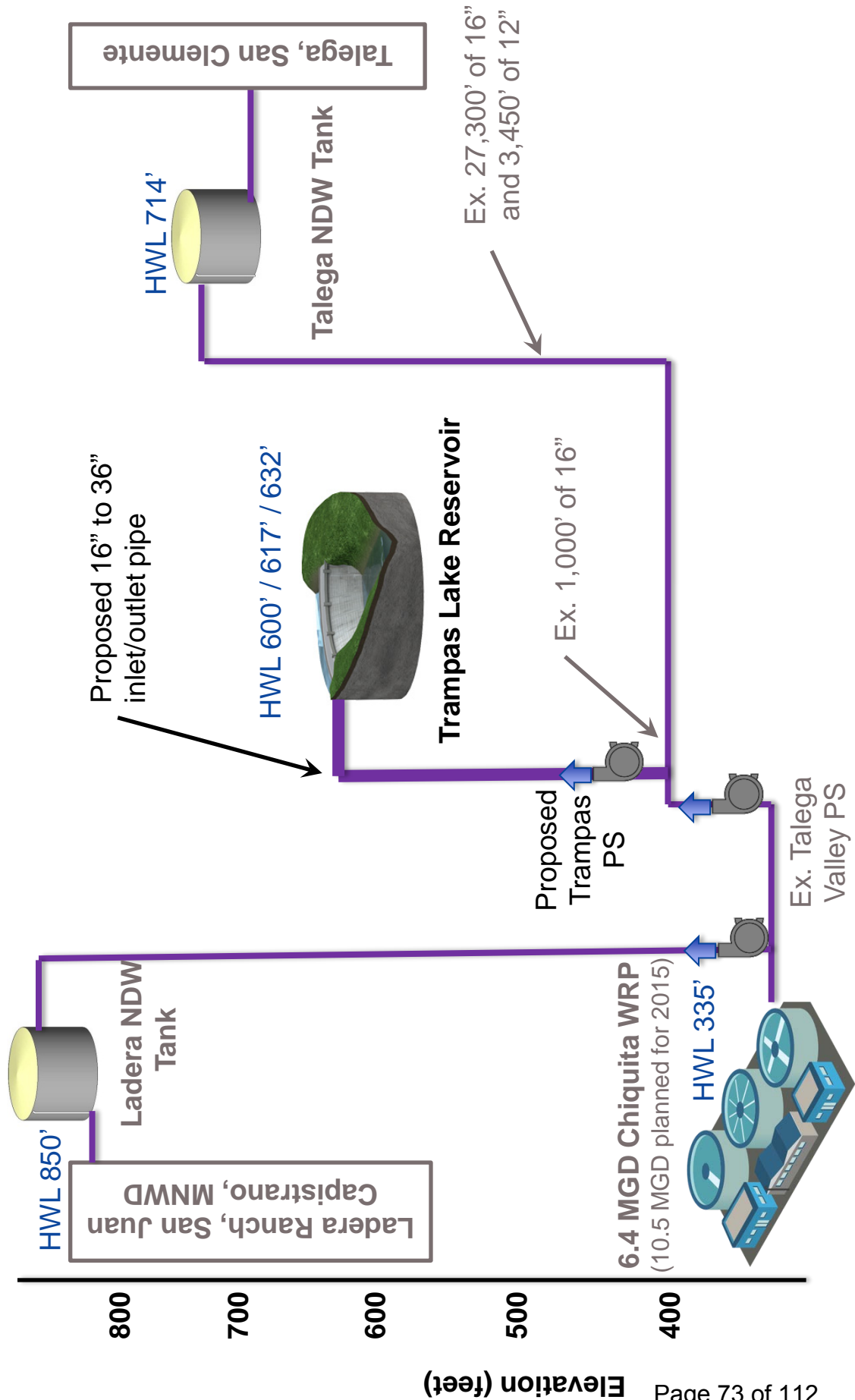
# Proposed Trampas Reservoir Benefits

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- Repurpose tailings storage dam for recycled water storage
  - Raise dam to increase reservoir capacity and provide 12.5' freeboard
    - Option 1: ~ 3,000 ac-ft storage, 21-ft raise, ~ \$40M
    - Option 2: ~ 5,000 ac-ft storage, 40-ft raise, ~ \$55M
  - Add downstream buttress and filter drains to mitigate deficiencies
  - Construct inlet/outlet structure with emergency gravity discharge
  - Construct new spillway mitigating downstream flooding and erosion potential
- Reduced ancillary facilities vs. Ortega Site
  - Use existing piping
- Potential reduced implementation time vs. Ortega Site



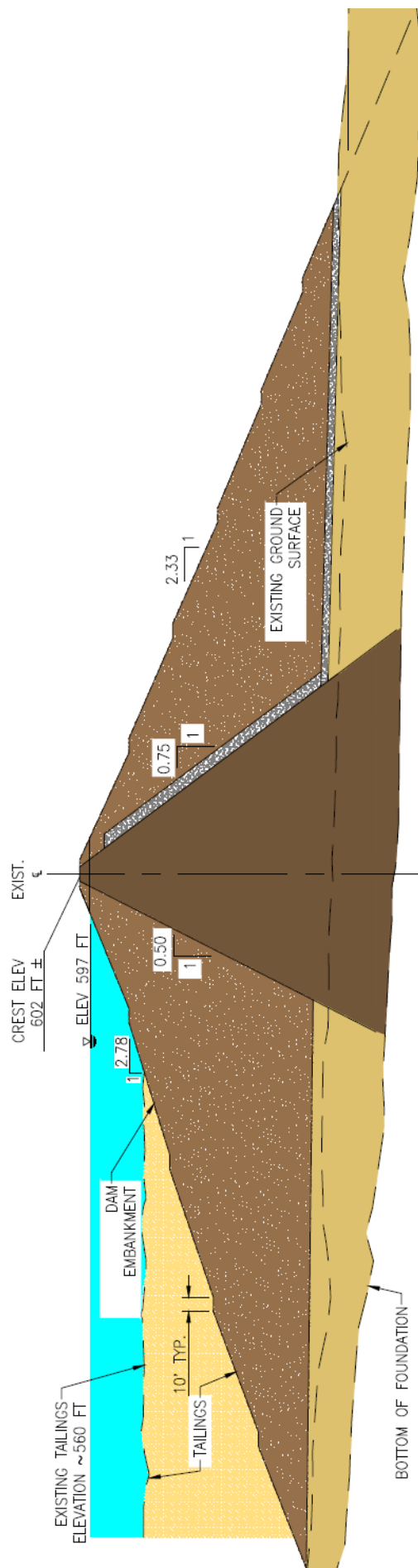
# Trampas Integration into SMWD RW System



# Existing Trampas Section

Upstream

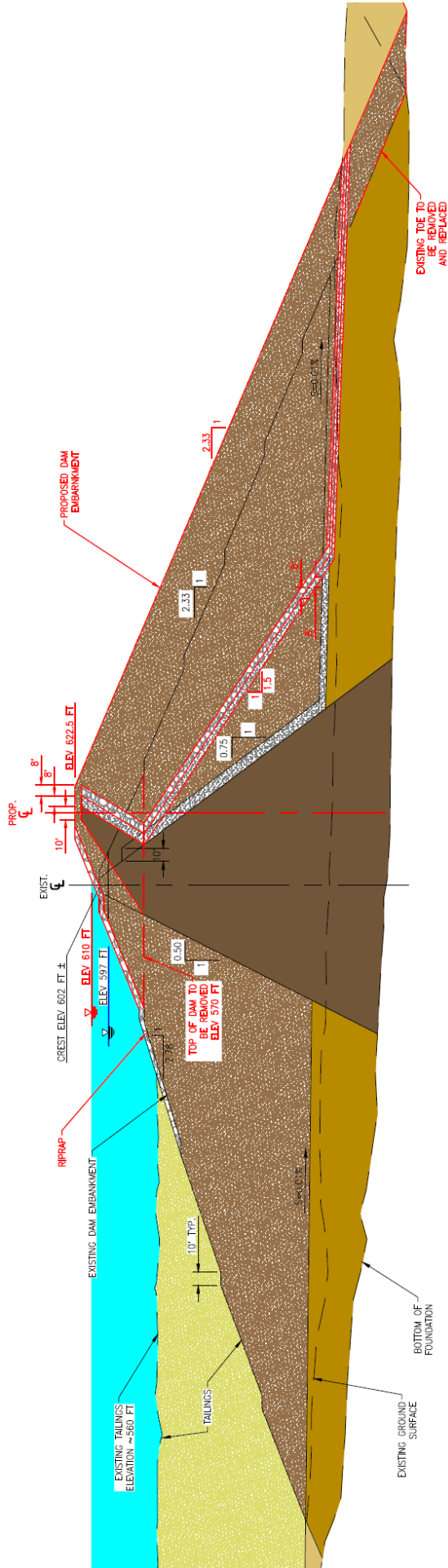
Downstream



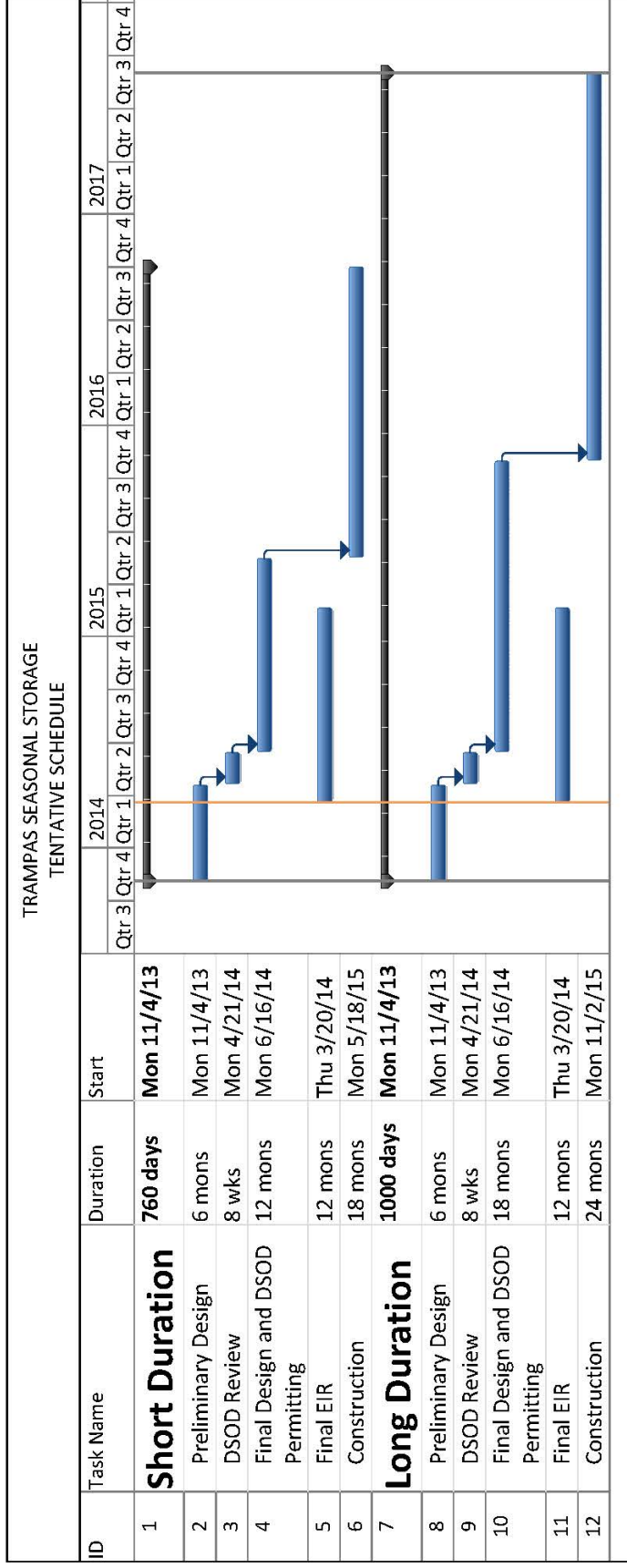
# Proposed Trampas Section (Option 1)

Upstream

Downstream



# Schedule



- Early Completion – Oct ‘16
- Late Completion – Sept ‘17



## Q&A



Santa Margarita  
Water District



### Contact Information:

**Michael Smith, PE, GE**  
Principal Geotechnical  
Engineer

**O: 714.648.2836**

**M: 714.697.5239**

**michael.g.smith@urs.com**

**Bryan Paine, PE**  
Project Manager

**O: 714.433.7652**

**M: 949.466.0481**

**bryan.paine@urs.com**

**Richard Hart, PE**  
Principal-in-Charge  
Vice President

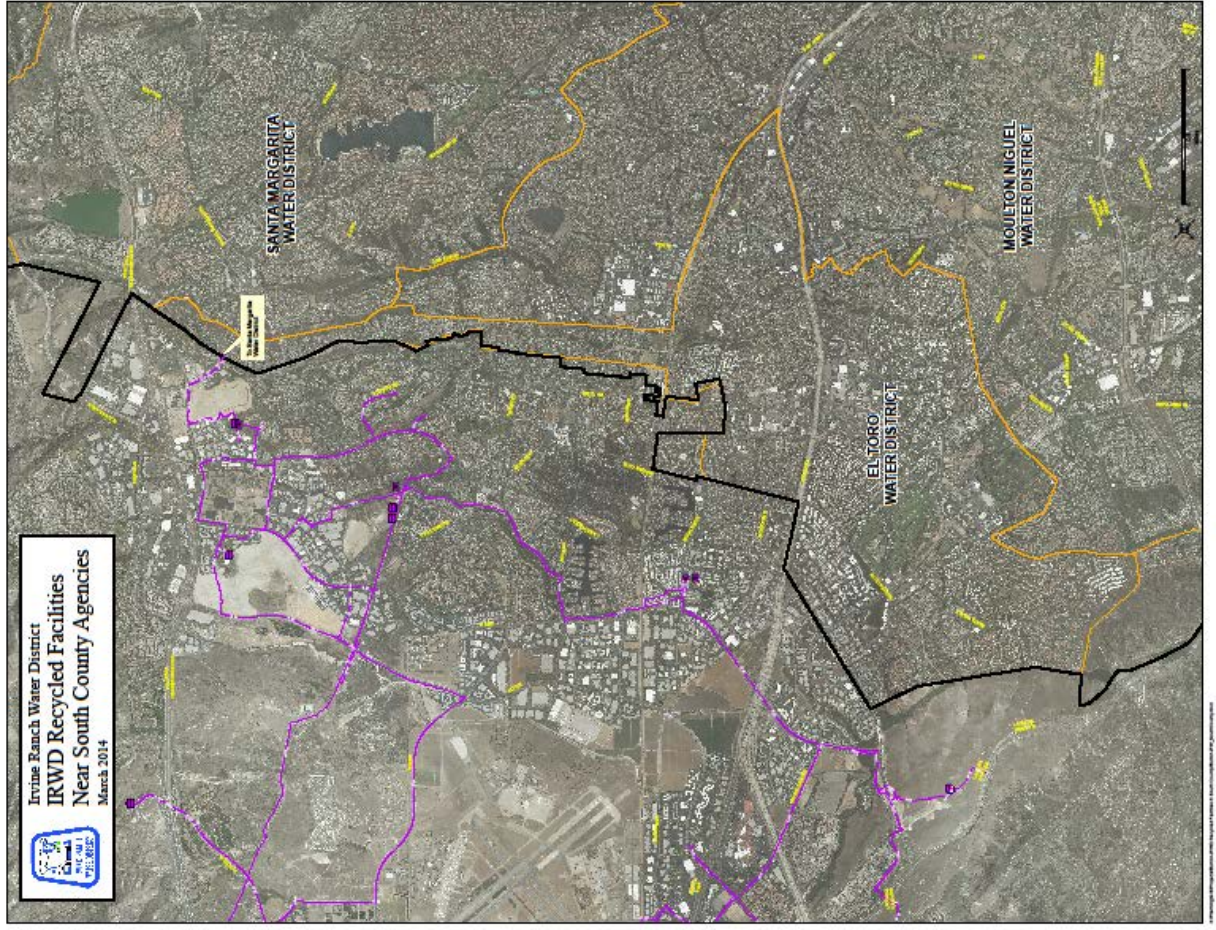
**M: 714.648.2891**

**richard.a.hart@urs.com**



# IRWD SYPHON RESERVOIR

- *Paul Cook*
  - *General Manager*
- *Kevin Burton*
  - *Executive Director*
- *IRWD Facilities Engineering & Water Quality*
- *Syphon Reservoir*





# EXISTING SYPHON RESERVOIR



*Photo 1 - Syphon Dam as viewed from right abutment (01-06-2011)*



Sage Canyon Access Rd

Pope Parkway

Scale, Feet

0 400 800

AERIAL IMAGERY OF SITE

GEI CONSULTANTS

PROJECT 104870

JANUARY 2012

FIGURE 2.2

Syphon Reservoir Expansion  
Engineering Feasibility Study  
Irvine Ranch Water District  
Irvine, California



# PROPOSED 5,000 AF RESERVOIR



# FINANCING

- *State Water Resources Control Board*
  - *1% low interest loans for recycling projects just announced*
- *MWDOC/MWD*
  - *Karl Seckel, Asst. General Manager*
  - *Local Resources Program*
- *Proposed Bond*
- *Drought funding*





## NEXT STEPS



- *Confirm collective interest in maximizing recycled water use*
- *South Orange County Integrated Regional Water Management Plan*
  - *Collective effort to ensure projects are listed and effectively ranked*
- *Initiate project partnership and participation discussions*

**Status of Ongoing WEROC Projects  
March, 2014**

<b>Description</b>	<b>Comments</b>
<b>Water Trailers</b>	<p>The Cities of Buena Park &amp; Newport received City Council approval to accept the Water Trailers on Tuesday, March 25, 2014 at their respective Council meetings. Staff was available at both meetings to answer any questions. Once all agreement paperwork is received the trailers will be physically transferred to each city.</p> <p>Reimbursement packets have been submitted to the City of Santa Ana for all 15 trailers for a total reimbursement request of \$497,304. The first reimbursement check has been received in the amount of \$298,386. A second reimbursement of \$165,766.00 was received on March 31, 2014. A final payment of \$33,152.00 is still in process.</p>
<b>Member Agency Coordination</b>	<p>WEROC staff attended the Metropolitan Water District of Southern California (MET) Member Agency Response System (MARS) Coordinator Meeting on February 26 at the District Operations Center in Eagle Rock. A speaker from the American Red Cross provided an overview of their services, trainings, and resources available. Met staff reviewed the current drought impacts and how they are involved in the State Conference Calls. Attendees had a good discussion about participation in future meetings and radio tests.</p> <p>Kelly Hubbard met with Costa Mesa Sanitary District staff to discuss training options and recommendations for a small district.</p> <p>Kelly, Darcy Burke and Karl Seckel participated in a conference call with the MET staff that has responsibility for generator permitting for MET. The call was intended to educate MWDOC staff in regards to the generator permitting process and to discuss shared concerns with the difficulty of generator permitting and operations.</p>
<b>Coordination with the</b>	<p>The Orange County Emergency Management Organization (OCEMO) monthly meeting was held</p>

Description	Comments
<b>County of Orange</b>	<p>at the City of Newport. Mona Bontty, Southern Region Director for the California Office of Emergency Services, provided a presentation on the Drought Emergency and Response.</p> <p>WEROC Staff attended the OCEMO WebEOC Meeting on March 19. The County is in the process of simplifying the situation summary reporting process, as well as the compatibility of the system with IPads and other non Internet Explorer based systems. Additionally, there was discussion on several Federal public notification systems and their policies.</p>
<b>Coordination with Outside Agencies</b>	<p>Ongoing (last month's report as reference): <i>Kelly was asked to join the California Office of Emergency Services Southern Region Drought Conference Calls as the Region 1 Mutual Aid Coordinator for the California Water and Wastewater Agency Response Network (CalWARN). This is a weekly conference call to provide an update to the Southern Region and the State Operations Center (SOC) on drought impacts, activities and needs. At the request of the State, Kelly has surveyed water utilities for their specific actions. Participation has been great to bring recognition of the potential role of water utilities in the EOC for a county EOC and to enhance emergency manager's knowledge of water utilities. Additionally, Kelly has been able to contribute to discussions regarding potential Stafford Act funding for Drought response.</i></p> <p>Kelly attended the ISDOC Executive Committee meeting to provide a report on the Operational Area (OA) Executive Board and its activities. It was agreed that Kelly will provide a quarterly report in coordination with the timing of the OA Executive Board meetings. She was also confirmed as the primary voting member to the OA Executive Board on behalf of ISDOC.</p> <p>Staff received a user account and training in the California Office of Emergency Services (Cal OES) Cal EOC (internet based computer software that documents emergency response), as the California Water /Wastewater Agency Response Network (CalWARN) Region 1 Chair. Cal EOC is based on WebEOC (used by WEROC and OC agencies), a computer/internet based system to report and manage information during disaster response. All Operational Areas are expected to report through this system to the state.</p>

Description	Comments
	<p>WEROC Staff participated in the California Emergency Services Association (CESA) Drought Webinar. CESA is starting a new series of free webinars as a benefit to its members. The webinar focused on what is a drought, why we are at the stage, and what the emergency managers' role was in this response.</p> <p>Kelly joined the other CalWARN chairs to review the California Multi-Agency Response Guidance For Emergency Drinking Water Procurement &amp; Distribution. The group is updating this document at the request of Cal OES for use during drought response and future potential responses. The guidance was developed to assist local government in procuring and distributing drinking water following disasters in which there is water supply disruption.</p> <p>Cal WARN hosted an Emergency Fuel Planning for Water and Wastewater Utilities seminar in coordination with the Cal-Nv AWWA Spring Conference. Kelly helped to plan the session and its speakers, as well as led a portion of the seminar. Speakers included:</p> <ul style="list-style-type: none"> <li>• California Energy Commission on the California State Fuel Supply Overview and Contingency Planning</li> <li>• Tesoro Southern California Asset Overview</li> <li>• Kinder Morgan Pacific Region Pipeline Transportation Network</li> <li>• SC Fuels and Downs Fuels on Local Fuel Supply, Distribution Logistics &amp; Business Continuity</li> <li>• WEROC conducted a Fuel Planning Gap Analysis – Group Exercise and Discussion</li> </ul> <p>The session was a great achievement in getting so many of the players into one room, along with 60+ water utility staff to listen, learn and plan as a group for fuel supply issues during disasters. The Fuel Planning Gap Analysis is being developed into a Planning Template that will be shared state-wide and hopefully spark continued planning.</p>
<b>WEROC Emergency Operations Center (EOC) Readiness</b>	<p>WEROC Staff were notified that Irvine Ranch Water District will be starting a year-long tear down and reconstruction of a water facility that are immediately adjacent to the WEROC North EOC. The actual construction will not directly impact the WEROC EOC; however there will be</p>

Description	Comments
	<p>indirect impacts of limited parking and the possible safety concerns of an active construction site. This facility will still be accessible and can be utilized if required. WEROC standard activation policy is for WEROC EOC staff is to report to the EOC closest to them following a major earthquake. Due to the potential safety hazards of a construction site and for ease of use, for the next year (2014) all WEROC staff will report to the South EOC as the primary EOC following an automatic activation of the EOC (5.0 Earthquake or greater in OC).</p> <p>Staff successfully participated in the MARS and OA Radio test this month.</p> <p>WEROC staff provided radio training to Yorba Linda Water District staff.</p> <p>Pest Control was completed at the North EOC.</p> <p>WEROC conducted its bi-monthly radio test of the WEROC radio system on Tuesday, March 25<sup>th</sup>. This month's test marked a significant improvement in participation. Twenty-four (24) agencies participated with one additional agency having a room conflict for the radio. A more complete report is provided in a Planning &amp; Operations Committee Report.</p>



## INFORMATION ITEM

April 14, 2014

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

**FROM:**       **Robert Hunter, General Manager**

Staff Contact: Kelly Hubbard, WEROC Emergency Manager

**SUBJECT:**   **California and Orange County Drought Task Force**

### STAFF RECOMMENDATION

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Staff recommends the Planning & Operations Committee:

### COMMITTEE RECOMMENDATION

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Committee recommends (To be determined at Committee Meeting)

### SUMMARY

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Kelly Hubbard was asked to participate in the California Offices of Emergency Services (Cal OES) Southern Region Drought Task Force as the California Water/Wastewater Agency Response Network (Cal WARN) Region 1 Chair and to participate in the Orange County Operational Area Drought Task Force as the WEROC representative.

### DETAILED REPORT

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The California Offices of Emergency Services (Cal OES) Southern Region Drought Task Force holds a conference call every Monday to receive updates from climatologists, state department agencies, the Southern region Operational Areas, tribes and mutual aid representatives. Kelly provides updates on water utility actions and concerns, as well as provides technical specialist support to the group. As the California Water/Wastewater Agency Response Network (Cal WARN) Region 1 Chair, Kelly represents water utilities from the counties of San Luis Obispo, Santa Barbara, Los Angeles and Orange County.

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



The Cal WARN Region 6 chair represents water utilities from Inyo, Mono, San Bernardino, Riverside, Imperial, and San Diego. In addition, Metropolitan Water District of Southern California is also represented by their emergency manager.

The State Drought Task Force group is mostly emergency managers with representatives from various other agencies. The Cal OES has been tasked with identifying water utilities that have water supply concerns and what actions all utilities are taking in the state. Additionally, they are working on the secondary impacts related to drought that are not water utility concepts, such as agricultural, social and economic impacts. Kelly provides pertinent information from this group to the appropriate member agency group, including the Managers, Public Affairs and/or the emergency coordinators.

Cal OES Southern Region Drought Task Force:

- NOAA/NWS - Los Angeles/Oxnard & San Diego
- California Department of Food and Agriculture (CDFA)
- Department of Water Resources (DWR)
- California State Water Resources Control Board
- Department of General Services
- California Department of Public Health-Office of Drinking Water (CDPH-OWA)
- California Department of Public Health-Emergency Preparedness Office (CDPH-EPO)
- California Volunteers
- California Department of Social Services (CDSS)
- California Department of Food and Agriculture (CDFA)
- Operational Area – Counties of San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, Imperial, San Diego, Riverside, San Bernardino
- Mutual Aid Regional Advisory Committee (MARAC) Cities - Los Angeles, Brea, Rancho Cucamonga, San Diego
- Tribal Nations - Viejas and Sycuan
- Metropolitan Water District of Southern California
- San Diego Public Utilities (Long Range Planning and Water Resources Division-Water Conservation Section)
- Cal OES Recovery Branch - Public and Individual Assistance
- Cal OES Tribal Nations Liaison
- Governor's Office of Planning and Research (OPR)
- Cal WARN Region 1 and 6

The Orange County Operational Area Drought Task Force had its first meeting on April 1. The county recognizes that Drought is not yet an emergency situation for the County, but is doing its due diligence in developing a Drought Response Plan. The primary goal of the plan is to identify trigger points for levels of response for affected agencies, what support would be needed from the Operational Area, and to define roles once those trigger points are met. The plan will be looking at impacts to the water utilities, social services, agricultural and fire services. Additionally, there will be a coordinated Joint Information System for the Public Information Officers of all of those affected agencies to work together on unified messaging. The task force will be meeting every other month at this time.



**INFORMATION ITEM**

April 14, 2014

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

**FROM: Robert Hunter, General Manager**

Staff Contact: Kelly Hubbard, Emergency Manager

**SUBJECT: WEROC EOC Communications and Radio Update**

**STAFF RECOMMENDATION**

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Staff recommends the Planning & Operations Committee hear the report.

**COMMITTEE RECOMMENDATION**

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Committee recommends (To be determined at Committee Meeting)

**SUMMARY**

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The WEROC Emergency Operations Center (EOC) utilizes multiple methods of communications for planning, exercises and emergency response. It is important that staff and member agencies are aware of and practice the use of all of these systems. Systems include telephones, email, social media accounts, WebEOC, Alert OC and radios. This report summarizes how these systems are used, tested and updated.

**DETAILED REPORT**

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The key to emergency planning and response is to have multiple methods of a process identified in case one or more systems are inoperable following an emergency event. For communications, WEROC has implemented or participates in the use of telephones, email, social media accounts, WebEOC, Alert OC and three radio systems.

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

## **Telephones**

Both of the WEROC EOC's have landline based telephone service through ATT. These phones are utilized for each key section and or position within the EOC: EOC Director, Public Information Officer, Planning & Intelligence Section Chief, Planning & Intelligence Section, Logistics Chief, Finance & Administration Chief, EOC Fax and then one additional line for internet service. These phones are tested at each visit to the EOC.

WEROC staff recently worked with ATT to have the cabling to the South EOC site completely replaced and has since had excellent service and no service interruptions.

Additionally, the WEROC Emergency Manager has a cell phone with voice, text and data capabilities. This is the primary phone listed for notification for the County Operational Area and for the WEROC Member Agencies. Many of the agencies use this phone as their primary method of contact for day to day business as well. One of the lessons learned from the October 2011 SDG&E power outage is the importance of text messaging as an alternate means of communication.

## **Email**

The WEROC EOC has hard wired internet and Wi-Fi capabilities with desktop and laptop computers. MWDOC IT staff has set up the MWDOC VPN for those computers and this connectivity is tested on regular visits and trainings. Additionally, WEROC has established G-Mail accounts for all the WEROC EOC positions, so that if the VPN was not available, the G-Mail email system could be used instead.

A system of Outlook based group email accounts has been established by the WEROC Manager. An easier method of updating and allowing access to these group emails to all WEROC EOC Staff is being explored to make these group email accounts easier to use and maintain.

## **Social Media**

WEROC has established both a Facebook (WEROC) and Twitter (@OCWEROC) account for use during emergency response. The purpose of both accounts is to engage the WEROC member agencies with information and discussion if needed. Following the March 2011 Japan Earthquake Facebook and Twitter were one of the first communication tools available following the Magnitude 9.0 earthquake.

The La Habra Earthquake has marked several firsts in WEROC response with social media. This is the first event in which a Member Agency (Laguna Beach County Water District) has provided a status update via Facebook. Additionally, WEROC was able to announce its EOC activation, activities and deactivation. Several WEROC EOC Staff saw the status update and knew what actions to take due to this posting, even though they could not get a call to the WEROC Manager due to overwhelmed phone lines. WEROC's two posts received almost 300 views in total.

WEROC staff posts information about planning, preparedness and response on a regular basis, not just during emergencies, to start to build an audience and following. The target

audience for these accounts is the staff of our member agencies and the WEROC EOC staff, not necessarily the general public.

### **WebEOC**

WebEOC is an internet based computer software program that the County of Orange, Emergency Management Division purchased (with grant funds) and maintains for all government agencies within the OC Operational Area. WebEOC is an information and resource management system. All government agencies now report their status, damages, costs, and resource requests through this system following an emergency. In case the system is not available, agencies can still utilize hard copy forms (Orange County calls them J Forms) to report the information. WEROC works with the water and wastewater utilities during a disaster to make sure they can access the system, troubleshoot any issues and to assist them in filling out the appropriate forms for documentation and reimbursement. Staff also worked with the County to make sure MET has an account in the system, so that MET can report how they have been affected. The California Department of Public Health Drinking Water Program OC District Engineer can also access the system through the WEROC account.

WebEOC also has an additional component called Resource Manager. The resource management side of the system is a huge benefit to WEROC, as it has a searchable resource data base. WEROC worked with its member agencies to collect a listing of all their resources and to input that information into WebEOC. Resources include operators, equipment, tools, chemicals, and just about any gadget, tool, person or widget a district uses. Staff will be working with the member agencies to update this database this coming year.

WEROC staff provides its member agencies and its EOC staff training on how to use the WebEOC system on a regular basis. The training ensures that water utilities, including city water departments who report through their city, know how to use the system and the benefits of reporting. Additionally, WEROC staff participates in the County's WebEOC Committee to help guide further development and implementation of the system.

### **AlertOC**

AlertOC is a reverse notification tool that the County of Orange is providing to the cities and water districts at no cost. AlertOC can be used to notify the public of a threat to public health and actions that should be taken due to that threat. The system uses the E911 data (same info 911 centers use for caller ID) and information that residents choose to self-register. In addition to notifying the public, AlertOC can be used to notify internal groups. WEROC plans on using this system to do group notifications to member agencies, MWDOC staff, and WEROC EOC staff.

Following the La Habra earthquake on Friday, March 28 staff used the system to notify WEROC EOC staff that the WEROC EOC was partially activated, but that there was no need to report to the EOC until further notice. Staff has indicated that the system worked well and that they appreciated the notice.

## **Radios**

WEROC has 3 radio systems at both EOCs and in the WEROC Manager's office. There are also two repeaters with one on Pleasants Peak in the Santa Ana Mountains on a MET radio site and the other is on Catalina on a leased site. All of these systems are in good working order.

### **OA (Operational Area) 1 Radio:**

The OA1 radio is an 800 MHz radio that is licensed by the OCSD Communications Division. The radio, antenna and cabling was provided by a County grant. The County conducts a monthly radio test and WEROC participates regularly.

### **MARS (Metropolitan Member Agency Response System) Radio:**

The MARS radio was recently updated to a new digital 800 MHz system. This upgrade gave MET the greater distance it needed to reach all of its member agencies. This upgrade also resolved interference issues that the MET system was having with the WEROC radio system due to the close proximity in each agencies frequency. MARS conducts monthly tests and WEROC participates regularly.

### **WEROC Radio:**

The WEROC radio is a land band system and staff recently renewed its FCC license for this radio and frequency. The current license is good till 2023. This radio system is operating at its best. Staff is planning a review of the Blackjack repeater on Catalina as it has not been inspected and tuned up in almost 9 years.

There have been some questions regarding the member agency participation in the WEROC Radio tests. Staff has surveyed member agencies to see what may be causing the lack of participation. Many agencies explained that changes in staffing, emergency response to water operations (i.e. line breaks) and staff availability has all been issues. Staff availability was largely related to the fact that several of the agencies have customer service staff do the radio checks and that they have to balance checking in with real time customer service calls. All agencies expressed that they value the system and try to participate as often as possible.

In addition to the survey, staff discussed the radio tests with the Managers at the monthly MWDOC Manager's Meeting. Both served as a good reminder of the importance of the radio test and participation jumped from 17 total check-ins in January, to 41 check-ins in March. This is a great jump in participation and represents 27 agencies out of 36. For those that still did not check-in the most common reason for missing the March test was field priorities (i.e. required systems checks), and that customer service was covering the radio checks while still covering the phones. WEROC Staff is simplifying the radio test, by not requesting a report back from the agencies for each test to make participation simpler. In addition, to make the test more interesting and to incorporate real disaster response concepts, staff will be incorporating potential disaster scenarios and specific report back items into the WEROC Radio test. The next radio test is May 27<sup>th</sup> and Rob Hunter plans on following up with agencies who do not participant again in the next test.



## INFORMATION ITEM

April 14, 2014

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

**FROM:**       **Robert Hunter, General Manager**

Staff Contact: Kelly Hubbard, WEROC Emergency Manager

**SUBJECT:   WEROC Response to La Habra Earthquake (March 29, 2014)**

### STAFF RECOMMENDATION

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Staff recommends the Planning & Operations Committee hear report.

### COMMITTEE RECOMMENDATION

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Committee recommends (To be determined at Committee Meeting)

### DETAILED REPORT

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On Friday, March 28, 2014 at 9:09 pm a 5.1 magnitude earthquake occurred centered in the City of La Habra. There were two fore shocks with over 30 aftershocks by 10:00 pm that same evening, the largest being a M3.6. This was a very shallow earthquake near the Whittier Fault Line, and may be associated with the Puente Hills Thrust (PHT). The PHT is a blind thrust fault (meaning it hasn't reached the surface) that extends from this region to the north and west towards the City of Los Angeles. It caused the M5.9 October 1, 1987 Whittier Narrows earthquake. It is interesting to note that the demonstration earthquake early warning system provided a 4 second warning in Pasadena.

WEROC Staff immediately started to assess impacts to water and wastewater utilities in the immediate vicinity of the epicenter. It was determined that a full Emergency Operations Center (EOC) activation was not required without further assessment of damages. Karl Seckel, Joe Berg and Lee Jacobi reported to the WEROC South EOC and Kelly Hubbard coordinated from offsite. Staff at the EOC conducted a damage survey and reported status

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

updates to the OC Operational Area (OA) EOC and to Member Agencies. Staff also provided updates to the OA via WebEOC.

**Water Utility Damages Reported:**

- City of Buena Park - 1 break confirmed; no assistance requested
- City of Fullerton - 11 breaks, sizes 8" to 16"; no assistance requested
- City of La Habra - 2 leaks; short term maybe 75 homes out of water
- All other utilities, including MET confirmed are ok

WEROC EOC automatic activation policy is 5.0 magnitude or greater within Orange County, and or an earthquake that has caused obvious interruptions of lifeline services (water, power, telecommunications). This event just qualified as an automatic activated, however staff felt maybe a full activated was not needed. Darcy Burke sent an automated voicemail, email and text message to WEROC EOC Staff utilizing Alert OC (reverse notification system provided by the County). The message indicated that the WEROC EOC was partially activated, but that further response was not needed at this time.

No assistance was requested so the WEROC EOC deactivated on March 29, 2014 at 1:15 am. WEROC staff continues to provide assistance to agencies for reporting the cost of response (including damage assessments) in WebEOC.

Staff will be conducting a review of all aspects of this activation and response. Agencies will be surveyed about their own response, WEROC's response and what could have worked better. WEROC staff who participated will conduct an internal review for concepts of improvement. Initial lessons learned include:

- Additional WebEOC training is needed for agencies and staff.
- Need to identify additional options for notification; including a more automated system for keeping contact lists current.
- AlertOC training for most WEROC EOC employees to enhance internal notification capabilities.
- Continued work on identifying key concepts for sharing with our operational area partners.

All lessons learned will be incorporated into an After Action Report. Expected completion will be in Mid-May after the next WEROC Quarterly Meeting.

## Status of Water Use Efficiency Projects

April 2014

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
<b>Smart Timer Rebate Program</b>	MWDSC	85%	September 2015	<p>For February 2014, 104 smart timers were installed in the residential sector and 18 in the commercial sector.</p> <p>In February 2014, Newport Beach installed 18 residential smart timers through its ongoing smart timer installation program. In addition, Laguna Beach County Water District reported 64 residential timers through its smart timer installation program. These numbers are included in the program totals listed above.</p> <p>For program water savings and implementation information, see MWDSC Water Use Efficiency Program Savings and Implementation Report.</p>
<b>Rotating Nozzles Rebate Program</b>	MWDSC	Ongoing	June 2015	<p>For February 2014, 4,634 residential and 0 commercial rotating nozzles were installed in Orange County.</p> <p>In the month of February 2014, Newport Beach installed 1,348 residential rotating nozzles. In addition, Laguna Beach County Water District reported 2,677 residential rotating nozzles installed through its rotating nozzle installation program. These numbers are included in the program totals listed above.</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	September 2014	<p>In February 2014, a total of 12,336 meters received monthly irrigation performance reports comparing actual water use to a landscape irrigation budget customized to each meter.</p>



Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
<b>Water Smart Landscape Program (cont.)</b>				For program savings and implementation information, please see MWD OC Water Use Efficiency Program Savings and Implementation Report.
<b>SoCal Water\$mart Residential Indoor Rebate Program</b>	MWDSC	On-going	June 2015	In February 2014, 451 high efficiency clothes washers and 271 high efficiency toilets were installed through this program.  For program savings and implementation information, please see MWD OC Water Use Efficiency Program Savings and Implementation Report.
<b>SoCal Water\$mart Commercial Rebate Program</b>	MWDSC	On-going	On-going	In February 2014, 0 devices were installed through this program.  For program savings and implementation information, please see MWD OC Water Use Efficiency Program Savings and Implementation Report.
<b>Industrial Process Water Use Reduction Program</b>	MWD OC	84%	December 2014	Survey scheduling is ongoing. A total of 40 Focused Surveys and 19 Comprehensive Surveys have been completed or are in progress. To date, 11 companies have signed Incentive Agreements. Updated discharger lists have been obtained, and outreach is continuing to sites with feasible water savings potential.  As part of this program, UCI campus medical buildings installed 10 autoclaves and 18 faucets, yielding a total water savings of 13.5 AFY.
<b>MWD OC Conservation Meeting</b>	MWD OC	On-going	Monthly	This month's meeting was held on April 3, 2014 at the City of Huntington Beach. The next meeting will be on May 1, 2014 and will be hosted by the City of Newport Beach.
<b>Metropolitan Conservation Meeting</b>	MWDSC	On-going	Monthly	This month's meeting was held on March 20, 2014. The next meeting will be April 17, 2014 at Metropolitan.
<b>Water Smart Hotel Program</b>	MWD OC	68%	June 2014	MWD OC was awarded a Proposition 50 Water Use Efficiency grant and a Bureau of Reclamation grant, to be matched with Metropolitan funds, to conduct up to 105 commercial and

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
<b>Water Smart Hotel Program (cont.)</b>				<p>landscape audits of hotels. Enhanced financial incentives will be provided to augment the current SoCal WaterSmart rebates.</p> <p>On March 21<sup>st</sup>, MWDOC staff met with landscape staff for the Montage to discuss the rebate options available to the hotel.</p>
<b>Turf Removal Program</b>	MWDOC	On-going	June 2014	<p>In February 2014, 23 rebates were paid, representing 42,730 square feet of turf removed in Orange County. To date, the Turf Removal Program has removed approximately 1,419,785 square feet of turf.</p> <p>For program savings and implementation information, please see MWDOC Water Use Efficiency Program Savings and Implementation Report.</p>
<b>California Sprinkler Adjustment Notification System</b>	MWDOC	83%	September 2014	<p>MWDOC was awarded a grant from the Bureau of Reclamation to develop the California Sprinkler Adjustment Notification System (CSANS). This system will e-mail or “push” an irrigation index to assist property owners with making global irrigation scheduling adjustments. Participants will voluntarily register to receive this e-mail and can unsubscribe at any time.</p> <p>Final CSANS Testing has been completed, and pilot implementation of the CSANS began the week of March 31<sup>st</sup>.</p>
<b>Public Spaces Program</b>	MWDOC	10%	December 2015	<p>Through the Integrated Regional Watershed Management (IRWM) process, MWDOC is implementing a Proposition 84 grant to target the implementation of comprehensive landscape improvements for publicly owned landscape properties throughout the South Orange County IRWM Plan area.</p> <p>The program encourages the removal of non-functional turfgrass, the upgrade of antiquated irrigation timers, and the conversion of high-precipitation-rate fixed spray irrigation to low-precipitation-rate rotating nozzles and/or drip irrigation.</p>

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
<b>Public Spaces Program (cont.)</b>				<p>These improvements are meant to result in water savings, a reduction of dry-weather runoff, pollution prevention, and reduced maintenance costs on not only the landscape itself, but also the asphalt street material.</p> <p>To date, 10 cities, water districts, or other special districts (i.e., school districts) have applied for funding through this program.</p>
<b>Home Certification Program</b>	MWDOC	3%	July 2015	<p>This program will provide single-family sites with indoor and outdoor audits to identify areas for water savings improvements and opportunities. The program will also provide rebates for the installation of residential water efficiency devices, including smart timers and high efficiency rotating nozzles.</p> <p>In February 2014, MWDOC received one (1) application for the Home Certification Program. One survey was conducted, and survey results are pending for the remaining applications.</p>
<b>Landscape Irrigation Survey Program</b>	MWDSC	Ongoing	June 2016	<p>Through this program, Metropolitan offers, at no cost, the services of a certified landscape irrigation auditor who will survey and provide written recommendations for qualifying non-residential properties within Metropolitan's service area. To participate, properties must have a minimum of one acre of irrigated area. Eligible landscapes include commercial and industrial sites, homeowner association common areas, and institutional sites such as schools, parks, and government facilities.</p> <p>To date, 91 sites in the MWDOC service area have contacted Metropolitan to request surveys.</p>

Description	Lead Agency	Status % Complete	Scheduled Completion or Renewal Date	Comments
<b>Spray to Drip Conversion Pilot Program</b>	MWDOC	15%	October 2014	<p>This is a pilot program designed to test the efficacy of replacing conventional spray heads in shrub beds with low-volume, low-precipitation drip technology. Through a rebate program format, residential sites will be encouraged to convert their existing spray nozzles to drip.</p> <p>The program launched in March. To date, 15 contractors have attended the drip training course, and two (2) sites have signed up to receive rebates.</p>
<b>Commercial, Industrial, and Institutional Performance-Based Water Use Efficiency Program</b>	MWDOC	2%	December 2015	<p>This program will provide enhanced rebate incentives to commercial, industrial, and institutional sites and large-landscape properties (landscapes <math>\geq 1</math> acre). The program is scheduled to launch during the second Quarter of 2014.</p>
<b>Landscape Training and Outreach</b>	MWDOC	5%	Ongoing	<p>The Orange County Garden Friendly (OCGF) Program promotes the use of climate appropriate plants and water efficient irrigation practices, with the overall goals of reducing water runoff and improving outdoor water use efficiency. The OCGF Program is a collaborative effort of the Orange County Stormwater Program (OCSP) and the University of California Cooperative Extension (UCCE). Each partner plays a role in planning and implementing the Program. Various water-related organizations also provide program support and assist with implementation.</p>

# Orange County

## Water Use Efficiency Programs Savings and Implementation Report

### Retrofits and Acre-Feet Water Savings for Program Activity

Program	Program Start Date	Retrofits Installed in	Month Indicated		Current Fiscal Year		Overall Program		
			Interventions	Water Savings	Interventions	Water Savings	Interventions	Annual Water Savings[4]	Cumulative Water Savings[4]
High Efficiency Clothes Washer Program	2001	February-14	451	1.04	3,976	44.07	95,007	2,624	15,055
Smart Timer Program - Irrigation Timers	2004	February-14	122	1.44	745	80.46	10,946	3,709	19,628
Rotating Nozzles Rebate Program	2007	February-14	4,634	1.54	56,460	107.63	367,507	1,976	7,846
SoCal Water\$mart Commercial Plumbing Fixture Rebate Program	2002	February-14	0	0.00	797	14.78	44,625	3,368	26,944
Water Smart Landscape Program [1]	1997	February-14	12,336	880.29	12,336	6,990.57	12,336	10,336	54,292
Industrial Process Water Use Reduction Program	2006	March-14	1	13.50	1	13.50	11	252	878
Turf Removal Program <sup>[3]</sup>	2010	February-14	42,730	0.50	342,599	48	1,419,785	199	446
High Efficiency Toilet (HET) Program	2005	February-14	271	0.96	2,043	83.47	30,616	1,132	7,090
Home Water Certification Program	2013	February-14	1	0.002	30	0.202	30	0.706	0.706
Synthetic Turf Rebate Program	2007		0	0	0	0	685,438	96	469
Ultra-Low-Flush-Toilet Programs <sup>[2]</sup>	1992		0	0	0	0	363,926	13,452	150,509
Home Water Surveys <sup>[2]</sup>	1995		0	0	0	0	11,867	160	1,708
Showerhead Replacements <sup>[2]</sup>	1991		0	0	0	0	270,604	1,667	19,083
<b>Total Water Savings All Programs</b>				<b>899</b>	<b>418,987</b>	<b>7,383</b>	<b>3,312,698</b>	<b>38,971</b>	<b>303,948</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 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY13/14	Total	Current FY Water Savings Ac/Ft (Cumulative)	Cumulative Water Savings across all Fiscal Years
Brea	17	107	178	132	143	132	175	156	42	186	144	93	78	1,583	0.84	251.02
Buena Park	9	45	88	81	84	85	114	146	59	230	145	105	84	1,275	0.96	182.88
East Orange CWD RZ	3	8	20	20	11	18	22	17	3	23	10	10	6	171	0.08	28.38
El Toro WD	21	88	108	103	83	91	113	130	32	162	112	134	85	1,262	1.02	186.34
Fountain Valley	36	127	209	196	178	205	219	243	72	289	158	115	71	2,118	0.78	344.82
Garden Grove	39	173	278	243	243	238	304	332	101	481	236	190	114	2,972	1.33	466.83
Golden State WC	37	195	339	374	342	339	401	447	168	583	485	265	204	4,179	2.04	647.23
Huntington Beach	114	486	857	738	680	761	750	751	211	963	582	334	190	7,417	2.19	1,233.50
Irvine Ranch WD	159	626	1,087	1,093	1,445	1,972	2,052	1,844	1,394	2,621	2,170	1,763	1,190	19,416	13.47	2,868.53
La Habra	8	40	86	81	66	96	136	83	22	179	128	82	76	1,083	0.84	159.79
La Palma	3	5	13	21	18	33	35	51	25	76	46	34	20	380	0.23	53.99
Laguna Beach CWD	17	88	119	84	68	57	77	77	27	96	57	38	23	828	0.22	135.44
Mesa Water District	24	117	228	240	212	239	249	246	73	232	176	114	57	2,207	0.64	373.26
Moulton Niguel WD	158	630	841	640	570	652	716	742	250	1,127	679	442	308	7,755	3.26	1,215.07
Newport Beach	17	144	343	277	243	245	270	259	57	197	142	116	64	2,374	0.74	409.43
Orange	58	247	304	358	330	366	365	403	111	349	262	218	114	3,485	1.28	580.86
Orange Park Acres	-	-	-	-	-	4	8	-	-	-	-	-	-	12	0.00	2.43
San Juan Capistrano	16	95	120	107	102	109	103	127	43	190	110	76	50	1,248	0.49	195.93
San Clemente	32	182	235	170	136	204	261	278	63	333	206	140	65	2,305	0.78	361.22
Santa Margarita WD	140	510	743	573	592	654	683	740	257	1,105	679	553	426	7,655	4.87	1,168.24
Seal Beach	13	28	57	39	46	47	46	57	7	81	51	31	19	522	0.28	81.89
Serrano WD	9	16	54	39	39	30	31	23	7	21	20	13	8	310	0.13	54.41
South Coast WD	35	138	165	97	103	107	130	148	43	183	112	89	62	1,412	0.74	218.32
Trabuco Canyon WD	10	63	76	58	44	69	60	62	28	82	62	30	33	677	0.38	106.89
Tustin	21	89	152	138	127	152	146	144	45	174	97	78	42	1,405	0.42	233.10
Westminster	37	159	235	196	186	213	171	233	74	329	208	121	52	2,214	0.52	355.08
Yorba Linda	36	214	342	355	333	288	350	367	117	394	273	181	111	3,361	1.19	555.86
<b>MWDOC Totals</b>	<b>1,069</b>	<b>4,620</b>	<b>7,277</b>	<b>6,453</b>	<b>6,424</b>	<b>7,406</b>	<b>7,987</b>	<b>8,106</b>	<b>3,331</b>	<b>10,686</b>	<b>7,350</b>	<b>5,365</b>	<b>3,552</b>	<b>79,626</b>	<b>39.70</b>	<b>12,470.74</b>
Anaheim	917	677	904	1,364	701	854	847	781	860	910	477	331	187	9,810	1.99	1,684.86
Fullerton	40	196	369	289	263	269	334	330	69	397	270	200	141	3,167	1.48	494.35
Santa Ana	15	69	188	269	244	236	235	257	87	355	190	163	96	2,404	0.91	405.23
<b>Non-MWDOC Totals</b>	<b>972</b>	<b>942</b>	<b>1,461</b>	<b>1,922</b>	<b>1,208</b>	<b>1,359</b>	<b>1,416</b>	<b>1,368</b>	<b>1,016</b>	<b>1,662</b>	<b>937</b>	<b>694</b>	<b>424</b>	<b>15,381</b>	<b>4.38</b>	<b>2,584.44</b>
<b>Orange County Totals</b>	<b>2,041</b>	<b>5,562</b>	<b>8,738</b>	<b>8,375</b>	<b>7,632</b>	<b>8,765</b>	<b>9,403</b>	<b>9,474</b>	<b>4,347</b>	<b>12,348</b>	<b>8,287</b>	<b>6,059</b>	<b>3,976</b>	<b>95,007</b>	<b>44.07</b>	<b>15,055.17</b>

**SMART TIMERS 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		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	9	0	0	2	0	8	0	9	8	4	0	37	66	293.68
Buena Park	3	1	0	0	0	0	4	19	3	0	0	0	10	20	44.07
East Orange CWD RZ	0	0	0	0	1	0	5	0	2	0	0	0	11	0	2.35
El Toro WD	0	25	2	18	5	5	26	2	7	2	7	0	61	321	1,524.68
Fountain Valley	1	0	0	6	2	2	8	2	3	2	1	0	35	17	74.26
Garden Grove	2	1	6	0	5	4	7	0	5	2	5	0	46	13	62.23
Golden State WC	1	2	9	22	7	4	13	3	9	49	3	11	89	113	310.83
Huntington Beach	13	1	6	27	6	36	15	4	18	33	14	32	117	157	431.38
Irvine Ranch WD	29	56	14	145	28	153	267	71	414	135	49	41	1,097	1,331	5,567.37
La Habra	0	0	0	21	0	0	3	0	4	7	2	0	17	29	89.27
La Palma	0	0	0	0	0	0	1	0	1	0	1	0	3	0	0.28
Laguna Beach CWD	2	0	2	14	4	1	109	2	76	2	66	0	293	19	96.27
Mesa Water District	6	7	13	7	7	22	21	0	10	2	11	2	112	73	338.01
Moulton Niguel WD	21	23	17	162	36	60	179	31	51	74	32	35	461	467	1,512.35
Newport Beach	10	27	7	58	6	0	275	12	242	26	105	69	906	339	1,364.60
Orange	5	2	2	13	5	8	25	0	20	24	11	9	145	111	461.30
San Juan Capistrano	10	0	7	49	13	1	103	2	14	18	3	0	171	79	276.30
San Clemente	81	20	13	209	46	11	212	17	26	7	8	0	940	332	1,476.22
Santa Margarita WD	25	44	10	152	61	53	262	7	53	171	44	66	566	667	2,119.13
Santiago CWD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
Seal Beach	0	0	0	1	0	0	0	3	1	0	1	36	2	40	33.79
Serrano WD	0	0	11	0	4	0	3	0	1	0	0	0	19	0	3.78
South Coast WD	11	6	3	10	13	3	78	10	13	16	4	1	154	125	531.73
Trabuco Canyon WD	1	0	2	0	2	10	12	0	6	0	2	0	68	103	548.16
Tustin	7	9	10	14	10	0	11	0	8	4	9	0	59	34	137.51
Westminster	3	0	3	0	1	1	2	0	1	1	0	0	26	14	85.13
Yorba Linda	8	5	5	21	25	0	22	0	20	0	10	5	171	83	394.39
<b>MWDOC Totals</b>	<b>242</b>	<b>238</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>392</b>	<b>307</b>	<b>5,616</b>	<b>4,553</b>	<b>17,779.08</b>

Anaheim	9	59	5	46	12	11	23	60	19	10	7	26	118	361	1,376.27
Fullerton	2	2	2	39	9	33	22	51	9	29	5	0	71	154	384.74
Santa Ana	2	4	1	8	8	0	6	5	8	19	2	6	31	42	88.05
<b>Non-MWDOC Totals</b>	<b>13</b>	<b>65</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>14</b>	<b>32</b>	<b>220</b>	<b>557</b>	<b>1,849.06</b>

<b>Orange County Totals</b>	<b>255</b>	<b>303</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>406</b>	<b>339</b>	<b>5,836</b>	<b>5,110</b>	<b>19,628</b>
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**ROTATING NOZZLES INSTALLED BY AGENCY  
through MWDOC and Local Agency Conservation Programs**

Agency	FY 09/10			FY 10/11			FY 11/12			FY 12/13			FY 13/14			Total Program			Cumulative Water Savings across all Fiscal Years
	Small		Large	Small		Large	Small		Large	Small		Large	Small		Large	Small		Large	
	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	Res	Comm.	Comm.	
Brea	8	100	0	32	0	0	130	0	0	65	120	0	84	0	0	341	220	0	6.57
Buena Park	0	0	2,535	29	0	0	32	0	0	65	0	0	53	0	0	216	75	2,535	447.88
East Orange	0	0	0	0	0	0	340	0	0	55	0	0	0	0	0	500	0	0	7.04
El Toro	145	2,874	890	174	0	0	357	76	0	23	6,281	0	36	3,288	0	823	12,809	890	296.85
Fountain Valley	21	0	0	83	0	0	108	0	0	35	0	0	0	0	0	381	0	0	6.74
Garden Grove	151	45	0	38	0	0	119	0	0	95	0	0	61	0	0	661	151	0	14.40
Golden State	280	29	0	303	943	0	294	0	0	257	2,595	0	165	0	0	1,543	3,567	0	59.59
Huntington Beach	39	3,420	305	203	625	0	458	0	0	270	0	0	120	0	0	1,505	4,909	2,681	719.35
Invine Ranch	1,034	54,441	1,479	2,411	2,861	0	1,715	4,255	0	25,018	1,014	0	10,848	4,257	0	43,230	79,371	2,004	2303.93
La Habra	0	273	0	0	0	0	33	90	0	0	0	0	15	0	0	72	898	900	213.71
La Palma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0.24
Laguna Beach	191	0	0	156	0	0	763	0	0	3,596	0	0	2,739	878	0	7,661	925	0	65.45
Mesa Water District	195	83	0	118	0	0	297	277	0	270	0	0	338	0	0	1,499	385	343	109.98
Moulton Niguel	234	0	959	1,578	0	0	1,225	0	0	512	1,385	0	257	227	0	4,529	8,615	2,945	833.60
Newport Beach	92	4,781	0	337	1,208	0	640	3,273	0	25,365	50	0	16,149	6,673	0	42,670	16,724	0	485.73
Orange	129	0	0	135	30	0	343	0	0	264	0	0	165	0	0	2,155	193	0	43.49
San Clemente	729	1,299	0	2,612	851	0	4,266	117	1,343	631	172	0	216	5,004	0	9,038	7,468	1,343	331.89
San Juan Capistrano	656	5,709	0	1,452	0	0	949	0	0	684	30	0	283	0	0	4,528	7,399	0	220.89
Santa Margarita	1,731	937	611	3,959	3,566	0	4,817	0	0	983	0	0	318	0	0	13,052	4,571	611	379.66
Seal Beach	0	291	0	0	0	0	0	0	0	0	0	0	0	0	0	115	291	0	8.58
Serrano	1,498	0	0	364	0	0	58	0	0	190	0	0	105	0	0	2,333	0	0	41.61
South Coast	0	0	0	318	1,772	0	688	359	0	435	0	0	70	0	0	1,700	2,264	0	58.30
Trabuco Canyon	1,357	791	0	0	0	0	379	0	0	34	0	0	0	0	0	1,900	791	0	51.40
Tustin	314	0	0	512	0	0	476	1,013	0	378	0	0	329	0	0	2,581	1,013	0	50.48
Westminster	80	0	0	0	0	0	26	0	0	15	0	0	0	0	0	232	0	0	4.69
Yorba Linda	371	3,256	0	529	0	0	559	0	0	730	0	0	40	940	0	3,232	4,309	500	231.45
<b>MWDOC Totals</b>	<b>9,255</b>	<b>78,329</b>	<b>6,779</b>	<b>15,343</b>	<b>11,856</b>	<b>0</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>32,391</b>	<b>21,267</b>	<b>0</b>	<b>146,507</b>	<b>156,948</b>	<b>14,752</b>	<b>6993.50</b>
Anaheim	273	164	105	372	382	0	742	38,554	0	459	813	0	144	0	0	2,387	39,913	105	531.07
Fullerton	48	0	1,484	416	0	0	409	0	0	119	0	0	107	0	0	1,640	64	1,484	288.49
Santa Ana	48	572	0	53	0	0	22	65	0	99	0	0	18	2,533	0	481	3,226	0	32.98
<b>Non-MWDOC Totals</b>	<b>369</b>	<b>736</b>	<b>1,589</b>	<b>841</b>	<b>382</b>	<b>0</b>	<b>1,173</b>	<b>38,619</b>	<b>0</b>	<b>677</b>	<b>813</b>	<b>0</b>	<b>269</b>	<b>2,533</b>	<b>0</b>	<b>4,508</b>	<b>43,203</b>	<b>1,589</b>	<b>852.53</b>
<b>Orange County Totals</b>	<b>9,624</b>	<b>79,065</b>	<b>8,368</b>	<b>16,184</b>	<b>12,238</b>	<b>0</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>32,660</b>	<b>23,800</b>	<b>0</b>	<b>151,015</b>	<b>200,151</b>	<b>16,341</b>	<b>7846.03</b>



# SOCAL WATER\$MART COMMERCIAL PLUMBING FIXTURES REBATE PROGRAM<sup>[1]</sup>

## INSTALLED BY AGENCY

through MWDOC and Local Agency Conservation Programs

Agency	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	Totals	Cumulative Water Savings across all Fiscal Years
Brea	0	51	0	22	52	2	27	113	24	4	1	234	0	530	263
Buena Park	10	83	28	55	64	65	153	432	122	379	290	5	0	1,686	691
East Orange CWD RZ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
El Toro WD	23	23	73	42	5	2	0	92	143	1	137	0	212	753	393
Fountain Valley	1	94	2	59	35	63	17	35	0	2	314	0	0	622	409
Garden Grove	21	199	51	297	34	136	5	298	130	22	0	4	1	1,198	1,058
Golden State WC	11	197	34	232	80	531	46	414	55	68	135	0	0	1,803	1,367
Huntington Beach	5	191	73	185	82	209	48	104	126	96	156	104	138	1,517	1,076
Irvine Ranch WD	306	1,085	87	325	1,044	429	121	789	2,708	1,002	646	1,090	127	9,759	4,485
La Habra	10	37	52	45	60	16	191	75	53	4	0	0	0	543	385
La Palma	0	0	0	0	5	0	0	140	21	0	0	0	0	166	56
Laguna Beach CWD	2	30	2	18	9	12	20	137	189	0	0	0	27	446	219
Mesa Water District	424	155	22	130	241	141	141	543	219	669	41	6	0	2,732	1,438
Moulton Niguel WD	31	74	65	172	3	0	9	69	151	6	0	0	0	580	595
Newport Beach	4	230	9	77	24	94	98	27	245	425	35	0	0	1,268	873
Orange	84	144	22	553	127	88	18	374	67	1	73	1	38	1,590	1,240
San Juan Capistrano	0	34	21	181	0	6	2	1	1	0	0	0	2	248	306
San Clemente	0	36	5	95	40	173	2	18	43	0	19	0	0	431	287
Santa Margarita WD	0	16	3	56	0	0	6	23	11	0	0	0	0	115	149
Santiago CWD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seal Beach	3	34	44	40	61	45	1	2	124	0	0	0	0	354	309
Serrano WD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Coast WD	0	31	8	54	8	4	9	114	56	422	84	148	0	938	304
Trabuco Canyon WD	0	1	0	6	0	0	0	4	0	0	0	0	0	11	11
Tustin	9	114	16	82	14	7	115	145	25	230	0	0	0	757	574
Westminster	16	109	32	153	57	104	40	161	16	63	35	1	12	799	730
Yorba Linda	0	36	12	42	4	118	10	24	8	30	0	1	0	285	402
<b>MWDOC Totals</b>	<b>960</b>	<b>3,004</b>	<b>661</b>	<b>2,921</b>	<b>2,049</b>	<b>2,245</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>557</b>	<b>29,131</b>	<b>17,618</b>
Anaheim	1,042	400	947	362	1,113	780	766	3,298	582	64	48	165	240	9,807	4,843
Fullerton	28	41	138	270	91	96	133	579	29	4	0	94	0	1,503	1,141
Santa Ana	115	153	589	227	624	373	493	815	728	39	12	16	0	4,184	3,341
<b>Non-MWDOC Totals</b>	<b>1,185</b>	<b>594</b>	<b>1,674</b>	<b>859</b>	<b>1,828</b>	<b>1,249</b>	<b>1,392</b>	<b>4,692</b>	<b>1,339</b>	<b>107</b>	<b>60</b>	<b>275</b>	<b>240</b>	<b>15,494</b>	<b>9,325</b>
<b>Orange County Totals</b>	<b>2,145</b>	<b>3,598</b>	<b>2,335</b>	<b>3,780</b>	<b>3,877</b>	<b>3,494</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>797</b>	<b>44,625</b>	<b>26,944</b>

[1] Retrofit devices include ULF Toilets and Urinals, High Efficiency Toilets and Urinals, Zero Water Urinals, High Efficiency Clothes Washers, Cooling Tower Conductivity Controllers, Ph Cooling Tower Conductivity Controllers, Flush Valve Retrofit Kits, Pre-rinse Spray heads, Hospital X-Ray Processor Recirculating Systems, Steam Sterilizers, Food Steamers, and Water Pressurized Brooms.

## Water Smart Landscape Program

Total Number of Meters  
in Program by Agency

Agency	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12/13	FY 13/14	Overall Water Savings To Date (AF)
Brea	0	0	0	0	0	0	0	22	22	22	32.97
Buena Park	0	0	0	0	0	17	103	101	101	101	318.55
East Orange CWD RZ	0	0	0	0	0	0	0	0	0	0	0.00
El Toro WD	88	109	227	352	384	371	820	810	812	812	3,698.05
Fountain Valley	0	0	0	0	0	0	0	0	0	0	0.00
Garden Grove	0	0	0	0	0	0	0	0	0	0	0.00
Golden State WC	0	0	0	14	34	32	34	32	32	32	154.92
Huntington Beach	0	0	0	0	0	31	33	31	31	31	104.18
Irvine Ranch WD	277	638	646	708	1,008	6,297	6,347	6,368	6,795	6,797	28,646.84
Laguna Beach CWD	0	0	0	0	57	141	143	141	124	124	556.10
La Habra	0	0	0	0	23	22	24	22	22	22	105.33
La Palma	0	0	0	0	0	0	0	0	0	0	0.00
Mesa Water District	191	170	138	165	286	285	288	450	504	511	2,212.50
Moulton Niguel WD	80	57	113	180	473	571	595	643	640	637	3,157.58
Newport Beach	32	27	23	58	142	171	191	226	262	299	1,073.24
Orange	0	0	0	0	0	0	0	0	0	0	0.00
San Clemente	191	165	204	227	233	247	271	269	269	291	1,852.27
San Juan Capistrano	0	0	0	0	0	0	0	0	0	0	0.00
Santa Margarita WD	547	619	618	945	1,571	1,666	1,746	1,962	1,956	2,271	10,891.14
Seal Beach	0	0	0	0	0	0	0	0	0	0	0.00
Serrano WD	0	0	0	0	0	0	0	0	0	0	0.00
South Coast WD	0	0	0	62	117	108	110	118	118	118	622.11
Trabuco Canyon WD	0	0	0	12	49	48	62	60	60	60	264.89
Tustin	0	0	0	0	0	0	0	0	0	0	0.00
Westminster	0	0	0	10	18	18	20	18	18	18	90.77
Yorba Linda WD	0	0	0	0	0	0	0	0	0	0	0.00
<b>MWDOC Totals</b>	<b>1,406</b>	<b>1,785</b>	<b>1,969</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>12,146</b>	<b>53,781.4</b>
Anaheim	0	0	0	0	0	142	146	144	190	190	510.36
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>0</b>	<b>0</b>	<b>0</b>	<b>142</b>	<b>146</b>	<b>144</b>	<b>190</b>	<b>190</b>	<b>510.36</b>
<b>Orange Co. Totals</b>	<b>1,406</b>	<b>1,785</b>	<b>1,969</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>12,336</b>	<b>54,291.81</b>

# INDUSTRIAL PROCESS WATER USE REDUCTION PROGRAM

Number of Process Changes by Agency

Agency	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	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
Buena Park	0	1	0	0	0	0	0	1	54	284
East Orange	0	0	0	0	0	0	0	0	0	0
El Toro	0	0	0	0	0	0	0	0	0	0
Fountain Valley	0	0	0	0	0	0	0	0	0	0
Garden Grove	0	0	0	0	0	0	0	0	0	0
Golden State	1	0	0	0	0	0	0	1	3	18
Huntington Beach	0	0	0	0	0	2	0	2	54	92
Irvine Ranch	0	0	2	1	1	1	1	6	98	219
La Habra	0	0	0	0	0	0	0	0	0	0
La Palma	0	0	0	0	0	0	0	0	0	0
Laguna Beach	0	0	0	0	0	0	0	0	0	0
Mesa Water District	0	0	0	0	0	0	0	0	0	0
Moulton Niguel	0	0	0	0	0	0	0	0	0	0
Newport Beach	0	0	0	0	0	0	0	0	0	0
Orange	1	0	0	0	0	0	0	1	43	266
San Juan Capistrano	0	0	0	0	0	0	0	0	0	0
San Clemente	0	0	0	0	0	0	0	0	0	0
Santa Margarita	0	0	0	0	0	0	0	0	0	0
Seal Beach	0	0	0	0	0	0	0	0	0	0
Serrano	0	0	0	0	0	0	0	0	0	0
South Coast	0	0	0	0	0	0	0	0	0	0
Trabuco Canyon	0	0	0	0	0	0	0	0	0	0
Tustin	0	0	0	0	0	0	0	0	0	0
Westminster	0	0	0	0	0	0	0	0	0	0
Yorba Linda	0	0	0	0	0	0	0	0	0	0
<b>MWDOC Totals</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>11</b>	<b>252</b>	<b>878</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 10/11		FY 11/12		FY 12/13		FY 13/14		Total Program		Cumulative Water Savings across all Fiscal Years
	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	Res	Comm.	
Brea	0	0	3,397	9,466	7,605	0	0	0	11,002	9,466	7.53
Buena Park	0	0	0	0	0	0	0	0	0	0	-
East Orange	0	0	0	0	0	0	1,964	0	1,964	0	0.27
El Toro	0	0	4,723	0	4,680	72,718	2,908	0	12,311	72,718	24.06
Fountain Valley	0	0	1,300	0	682	7,524	1,054	0	3,036	7,524	2.99
Garden Grove	0	46,177	14,013	0	4,534	0	3,274	0	21,821	46,177	33.47
Golden State	0	0	42,593	30,973	31,813	3,200	19,884	8,424	94,290	42,597	44.66
Huntington Beach	801	3,651	27,630	48,838	9,219	12,437	13,513	0	51,163	64,926	42.56
Irvine Ranch	5,423	12,794	6,450	1,666	32,884	32,384	23,962	67,381	68,719	114,225	44.67
La Habra	0	7,775	0	8,262	0	0	0	0	0	16,037	7.82
La Palma	0	0	0	0	0	0	0	0	0	0	-
Laguna Beach	978	0	2,533	0	2,664	1,712	1,886	226	8,061	1,938	3.13
Mesa Water District	0	0	6,777	0	10,667	0	8,008	0	25,452	0	6.95
Moulton Niguel	956	16,139	4,483	26,927	11,538	84,123	3,672	20,388	20,649	147,577	52.92
Newport Beach	0	0	3,454	0	3,548	2,346	894	0	7,896	2,346	3.23
Orange	0	0	12,971	0	15,951	8,723	1,434	0	30,356	8,723	12.56
San Clemente	0	0	21,502	0	16,062	13,165	10,646	10,000	48,210	23,165	20.10
San Juan Capistrano	0	0	22,656	103,692	29,544	27,156	6,581	0	58,781	130,848	69.86
Santa Margarita	4,483	5,561	1,964	11,400	10,151	11,600	3,885	10,257	20,483	38,818	19.31
Seal Beach	0	0	0	0	3,611	0	0	0	3,611	0	1.01
Serrano	0	0	0	0	0	0	2,971	0	2,971	0	0.42
South Coast	0	16,324	6,806	0	9,429	4,395	5,627	101,127	21,862	121,846	30.82
Trabuco Canyon	0	0	272	0	1,542	22,440	2,009	0	3,823	22,440	7.11
Tustin	0	0	0	0	9,980	0	1,410	0	11,390	0	2.99
Westminster	0	0	0	0	0	0	0	0	0	0	-
Yorba Linda	11,349	0	0	0	0	0	0	0	11,349	0	6.36
<b>MWDOC Totals</b>	<b>23,990</b>	<b>108,421</b>	<b>183,524</b>	<b>241,224</b>	<b>216,104</b>	<b>303,923</b>	<b>115,582</b>	<b>217,803</b>	<b>539,200</b>	<b>871,371</b>	<b>444.82</b>

Anaheim	0	0	0	0	0	0	0	0	0	0	-
Fullerton	0	0	0	0	0	0	0	9,214	0	9,214	1.29
Santa Ana	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>0</b>	<b>0</b>	<b>9,214</b>	<b>0</b>	<b>9,214</b>	<b>1.29</b>

<b>Orange County Totals</b>	<b>23,990</b>	<b>108,421</b>	<b>183,524</b>	<b>241,224</b>	<b>216,104</b>	<b>303,923</b>	<b>115,582</b>	<b>227,017</b>	<b>539,200</b>	<b>880,585</b>	<b>446.11</b>
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[1] Installed device numbers are listed as square feet

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

Agency	FY05-06	FY 06-07	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14	Total	Cumulative Water Savings across all Fiscal Years
Brea	0	2	7	43	48	8	0	0	26	134	26.43
Buena Park	0	1	2	124	176	7	0	0	26	336	72.35
East Orange CWD RZ	0	0	10	12	1	0	0	0	1	24	6.30
El Toro WD	0	392	18	75	38	18	0	133	160	834	187.26
Fountain Valley	0	69	21	262	54	17	0	0	21	444	111.93
Garden Grove	0	14	39	443	181	24	0	0	26	727	173.22
Golden State WC	2	16	36	444	716	37	80	2	79	1,412	302.72
Huntington Beach	2	13	59	607	159	76	0	0	97	1,013	228.67
Irvine Ranch WD	29	1,055	826	5,088	2,114	325	0	1,449	468	11,354	2,564.06
Laguna Beach CWD	0	2	17	91	28	11	0	0	20	169	37.66
La Habra	0	3	18	296	34	20	0	0	6	377	92.86
La Palma	0	1	10	36	26	13	0	0	15	101	20.90
Mesa Water District	0	247	19	736	131	7	0	0	124	1,264	312.04
Moulton Niguel WD	0	20	104	447	188	46	0	0	196	1,001	208.11
Newport Beach	0	5	19	163	54	13	0	0	18	272	63.46
Orange	1	20	62	423	79	40	0	1	78	704	160.70
San Juan Capistrano	0	10	7	76	39	11	0	0	19	162	35.88
San Clemente	0	7	22	202	66	21	0	0	38	356	79.76
Santa Margarita WD	0	5	14	304	151	44	0	0	362	880	138.53
Seal Beach	0	678	8	21	12	1	0	2	2	724	241.57
Serrano WD	0	0	1	13	5	0	0	0	2	21	5.53
South Coast WD	2	2	29	102	41	12	23	64	46	321	57.24
Trabuco Canyon WD	2	0	4	23	23	0	0	0	5	57	12.17
Tustin	0	186	28	387	479	17	0	0	40	1,137	277.02
Westminster	0	17	25	541	167	23	0	0	20	793	191.69
Yorba Linda WD	0	14	89	323	96	18	0	0	24	564	138.27
<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>1,919</b>	<b>25,181</b>	<b>5,746.33</b>

Anaheim	0	255	78	2,771	619	114	0	0	82	3,919	972.26
Fullerton	0	4	28	286	60	23	0	0	21	422	100.31
Santa Ana	0	11	25	925	89	23	0	0	21	1,094	271.14
<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>124</b>	<b>5,435</b>	<b>1,343.72</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>2,043</b>	<b>30,616</b>	<b>7,090.04</b>
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# HOME WATER SURVEYS PERFORMED BY AGENCY

through MWDOC and Local Agency Conservation Programs

Agency	FY 13/14		FY 14/15		Total		Cumulative Water Savings
	Surveys	Cert Homes	Surveys	Cert Homes	Surveys	Cert Homes	
Brea	0	0	0	0	0	0	0.00
Buena Park	0	0	0	0	0	0	0.00
East Orange	13	0	0	0	13	0	0.31
El Toro	0	0	0	0	0	0	0.00
Fountain Valley	2	0	0	0	2	0	0.05
Garden Grove	0	0	0	0	0	0	0.00
Golden State	0	0	0	0	0	0	0.00
Huntington Beach	0	0	0	0	0	0	0.00
Irvine Ranch	0	0	0	0	0	0	0.00
La Habra	0	0	0	0	0	0	0.00
La Palma	0	0	0	0	0	0	0.00
Laguna Beach	3	0	0	0	3	0	0.07
Mesa	0	0	0	0	0	0	0.00
Moulton Niguel	1	0	0	0	1	0	0.02
Newport Beach	0	0	0	0	0	0	0.00
Orange	0	0	0	0	0	0	0.00
San Clemente	1	0	0	0	1	0	0.02
San Juan Capistrano	1	0	0	0	1	0	0.02
Santa Margarita	7	0	0	0	7	0	0.16
Serrano	0	0	0	0	0	0	0.00
South Coast	2	0	0	0	2	0	0.05
Trabuco Canyon	0	0	0	0	0	0	0.00
Tustin	0	0	0	0	0	0	0.00
Westminster	0	0	0	0	0	0	0.00
Yorba Linda	0	0	0	0	0	0	0.00
<b>MWDOC Totals</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0.71</b>

Anaheim	0	0	0	0	0	0	0.00
Fullerton	0	0	0	0	0	0	0.00
Santa Ana	0	0	0	0	0	0	0.00
<b>Non-MWDOC Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>

<b>Orange County Totals</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0.706</b>
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**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 District	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>
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[1] Installed device numbers are calculated in square feet

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

Agency	Previous Years	FY 95-96	FY 96-97	FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	Total	Cumulative Water Savings across all Fiscal Years
Brea	378	189	299	299	122	144	867	585	341	401	26	48	17	4	0	3,720	1,589.44
Buena Park	361	147	331	802	520	469	524	1,229	2,325	1,522	50	40	18	9	0	8,347	3,221.94
East Orange CWD RZ	2	0	33	63	15	17	15	50	41	44	19	18	13	2	0	332	127.24
El Toro WD	1,169	511	678	889	711	171	310	564	472	324	176	205	61	40	0	6,281	2,883.15
Fountain Valley	638	454	635	858	1,289	2,355	1,697	1,406	1,400	802	176	111	58	32	0	11,911	4,988.63
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	11,284.48
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	10,916.54
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	12,896.15
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	10,965.00
Laguna Beach CWD	283	93	118	74	149	306	220	85	271	118	32	26	29	6	0	1,810	785.75
La Habra	594	146	254	775	703	105	582	645	1,697	1,225	12	31	6	7	0	6,782	2,733.13
La Palma	65	180	222	125	44	132	518	173	343	193	31	27	20	17	0	2,090	858.31
Mesa Water District	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	7,114.85
Moulton Niguel WD	744	309	761	698	523	475	716	891	728	684	410	381	187	100	0	7,607	3,119.21
Newport Beach	369	293	390	571	912	1,223	438	463	396	1,883	153	76	36	16	0	7,219	2,927.69
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	6,798.18
San Juan Capistrano	1,234	284	193	188	323	1,319	347	152	201	151	85	125	42	39	0	4,663	2,170.00
San Clemente	225	113	191	65	158	198	667	483	201	547	91	66	37	34	0	3,076	1,212.77
Santa Margarita WD	577	324	553	843	345	456	1,258	790	684	260	179	143	101	29	0	6,522	2,785.02
Seal Beach	74	66	312	609	47	155	132	81	134	729	29	10	6	12	0	2,396	994.45
Serrano WD	81	56	68	41	19	52	95	73	123	98	20	15	14	2	0	757	313.59
South Coast WD	110	176	177	114	182	181	133	358	191	469	88	72	32	22	0	2,305	913.71
Trabuco Canyon WD	10	78	42	42	25	21	40	181	102	30	17	20	12	14	0	634	252.02
Tustin	968	668	557	824	429	1,292	1,508	1,206	1,096	827	69	89	26	12	0	9,571	4,106.91
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	6,544.89
Yorba Linda WD	257	309	417	457	404	1,400	759	1,690	1,155	627	158	136	81	41	0	7,891	3,148.16
<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>105,621.20</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	16,914.77
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	6,894.71
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	21,078.27
<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>44,887.75</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>150,508.96</b>
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