

# CALFED Bay-Delta Program

## Water Use Efficiency Program Plan Year 10 (State FY 2009-2010; Federal FY 2010)

### **Implementing Agencies:**

DEPARTMENT OF WATER RESOURCES  
STATE WATER RESOURCES CONTROL BOARD  
US BUREAU OF RECLAMATION  
US NATURAL RESOURCES CONSERVATION SERVICE  
CALFED PROGRAM

July 1, 2009



# Introduction

This *Water Use Efficiency* Program Plan identifies the CALFED Program activities that are scheduled to be completed during State Fiscal Year (FY 2009-10) and Federal FY 2010. The Plan also describes progress made to date on the previous year's program plan. As appropriate, the Program Plan and activities will be adjusted during the year to reflect, for example, changes in priorities, funding, policies or program direction. This plan also describes the accomplishments made during the previous fiscal year, State FY 2008-09 and Federal FY 2009.

The Water Use Efficiency Program is presently considered a Coordinated CALFED Action. Under the CALFED structure, Department of Water Resources (DWR), State Water Resources Control Board (SWRCB), United States Bureau of Reclamation (Reclamation), and Natural Resources Conservation Service (NRCS) will work together to implement the WUE Program consistent with the CALFED Record of Decision (ROD). The implementing agencies will work with the WUE stakeholders to continue to implement the WUE Program and to report overall program progress to the CALFED advisory and governing boards.

## **CHAPTER 2. PROGRESS REPORT**

### **I. Urban Conservation Grants**

#### *A. Grants*

DWR selected 47 urban water conservation projects for a total of \$16,895,191 of Proposition 50 funds in Year 5. Contracts were developed for these Proposition 50 grants. The projected water savings from 25 urban implementation projects is estimated to be 30,000 acre feet per year. The ROD water savings projections for Stage 1 was 520,000 to 680,000 acre feet per year for urban. The ROD's projection for urban grants in Stage 1 was \$350 million. The total grant from agencies since 2001 is \$49.7 million (14% of ROD's projection). Management of Proposition 13 grants continued into Year 8.

DWR released the 2008 Draft WUE PSP which provides \$15 and \$20.3 million for urban and agricultural water use efficiency projects, for a total of \$35.3 million. The Final package was put on hold and efforts were re-directed toward dealing with urgent drought issues gripping urban water suppliers.

As a result, in 2008 WUE Proposition 50 Urban Drought Assistance grant program PSP was developed and released on a very fast track schedule to help reduce impacts of on-going drought. Four workshops were conducted for the public Proposals were received, evaluated and 54 projects were selected and agreements were developed. By December 2008, over 30 of these agreements were signed and the rest, while agreements have been developed, put on hold due to stop-work order. All of these projects are now on hold and can be re-started. Many need to be amended for extension of time. The total funds for this PSP were \$17 million of which \$5 million was dedicated to disadvantage communities.

Starting in 2008, DWR worked on AB 1420 to formulate how it will implement provisions of the Bill. The Bill became effective January 1, 2009. Starting in 2008, DWR, in cooperation with staff SWRCB, CALFED, the California Urban Water Conservation Council, developed a "compliance Requirement for eligibility of urban water suppliers to receive grants/loans. DWR conducted several public workshops for the Ag& Urban PSP, following with several workshops for the Urban Drought Assistance PSP and included information on the draft "Compliance With the AB 1420 Requirement" in all of those workshops. DWR has finalized the "Compliance with AB 1420 Requirements" and the package has been submitted to DWR management for approval. It is anticipated that by the third week of May 2009, the "Compliance with AB 1420" will be released to the public.

Lead Agency: California Department of Water Resources (DWR)

## **II. Agricultural Conservation Projects**

### *A. Loans*

\$15 million was available for agricultural loans. No applications were submitted.

DWR staff recommended changing these loan funds to grant funds. No decision has been made.

### *B. Grants*

DWR selected 28 agricultural water conservation projects for a total of \$11,737,791 of Proposition 50 funds in Year 5. Contracts were developed. The projected water savings from 11 implementation projects is estimated to be 26,000 acre feet per year. The ROD water savings projection for Stage 1 was 260,000 to 350,000 acre feet per year for agriculture. ROD's projection for agricultural grants in Stage 1 was \$513 million. Since 2001, total agency grant funds awarded are \$98.4 million (19% of ROD's

projection). Management of these Proposition 50 grants and formerly funded Proposition 13 grants continued into Year 7.

DWR released the Draft 2008 WUE PSP and prepared to release a second draft. The Final draft was put on hold due to DWR's redirecting its efforts on the urgent drought issues. The Final PSP for agricultural projects is ready for release once Bond Fund issues are resolved. This PSP has \$19 million for agricultural water use efficiency projects.

DWR has been mindful of the fact that some agricultural water suppliers do provide water for urban uses and therefore are subject to the provisions of the AB 1420. (See urban activities above)

Lead Agency: DWR

NRCS continued to implement the Environmental Quality Incentives Program (EQIP) (Category B), to provide cost share incentive payments to encourage installation of water conservation practices. Funding available in the EQIP for on farm implementation is based on prior year estimates of the EQIP practice cost share expenditures that complement CALFED WUE Agricultural.

Lead Agency: NRCS

### **III. Water Recycling Projects**

#### *A. Grants*

ROD's projection for water savings in Stage 1 was 225,000 to 350,000 acre feet per year and the projection for funding was \$650 million. The total agency grant commitment since 2001 for water recycling has been \$376 million. SWRCB Water Recycling Loans and Grants accomplishments for FY 2008-2009 are as follows:

1. The SWRCB continues administration of a contract with the WasteReuse Foundation. The contract was amended in early 2008 extending the life of the contract to 2013.

2. For the period of July 2008 through March 2009 the agency approved six (6) planning grants totaling \$450,000 (non-category A funds) for facilities planning studies for water recycling projects using Proposition 13 (2000 bond issue) funds.
3. For the period of July 2008 through March 2009 the agency approved one (1) construction grant totaling \$3.8 million (category A funds) for water recycling facilities construction projects using Proposition 13 (2000 bond issue) funds. For the same period the agency approved one (1) construction loan totaling \$2.9M for water recycling projects.
4. The State Water Board has approved a \$140,000 grant to be used by the California Department of Public Health and Board Staff for two expert advisory panels and a risk assessment report. The scope of one of the advisory panels is to obtain recommendations on the technical viability of the Biodegradable Dissolved Organic Carbon (BDOC)/indicator chemicals concept and whether this approach could be included in the draft groundwater recharge regulations. The scope of the other panel will be to address recycled water used for irrigation of a wide variety of food crops requiring different recycled water qualities.
5. The State Water Board authorized \$220,400 to develop an agreement with University of California Regents that will be used to facilitate an economic analysis task force whose primary responsibility will be to recommend the appropriate framework and methodology for conducting economic analyses of potential water recycling projects. This work is in support of the 2002 Governor's Task Force on Recycled Water recommendations. The state board's authorization will also be used to develop water recycling economic guidance and develop a cost share evaluation.

#### *B. Loans*

For the period of July 2007 through March 2008 no recycled water construction loans were committed.

### **IV. Desalination Projects**

#### *A. Grants*

1. Water desalination may be considered a water supply activity rather than water use efficiency. The Water Desalination Program is managed by DWR Office of Water Use Efficiency and Transfer. Thus, it is reported under the WUE Program Element for

organizational reasons. DWR's Water Desalination Program is administered by funds from Chapter 6 of Proposition 50.

2. The Water Desalination Grant Program is implementing Chapter 6 of Proposition 50 [Water Code Section 79545(a)]. The objective of this grant program is to assist local public agencies with the development of local potable water supplies through brackish water and ocean water desalination.

Lead Agency: DWR with cooperation from EPA, DHS, SWRCB, and DFG.

## **V. Urban Technical Assistance**

Assembly Bill 1881 (Chapter 559, Statutes of 2006) enacted into law on September 28, 2006, improves and strengthens the "Water Conservation in Landscaping Act." A series of actions to be implemented by the Department of Water Resources, local agencies including charter cities and counties, are targeted at improving the efficiency of water use in new and existing irrigated urban landscapes. The law recognizes that the efficient use of water in landscape design, installation, maintenance, and management has a role in reducing water use and waste.

To updated regulation, the Department initiated a stakeholder and technical advisory process. DWR invited and assigned stakeholders into groups based on their request and/or expertise in the subject matters of Evapotranspiration Adjustment Factor (ETAF), Plants, Irrigation, and Compliance. The Department held 12 public discussions or stakeholder meetings in 2007 and one informational meeting in 2008.

In order for the DWR to adopt an updated Model Water Efficient Landscape Ordinance, a rulemaking process is necessary. DWR initiated the rulemaking process for the updated Model Water Efficient Landscape Ordinance in January 2008.

The effect of the updated Model Ordinance is to provide guidance to local agencies in developing and adopting their own landscape ordinances. All local agencies, including charter cities or charter counties, are required to adopt the updated Model Ordinance or adopt its own local landscape ordinance that is at least as effective.

As part of the rulemaking process, in February 2008, DWR released a draft ordinance for a 45-day public comment period that ended in March. DWR received over 600 comments by letter and e-mail, some of which were extensive. DWR made modifications to the proposed ordinance based on public comments, follow ups, and internal discussions. In addition, DWR prepared summaries and responses for key public comments to assist reviewers with understanding the

reasons behind changes to the revised ordinance. DWR also provided detailed comments and responses in the Final Statement of Reasons.

In November 2008, and May 2009, DWR released two notices for 15-day public comment periods.

DWR shall adopt the updated Model Ordinance in 2009.

DWR and U.S. Bureau of Reclamation sponsored three workshops to assist agencies to prepare for water shortages. In the workshops, agencies learned how to assemble the necessary resources; gather basic data needed to understand how customers use water; crunch the numbers to find the savings; establish fair and effective water rationing; and make it work for your customers and your agency.

At the workshops, local water suppliers shared their water shortage experiences, challenges, and solutions.

DWR contributed to water efficient portion of the 2008 California Green Building Standards Code, Title 24, Part 11 California Code of Regulations. The code will be effective in August 1, 2009.

## **VI. Agricultural Technical Assistance**

DWR provides ongoing assistance to agricultural water suppliers by providing information to implement efficient water management practices and help local agencies in their efforts to prepare Water Management Plans and bi-annual progress reports through the Agricultural Water Management Council (AWMC). DWR provides assistance for agricultural water management planning and implementation.

Developed a new cooperative agreement with AWMC to find ways to improve agricultural water supplier's participation in the PSP process. Outreach and marketing of TB's are also part of scope of the work for this activity.

Supported the AWMC to develop a database containing water management plan information. CBDA assisted the AWMC with the initial database development.

Continued to assist AWMC to incorporate QO's into EWMP's, net benefit analysis, and Model Water Management Plan.

Developed a new agreement with AWMC to conduct two drought workshops.

Developed a new cooperative agreement with AWMC to help the Council to increase membership and acreage, to provide financial assistance to small agricultural water suppliers to develop WM Plans, and to develop an on-line water management, reporting application.

Developed a new cooperative agreement with AWMC to conduct 3 public workshops for water districts and farmers on drought issues. These workshops were completed in December 2008, and January 2009.

Developed a new cooperative agreement with AWMC to provide technical assistance to agricultural water suppliers. The activity is put on hold due to the State's Bond Fund issues.

Lead Agency: AWMC with assistance from CBDA, DWR, and Reclamation.

The activities for this past year will continue into the next year. Operated and maintained equipment in over 130 California Irrigation Management Information System (CIMIS) stations statewide and disseminate data to the public for agricultural and urban water management planning and efficient irrigation scheduling. Continued outreach activities at conferences, workshops, and educating foreign visitors and scientists.

Lead Agency: DWR Enhanced and administered and updated the new CIMIS website: (<http://www.cimis.water.ca.gov>) to facilitate the increased demand for data, technical information, and water management tools. Implemented and continued operation of File Transfer Protocol (FTP) site for automated data downloads. Implemented new logger net polling computer data acquisition platforms to provide more frequent CIMIS data updates. This coming year these activities will be migrated to servers. Continued collecting data and providing assistance for maintaining three weather station towers for the Salton Sea Authority investigation.

Plan to assist local water agencies install five new CIMIS weather stations. Collect, process QC/QA, and disseminate CIMIS data to the public through the CIMIS website and provide local technical assistance.

Provide statewide operations maintenance, calibration, and technical assistance, in resolving problems with DWR and cooperator owned CIMIS weather stations and to the public on using CIMIS. Managed Bryte Lab activities and equipment repair and calibrations.

Operated the non-ideal site weather station network study, which includes, establishing weather stations on surfaces other than grass and a comparative correlation analysis to a reference weather station for determining ETo. In 2009 continued the program with currently 11 weather stations and expected to expand an additional 5 in 2009.

Began analysis of comparing CIMIS, lysimeter and EP pan correlations from the Five Points Research Station and fetch studies. Continued the study in 2009.

Continue to manage a contract with University of California Davis to further refine ETo zone maps for California using remote sensing and spatial interpolation methods, updating daily, and to be made available to the public through the CIMIS web page in June 2009. DWR has begun the final stage of refining and implementing the Geostationary Operational Environmental Satellites (GOES) model daily statewide evapotranspiration (ETo) maps and integrating them into CIMIS. In conjunction with the GOES project, CIMIS stakeholders completed phase 1 of the web client services. This includes the creation of a standard data protocol that will allow for the automatic and seamless transmission of CIMIS data to any end user. . Phase 2 was completed and in 2009 began implementing it on the CIMIS public site.

Continued submitting publications to California Agricultural Technology Institute and the Water Conservation News. Published second scientific paper Comparing Net Radiation Estimation Methods: CIMIS vs. Penman – Montieth in the ASCE Journal. 2009 initiated a second study in a different geographic location replicating the first.

Lead Agency: DWR Reclamation provides technical assistance to water suppliers through agreements with the Cal Poly Irrigation Training and Research Center (ITRC), California State University, Chico, Fresno State's Center for Irrigation Technology, and the AWMC. As an example of this technical assistance, the ITRC trains district staff at San Luis Obispo in their Rapid Appraisal Program. This program evaluates irrigation and district's facilities and operations to improve water management. The ITRC annually conducts several 1 to 3 day training classes for approximately 150 participants per year. Most participants are district staff, state and Federal employees, or private contractors. Classes focus on the latest technologies for improved irrigation management. Topics covered include: water distribution system automation, water measurement, and optimal canal operation. In addition to training district staff, Reclamation supports ITRC's Annual Design/Manager School, which supports improvements in on-farm irrigation, drainage reduction, and enhanced groundwater and surface water quality. The ITRC also offers onsite training for Reclamation's water users on specific topics related to irrigation and drainage. These include irrigation evaluation, water delivery modernization, drainage, water quality, and irrigation scheduling. Additionally, federal funding to AWMC will assist the Council in monitoring and evaluating the implementation of efficient water management practices by agricultural water suppliers. The AWMC's work will assist Reclamation, DWR, and CALFED in developing a program of technical and financial incentives for water use efficiency in the agricultural sector and can be used to enhance Reclamation's Criteria for Evaluating Water Management Plans, which are required under the Central Valley Project Improvement Act.

Agricultural Water Management Council, under contract with DWR, conducted drought workshops

Continue to provide technical assistance to producers throughout the state for the adoption of new and improved water management techniques. Compile data and procedures for use of flow meters in irrigation systems and incorporate the information in agency Technical Note and applicable Practice Standard Revisions. Compile data and procedures for use of backflow prevention in irrigation systems and incorporate the information in agency Technical Note and applicable Practice Standard Revisions. Design a water management training course for field office staff that provides irrigation and water management technical assistance.

Lead Agency: NRCS

## **VII. Water Recycling Technical Assistance**

### **A. Technical Assistance**

Continued to provide technical knowledge on water recycling, including: responding to questions from policy makers, regulators, state and local agencies, and the public on permitting issues, public health regulations, and types, locations, and amounts of water reuse occurring. Continued participation on Department of Health Services Recycled Water Committee.

Lead Agency: DWR and SWRCB

### **A. Dual Plumbing Adoption**

Hold public workshops and receive public comments pertinent to the implementation of Assembly Bill 371 (Goldberg 2006) mandate to adopt dual plumbing design standards for potable and recycled water systems inside buildings (California Plumbing Code - California Code of Regulations Title 24, Part 5, Chapter 16 Part II). DWR will submit the code to the Building Standards Commission for the 2009 Annual Code Adoption Cycle.

Lead Agency: DWR in cooperation with CBSC

## **VIII. Assurances**

### **A. *Performance Measures:***

DWR will conduct the performance of funded projects as project outcomes are reported to DWR. DWR will require performance

measures as part of the grant funding applications. A set of performance measures for project and program effectiveness will be developed to assess water savings, cost, in-stream flow benefits, and water quality benefits.

Funding: DWR's funding is included in Science and Monitoring section.

Lead Agency: DWR with cooperation from, SWRCB, Reclamation, and NRCS.

### *B. Urban Certification*

DWR, USBR, SWRCB, and CBDA conducted a confidential stakeholder's interview with representatives of urban water agencies, environmental groups, State, and federal agencies to better understand the affected stakeholder's communities' views regarding urban water agencies implementation of locally cost effective BMPs. An Interview Summary Report was prepared for the agencies. No further activities were taken. AB 1420 was signed into law in 2007. DWR will implement AB 1420 that, effective January 1, 2009, conditions loans and grants on implementation of BMPs. Lead Agency: CBDA with participation by DWR, Reclamation, and SWRCB

### *C. Agricultural Assurances Package*

Agricultural Assurance Package is a set of mechanisms structured to ensure that water users implement appropriate efficiency measures. . The strategy is to take an adaptive management approach and to provide incentives for furthering linkage of funding to Targeted Benefits (TB).

The existing Quantifiable Objectives (QO) and the list of prioritized TB's were included in the WUE PSP. Grant funding will be linked to TB and other project benefits. No further work is currently planned for development of new QO's.

DWR utilized the list of Performance Measures developed for Reclamation's RFP and adapted it for inclusion in the 2007 WUE PSP. DWR has required the applicants to submit a monitoring and performance evaluation plan as part of their application for grant funding.

Lead agency: DWR

#### Quantifiable Objectives/Targeted Benefits:

Targeted Benefits and Quantifiable Objectives were developed by CALFED. The CALFED ROD requires providing irrigated agriculture with an objective list of resource management goals. Through a process that involves quantified TB's and water balances, a QO is developed and expressed in acre-feet or in water quality units. In a simplistic sense, a QO represents a water order: an amount of water needed at a specific location for a given period. Water suppliers and growers can use this information to propose system upgrades to meet the stated objective.

Fifty-five of the 194 TB's are available as QO's. The Water Use Efficiency PSP's are generating interest and activity in QO's. Reclamation has integrated QO's into its standard and regional criteria. The AWMC worked with water districts to help them integrate QO's into the AWMC's efficient water management practices and AWMP process. In Year 6 the AWMC issued a technical memorandum explaining what practices correspond to QO's. Participating agencies: DWR, Reclamation, and CBDA.

AB 1404, water use measurement reporting was signed into law in 2007. It requires agricultural water suppliers to report their farm-gate deliveries to DWR annually.

Developed a new cooperative agreement with AWMC to conduct 3 public workshops for water districts and farmers on drought issues. These workshops were completed in December 2008, and January 2009.

Developed a new cooperative agreement with AWMC to provide technical assistance to agricultural water suppliers. The activity is put on hold due to the State's Bond Fund issues.

#### *D. Science and Monitoring*

Proposals submitted to DWR were required to have a monitoring and assessment plan. DWR will use the plan to make assessments and evaluation of funded projects to evaluate the effectiveness and benefits of CALFED funding of water conservation projects.

AB 1881 signed by the Governor in 2006 requires DWR, by January 2009, to update the Model Landscape Ordinance adopted by DWR in 1992. DWR intends to conduct an ETAF study and submit a report to the Legislature on the water budget component of the model ordinance. An ET Adjustment Factor study will be conducted to determine the maximum allowed amount of water for irrigated landscape. .

DWR initiated work on the AB 1881 ET Adjustment Factor study using the science funds. A Technical Advisory Committee consisting of interested stakeholders was formed to advise DWR in the study. The study will investigate effect of irrigation systems, irrigation management and plant factor on ET adjustment factor to determine the maximum amount of applied water in irrigated landscape. A contract is under development with UC Davis. Lead Agency: DWR with cooperation from Reclamation, SWRCB, and CBDA.

Initiate the ET Adjustment Factor study to determine the maximum amount of water allowed for irrigated landscapes. This study is needed to further refine the water budget component of the Landscape Model Ordinance. AB 1881, signed by the Governor in 2006, requires DWR to update the Model Ordinance by January 2009.

Science and Monitoring Program Funding: \$1.5 million

Lead Agency: DWR with participation by SWRCB, NRCS, and Reclamation.

### *E. Verification*

A more detailed monitoring plan is required in the WUE PSP application to allow verification of WUE funded projects.

For water recycling projects funded by the SWRCB, projects are monitored for the first five years of operation to determine actual deliveries of recycled water compared to estimates for the approved project.

Co-Lead agency: DWR, Reclamation, and SWRCB take the lead for their grant programs ongoing interagency coordination.

## **XI. CBDA Coordination**

WUE is now a CALFED Coordinated Action. Implementing agencies have informed CBDA of accomplishments and actions.

### *Tasks behind schedule for Year 9:*

- The ROD water savings projection for Stage 1 was 520,000 to 680,000 acre feet per year for urban grants. The ROD's projection for urban grants in Stage 1 was \$350 million. The total agency grants since 2001 is \$49.7 million (14% of ROD's projection). The actual water savings from grant-funded projects will not be available until projects have been completed.
- The ROD water savings projection for Stage 1 was 260,000 to 350,000 acre feet per year for agriculture. ROD's projection for agricultural grants in Stage 1 was \$513 million. Total agency grants since 2001 is \$98.4 million (19% of ROD's projection). The actual water savings from grant-funded projects will not be available until projects have been completed.
- ROD's projection for water savings from water recycling in Stage 1 was 225,000 to 350,000 acre feet per year and the projection for grant funding was \$650 million. The total agency grants since 2001 for water recycling has been \$212 million (33% of the ROD's projection). The actual water savings from grant-funded projects will not be available until projects have been completed.
- DWR in cooperation with other agencies and stakeholders have identified urban implementation challenges and impediments such as: marketing, lack of sufficient data, lack of quantified and reliable savings estimates, incentives, and leak detection costs which need to be further studied and the identified barriers removed for improving water conservation. These projects were eligible for funding for DWR's 2004-05, 2006-07 PSP, and 2008-09 PSP and Reclamation's 2006 RFP.
- Urban BMP certification: No urban certification process is developed but a stakeholder interview was conducted. AB 1420 became law and conditions loans and grant on BMP implementation effective January 1, 2009. The Compliance Criteria is being developed but the formation of the Independent Technical Panel is delayed due to lack of resources.

**Details of Year 9 accomplishments are outlined below:**

**V. Urban Technical Assistance**

DWR received 409 Urban Water Management Plans for the 2005 cycle and completed review of 367 plans.

Support CUWCC BMP information reporting for 2010 Urban Water Management Plans (funding is provided from FY 06-07).

DWR is developing a cooperative agreement with the CUWCC for technical assistance to the urban water suppliers.

Lead Agency: DWR

**VI. Agricultural Technical Assistance**

Progress Report

**Activities:**

1. Monitor 33 CALFED Water Use Efficiency and other Water Conservation Field Services Program (WCFSP) grant agreements. These grants are disbursed to both agricultural and urban entities.

**Progress:** Water Use Efficiency projects funded under Reclamation's CALFED program are being completed and Reclamation is working closely with grant recipients on quarterly and final progress reports which include summarizing the project's benefits to assess the project's success in relation to its goals and objectives.

Through the Water Conservation Field Services Program, Reclamation awarded 21 grants in 2008 totaling \$797, 103 in federal funds. With local cost share contributions, these grants resulted in a \$2.3 million investment in water use efficiency. These are two year agreements; therefore, Reclamation is still monitoring each of these agreements for progress.

2. Provide technical assistance to agricultural and urban water districts for water management planning.

**Progress:** Reclamation renewed contracts with California Polytechnic State University, San Luis Obispo's Irrigation Training and Research Center (ITRC), the Agricultural Water Management Council (AGWMC), and the California Urban Water Conservation Council (CUWCC).

Reclamation's agreement with ITRC funds multiple training programs and educational classes for water managers and water operators. These programs

include agricultural irrigation, measurement, automation, and drainage, plus landscape irrigation, and provide training to over 200 participants per year. ITRC also performs rapid appraisals of water districts to provide system-wide recommendations for improved water management.

Agreements with the AWMC and CUWCC provide technical assistance to agricultural and urban districts preparing water management plans and annual updates. These contracts provide funding for the on-line reporting of annual water management plan updates.

### 3. Manage Wetlands Technical Assistance.

**Progress:** After approving the initial 5-year water management plans by 12 national and state wildlife refuges, Reclamation continued to assist the refuges in the implementation of these plans and provide assistance for the annual updates of their Best Management Practices.

### 4. Develop Regional Water Plan for the Sacramento Valley River Contractors.

**Progress:** Reclamation reviewed and approved the Regional Plan in accordance with the Regional Criteria. After no significant public comments were received, this plan was finalized. Currently, Reclamation is working with the Contractors to develop the annual updated on their Best Management Practices.

#### 1. Update Standard Criteria for Evaluating Water Management Plans.

**Progress:** Reclamation reviewed and updated the 2005 Standard Criteria. No significant public comments were received and the 2008 Standard Criteria was finalized. The 2008 Criteria includes 2 substantial changes to the Agricultural Best Management Practices which include the plan to measure outflow from the district and the development of Geographic Information System-based mapping of the distribution and drainage system. A guidebook to assist districts in updating their Water Management Plan was developed in paper and electronic versions.

#### 2. Provide Public Water Conservation Education.

**Progress:** Reclamation provided \$50,000 to Project WET through the Water Education Foundation to provide education to over 250,000 individuals including teachers and students grades kindergarten to 12.

#### 6. DWR developed a cooperative agreement with AWMC to conduct three drought workshops.

**Progress:** These three workshops were conducted during December of 2008 and January 2009.

## Desalination

- Developed a “California Desalination Planning Handbook” in cooperation with the Center for Collaborative Policy (California State University,

Lead Agency: DWR

- Continued to manage desalination grants which were awarded through the two funding cycles of the Proposition 50 desalination grant process.
- Evaluated water desalination project components of various Proposition 84 IWRM grant applications.

## **VII. Assurances**

### *A. Ag Assurances Package*

DWR will include implementation of EWMP's as a scoring criterion for grant funding. Applicants will be required to monitor and report on the project benefits. Greater emphasis was placed on the linkage between project outcome and TB's and this policy will be implemented in future PSPs.

Quantifiable Objectives/Targeted Benefits:

- Agencies continued incorporation of QO's and TB's in future programs and projects. DWR PSP will give priority to projects that contribute to high priority TB's.

### *B. Science/Monitoring/Verification*

Proposals submitted under Proposition 50 are reviewed for scientific merit and feasibility. Monitoring plan and Performance Measures will be required of all applicants for Proposition 50 funding. DWR will analyze monitoring data as projects progress and results are submitted to DWR. DWR will examine the funded projects and pursue any further monitoring needed to verify project benefits. The Monitoring and Performance Evaluation (performance measures) plans of all grant funded projects will be

incorporated into agreements with the grantee. The monitoring and verification data and the performance measures will be used to analyze the water savings, in-stream flow benefits, water quality, energy savings, and costs of projects.

Co-Lead agency: DWR, Reclamation, and SWRCB will take the lead for their respective grant programs; ongoing cross-agency coordination.

DWR Funding: Science and Monitoring

Initiate the ET Adjustment Factor study to determine the maximum amount of water allowed for irrigated landscapes. This study is needed to further refine the water budget component of the Landscape Model Ordinance. AB 1881, signed by the Governor in 2006, required DWR to update the Model Ordinance by January 2009.

Science and Monitoring Program Funding: \$1.2 million

Schedule: 2008-2009

Lead Agency: DWR with participation by SWRCB, NRCS, and Reclamation.

## **Activities for Year 10**

Lead Agency: DWR

### **I. Urban Conservation Projects**

#### *A. Grants*

Continue to work on the 2004 WUE grant funded projects, and management of these contracts.

Complete contracts for the 2007 WUE PSP.

Continue managing 2004 and 2007 projects and compile data and information regarding benefits achieved from these projects.

Issue the Proposition 50 2009 WUE PSP for agricultural water use efficiency. Implementation as well as research and development projects are eligible for funding.

The passage of AB 1420 (Laird) signed in January 2008, conditioned State loans and grant funds from DWR, SWRCB and CBDA to urban water suppliers on compliance with implementation of the Best Management Practices or demand management measures. DWR, in cooperation with urban stakeholders, will issue the AB 1420 Compliance Criteria and appropriate procedures to implement AB 1420. DWR is modifying and revising 2009 WUE Prop 50 PSP to incorporate provisions of AB 1420.

Efforts will be made to include Native American tribes and incorporate Environmental Justice in the development and implementation of the PSP. Continue to strive for a balance between making the proposal and implementation process as accessible as possible to all entities involved in water use efficiency and incorporating more scientific measures into the program. Implementing agencies will include necessary descriptions and a criterion in the PSP to ensure public benefits, monitoring and verification. Proposals will be reviewed and selected based on the criteria outlined in the PSP document. The planned grant dollars are not sufficient to meet ROD objectives.

Manage Proposition 13 and 2007 Proposition 50 WUE-funded projects, including: project monitoring, verification, and assessment of costs and benefits and review of related reports. Funding: \$15.07 million dollars.

Manage 54 Prop 50 Urban Drought Assistance projects.

Lead Agency: DWR

### **Water Conservation Field Services Program**

Lead Agency Reclamation

1. Description of Activity: 50% cost-shared grant program for water conservation. Federal contribution cannot exceed \$50,000.
2. Expected Deliverables/Products this year. The Mid-Pacific Region has completed the evaluation of 26 grant applications for the WCFSP and is proposing to award 18 grants for \$558,875. With local cost-share contributions, this will result in a \$1.8 million dollar investment in water use efficiency throughout the Central Valley. The Lower Colorado Region anticipates awarding an additional \$500,000.

3. Schedule (for the upcoming year only). These agreements were signed by April, 2009 with project start dates no later than September 30, 2009.
4. Cost (For the upcoming year only; identify fund source; i.e. prop 50, general funds, water and related, etc. This should be as close to the Cross-Cut Budgeting and Level 1 project level reporting as possible.): \$500,000 from general water conservation funds
5. Performance measure development: Reclamation requires the inclusion of performance measures as part of the grant application. This requires an assessment plan and a list of specific measures to assess the project success in relation to its goals and objectives. Grantees are required to quantify actual project benefits including water conserved or better managed.
6. Science review or science understanding: N/A
7. Public Involvement and Outreach; list all proposed activities, expected outcomes and dates. N/A
8. Linkages with other elements; this will necessitate cross program review to understand related activities. N/A
9. Environmental compliance. Each project is subject to NEPA
10. Environmental justice. N/A
11. Tribal activities. N/A

Lead Agency: USBR

Lead Agency: Reclamation

## **II. Agricultural Conservation Projects**

### *A. Loans*

The Proposition 13 loan program is available for agricultural water conservation projects. This loan program is managed by DWR's Office of WUE and Transfers.

Funding: \$15 million

Schedule: FY 2009-10. Follow-up with authorization to use these loan funds as grants.

Continue with the request to use these loan funds as grants.

Lead Agency: DWR

### *B. Grants*

Issue the Proposition 50 2009 WUE PSP (combined with urban PSP. See urban PSP). No changes in the Ag portion of the PSP as a result of AB 1420.

Manage Proposition 50 previously awarded grants, including project monitoring, verification, and assessment of costs and benefits and related reports.

Funding: \$15.07 million Proposition 50 WUE funding.

Release the Final Prop 50 WUE Grant PSP, review and evaluate proposals, select proposals and develop cooperative agreements for the successful projects.

Implementing agencies will include necessary descriptions and a criterion in the PSP's to ensure public benefits, monitoring, and verification.

Lead agency: DWR

Implementing agencies will include necessary descriptions and a criterion in the PSP's to ensure public benefits, monitoring, and verification.

Participating agencies: DWR, SWRCB, NRCS, and Reclamation.

## Reclamation Water Use Efficiency Activities

Lead Agency: Reclamation

1. Description of Activity: 50% cost-shared grant program for water use efficiency that specifically benefits the Delta. Agricultural grants are required to implement targeted benefits and quantifiable objectives, and urban grants are reserved for Best Management Practice implementation. Federal contribution cannot exceed \$1 million. Total federal funding for the water use efficiency grants is expected at \$5 million.
2. Expected Deliverables/Products this year. Reclamation anticipates awarding 9-15 water use efficiency grants.
3. Schedule (for the upcoming year only). Reclamation posted a Request for Proposals on grants.gov which closed on June 8<sup>th</sup>. Reclamation received 48 proposals, totaling \$16.9 million in requests. It is anticipated that agreements will be signed by August 13, 2009 with project start dates no later than September 30, 2009.
4. Cost: \$.5 million dollars from Reclamation's CALFED funds.

5. Performance measure development: Reclamation requires the inclusion of performance measures as part of the grant application. This requires an assessment plan and a list of specific measures to assess the project success in relation to its goals and objectives. Grantees are required to quantify actual project benefits including water conserved or better managed as grants are completed, which may be this year depending on the grant.

6. Public Involvement and Outreach; Reclamation has hosted a series of workshops at regional authorities to assist people with the application process. These workshops were held at Tehema-Colusa Canal Authority, San Luis – Delta Mendota Water Authority, Friant Water Authority and Metropolitan Water District of Southern California in May of 2009. Press release and other grant information was provided to AWMC, CUWCC, Regional Water Authority, the San Joaquin Exchange Contractors and Northern California Water Association in lieu of a presentation. Technical information was provided to an estimated 140 members of districts throughout California.

7.

8. Linkages with other elements; N/A

9. Environmental compliance. Each project is subject to NEPA

10. Environmental justice. N/A

11. Tribal activities. N/A

Lead Agency: USBR

NRCS is implementing the new Farm Bill, the Food, Conservation and Energy Act of 2008 authorized May 22, 2008. The new Farm Bill reauthorizes the Environmental Quality Incentives Program (EQIP), which provides cost share incentive payments to encourage installation of water conservation practices. Funding available in EQIP for on farm implementation is usually based on prior year estimates of EQIP practice cost share expenditures that complemented CALFED WUE Agricultural Water Conservation goals. NRCS EQIP is considered Category B.

Funding: As available.

Schedule: Annual Budget Appropriated by Congress

Lead Agency: NRCS

### **III. Water Recycling Projects**

### *A. Grants and Loans*

SWRCB major activities through FY 2009-10 will be as follows:

Continue administering grants and loans from Proposition 50 (grants), State Revolving Fund (loans), 1984 Bond Law (loans), and Proposition 13 (2000 bond issue, grants and loans) for planning and construction of water recycling projects. Under criteria in the CALFED Bay-Delta Program Programmatic Record of Decision, these programs are classified as Category B funding programs, except for construction grant funds authorized by Proposition 13, and funds authorized by Proposition 50, which are Category A funding sources.

Funding (Category B loans and grants): Loan repayments from previous loans under the 1984, 1988, 1996 and 2000 (Proposition 13) Bond Laws are available to continue loans and grants for planning and construction of water recycling projects. The State Revolving Fund can be used for water recycling projects, but there is no set allocation for this purpose. Proposition 13 funds under existing contract will be administered for additional research proposals. A small amount of additional research funds will become available from loan repayments.

Funding (Administrative): Funds from Proposition 50 and the loan repayments from Proposition 13 loans are available for administration.

Lead Agency: SWRCB

Schedule: FY 2009-10

### *B. Research Grants*

SWRCB major activities for FY 2009-10 are to continue water recycling research projects.

Funding: Up to 3 percent of loan repayments from Proposition 13 loans may be used for water recycling research.

Schedule: ongoing

Lead Agency: SWRCB

Develop a project-tracking database for SWRCB-funded water recycling projects, including administrative data as well as recycled water delivery data.

Funding: Administration funds for the State Revolving Fund and Propositions 13 and 50 for task administration.

Schedule: Ongoing

Lead Agency: SWRCB

SWRCB and Reclamation provides funding to WaterReuse Foundation, which in turn, provides research grants for water recycling. Studies funded nationally in other states often benefit California water recycling efforts.

Schedule: Ongoing

Lead Agency: SWRCB, Reclamation

Lead Agency: USBR

### C. Water Recycling Program

As this is a new program for Reclamation's CALFED program, a progress report is not available.

Background:

The Bay Area Regional Water Recycling Program (BARWRP) is a coalition of multiple water recycling agencies with individual projects each with its own planning, construction, and funding schedule. As of June 1, 2009, the BARWRP projects include:

1) Antioch Recycled water Project; 2) Mountain View, Moffett Area Reclaimed Water Pipeline Project; 3) North Coast County Water District Recycled Water Project; 4) Pittsburg Recycled Water Project; 5) Redwood City Recycled Water Project; 6) South Bay Advanced Recycled Water Treatment Facility; and 7) South Santa Clara County Recycled Water Project.

The City of San Jose's South Bay Water Recycling Program coordinate with the BARWRP projects but is administered separately.

The North Bay Water Reuse Authority coordinates the water recycling activities of recycled water producers in Marin, Napa, and Sonoma Counties. As of June 1, 2009, the five participating agencies are: 1) Las Gallinas Valley Sanitary District; 2) Napa Sanitation District; 3) Novato Sanitary District; 4) Sonoma County Water Agency; and 5) Sonoma Valley County Sanitation District.

#### **Project-Specific Details**

#### **BARWRP Projects**

#### **1) Antioch Recycled water Project**

This \$12.5 million project will expand the water reuse system to establish recycled water for use as landscape irrigation at municipal parks, a municipal golf course, medians, and other green spaces along the pipeline alignment. New facilities will include approximately 6 miles of underground pipeline, a 1.1 million gallon storage tank, and a distribution pump station. The completed project will provide approximately 530 acre-feet of recycled water per year and will reduce dependence on Delta potable water supplies, improve water supply reliability for irrigation customers, and will reduce wastewater discharges to the Delta.

## **2) Mountain View, Moffett Area Reclaimed Water Pipeline Project**

This \$21 million project will provide recycled water to over 120 irrigation users. New facilities will include 5 miles of pipeline; additional pipeline will be rehabilitated. The completed project will provide approximately 1,500 acre-feet of recycled water per year and will reduce dependence on existing potable water supplies and will reduce wastewater discharges.

## **3) North Coast County Water District Recycled Water Project**

This \$8.8 million project will provide recycled water to 6 irrigation users. New facilities will include 3.5 miles of pipeline, a 400,000 gallon storage tank, and a new pump station; several existing sites will be rehabilitated. The completed project will provide approximately 175 acre-feet of recycled water per year and will reduce dependence on existing potable water supplies.

## **4) Pittsburg Recycled Water Project**

This \$8.1 million project will expand the water reuse system to establish recycled water service to four landscape irrigation users. New facilities will include 2.5 miles of recycled water distribution pipeline, a 1.0 million gallon storage tank, and a pump station; an additional 11,000 feet of pipeline will be rehabilitated. The completed project will provide approximately 615 acre-feet of recycled water per year and will reduce dependence on Delta potable water supplies, improve water supply reliability for irrigation customers, and will reduce wastewater discharges to the Delta.

## **5) Redwood City Recycled Water Project**

This \$4.6 million project will provide recycled water to 14 irrigation users. New facilities will include 2.8 miles of pipeline. The completed project will provide approximately 250 acre-feet of recycled water per year and will reduce dependence on existing potable water supplies and will reduce wastewater discharges.

## **6) South Bay Advanced Recycled Water Treatment Facility**

This \$53.0 million project will expand the existing recycled water system to provide recycled water to agricultural, industrial, and landscape users. The new recycled water facility will treat secondary effluent with advanced treatment process including microfiltration, reverse osmosis, and ultraviolet disinfection; the water will be distributed via the existing 100-mile recycled water pipeline system.

The completed project will provide approximately 9,000 acre-feet of recycled water per year and will reduce dependence on existing potable water supplies and will reduce wastewater discharges.

### **7) South Santa Clara County Recycled Water Project**

This \$17.4 million project will expand the existing recycled water system to provide recycled water to agricultural, industrial, and landscape users. New facilities will include 5.7 miles of pipeline, a 3 million gallon storage tank, and a new pump station. The completed project will provide approximately 1,790 acre-feet of recycled water per year and will reduce dependence on existing potable water supplies and will reduce wastewater discharges.

### ***Non-BARWRP Projects***

#### **1) City of San Jose's South Bay Water Recycling Program**

This \$80 million project will expand the existing recycled water system to provide recycled water to over 10 industrial and landscape users throughout Santa Clara County. New facilities will include over 13 miles of pipeline and facility improvements. The completed project will provide approximately 2,400 acre-feet of recycled water per year and will reduce dependence on existing potable water supplies and will reduce wastewater discharges.

#### **2) North Bay Water Reuse Authority's North San Pablo Bay Restoration and Reuse Project**

This \$25 million project will expand the existing recycled water system to provide recycled water to agricultural, industrial, environmental, and landscape users to multiple users throughout a three-county region. The project will include upgrading the treatment processes, miles of pipeline, multiple storage facilities, and additional pump stations. The completed project will provide approximately 6,955 acre-feet of recycled water per year and will reduce both reliance on local, imported surface, and groundwater water supplies and the amount of treated effluent releases to San Pablo Bay and its tributaries.

#### **1. Description of Activity:**

#### **2. Expected Deliverables/Products this year:**

#### **3. Schedule (for the upcoming year only):**

#### **4. Cost (upcoming year + fund source):**

#### **5. Performance Measure Development:**

#### **6. Science Review or Science Understanding:**

As part of the feasibility determination for each project, each project sponsor affirms that all necessary scientific research has been completed.

#### **7. Public Involvement and Outreach (all proposed activities, expected outcomes, and dates):**

#### **8. Linkages with other elements (cross-program review):**

9. Environmental Compliance:

Each project has its own environmental document and will neither receive nor expend Federal funds until the project sponsor demonstrates compliance with all applicable environmental rules and regulations.

10. Environmental Justice:

Each environmental document includes a section devoted to environmental justice. There is no known environmental justice issues associated with any Title XVI project.

11. Tribal Activities:

The tribal activities are, at most, minimal.

#### **IV. Desalination Projects**

DWR major activities for 2009-10 are to continue the water desalination grants program to include the management of 48 different projects which were awarded through the two funding cycles of the Proposition 50 desalination grant process.

Schedule: No future grant funding is available. Administration is ongoing.

Participate in the review and evaluation of water desalination project components of various Prop. 84 IWRM grant applications.

Participate in the USBR's Brine-Concentrate Management Study. The study will survey the current state of southern California's brine-concentrate treatment and disposal facilities, regulatory requirements, and emerging / secondary constituent issues; evaluate and compare treatment and disposal methods that could meet forecasted trends in brine-concentrate management for coastal and inland areas; and provide a comparative review of recommended projects for coastal and inland areas to meet expected brine-concentrate treatment and disposal requirements.

Lead Agency: DWR

#### **V. Urban Technical Assistance**

- Landscape training

- Promote California Friendly Landscape
- Support BMP 5 in coordination with CUWCC
- Disseminate information on landscape water conservation
- Distribution system water audit and leak detection
- Assist with new mobile labs
- Participate in evaluating and research of potential BMP's
- Develop protocol for estimating environmental benefit of BMP implementation
- Review about 42 Urban Water Management Plans (remainder of 409 plans submitted in the 2005 cycle) and provide technical assistance
- Publish articles in Water Conservation News and brochures
- Develop and manage Urban Water Management Plan database
- Participate in commercial, industrial, and institutional water conservation through workshops, conferences, and outreach
- Support urban technical assistance projects through technical assistance grants.
- Assist the CUWCC with the implementation of the Water Smart Landscape for California, Landscape Water Conservation Task Force Recommendations (LTFR)
- Begin implementation of the LTFR's (1.1, 15.1, 15.2, 16.1, 31.1 model ordinance), as resources become available
- LT recommendations will be given priority for funding under Proposition 50 2007 WUE PSP.
- Initiate an assessment to identify research needs that could help full implementation of BMP's, and new and emerging technologies in the urban setting.
- Support CUWCC BMP database (funding is provided from FY 06-07).

Lead Agency: DWR

Through the Water Conservation Field Services Program (WCFSP), Reclamation will provide technical assistance to its urban contractors. These efforts can be seen through agreements with:

- California Polytechnic State University, San Luis Obispo's Irrigation Training and Research Center
- California Farm Water Coalition
- California State University, Fresno's Center for Irrigation Technology
  
- Universities of California, Riverside
  
- California State University, San Bernardino
  
- California State University, Chico
  
- Water Education Foundation's Project Water Education for Teachers.  
     Lead Agency: Reclamation  
     Funding: Included in the water conservation budget  
     Schedule: Ongoing

## **VI. Agricultural Technical Assistance**

DWR provides ongoing assistance to agricultural water suppliers by providing information to implement efficient water management practices and help local agencies in their efforts to prepare Water Management Plans and bi-annual progress reports through the Agricultural Water Management Council (AWMC). DWR provides assistance for agricultural water management planning and implementation.

Developed a new cooperative agreement with AWMC to find ways to improve agricultural water supplier's participation in the PSP process. Outreach and marketing of TB's are also part of scope of the work for this activity.

Supported the AWMC to develop a database containing water management plan information. CBDA assisted the AWMC with the initial database development.

Continued to assist AWMC to incorporate QO's into EWMP's, net benefit analysis, and Model Water Management Plan.

Developed a new agreement with AWMC to conduct two drought workshops.

Developed a new cooperative agreement with AWMC to help the Council to increase membership and acreage, to provide financial assistance to small agricultural water suppliers to develop WM Plans, and to develop an on-line water management reporting application. This activity is on hold due to the State's Bond Fund issues.

Lead Agency: DWR

Lead Agency: Reclamation

### **Revision of Standard Criteria**

1. Description of Activity: The Central Valley Project Improvement Act requires that the Standard Criteria for the Water Management Plans be revised every three years.
2. Expected Deliverables/Products this year. New Criteria for water districts to use when preparing their Water Management Plans.
3. Schedule (for the upcoming year only). Reclamation finalized the 2008 Standard Criteria in October 2008 and published a guidebook to assist the user to update their Water Management Plan in both paper and electronic versions.
4. Cost (For the upcoming year only; identify fund source; i.e. prop 50, general funds, water and related, etc. This should be as close to the Cross-Cut Budgeting and Level 1 project level reporting as possible.): \$20,000 from general water conservation funds.
5. Potential Problems: None
6. Performance measure development: N/A
7. Public Involvement and Outreach; list all proposed activities, expected outcomes and dates. Reclamation will host a series of workshops to present the new Criteria to the public and receive comments. Dates are to be determined.
8. Linkages with other elements; this will necessitate cross program review to understand related activities. N/A
9. Environmental compliance. N/A
10. Environmental justice. N/A
11. Tribal activities. N/A

### **Review 5-year water management plans and annual updates**

1. Description of Activity: The Central Valley Project Improvement Act requires that urban, agricultural, and refuge contractors submit a Water Management Plan every 5-years and an annual update of the Best Management Practices outlined in this plan. These plans and updates are reviewed by water conservation staff when submitted.

2. Expected Deliverables/Products this year. Approval of over 30 5-year plans and over 200 annual updates.
3. Schedule (for the upcoming year only). All plans will be received by December 2009, and all annual updates were received by May 2009.
4. Cost (For the upcoming year only; identify fund source; i.e. prop 50, general funds, water and related, etc. This should be as close to the Cross-Cut Budgeting and Level 1 project level reporting as possible.): Cost is unknown. Staff time for review is paid from general water conservation funds.

### **Quarterly Newsletter**

1. Description of Activity: The water conservation staff produces a quarterly newsletter, *Conservation Connection*. The newsletter features articles on new water conservation technologies and Reclamation's funding opportunities.
2. Expected Deliverables/Products this year. The Newsletter is produced quarterly and is distributed to over 850 people.
3. Schedule (for the upcoming year only). July 2009 and October 2009.
4. Cost (For the upcoming year only; identify fund source; i.e. prop 50, general funds, water and related, etc. This should be as close to the Cross-Cut Budgeting and Level 1 project level reporting as possible.): \$7,000 from general water conservation funds.

Lead Agency: Reclamation

Lead Agency: NRCS

NRCS is implementing the new Farm Bill, the Food, Conservation, and Energy Act of 2008 which reauthorized the Environmental Quality Incentives Program (EQIP), which provides cost share incentive payments to encourage installation of water conservation practices. Funding available in EQIP for on farm implementation is usually based on prior year estimates of EQIP practice cost share expenditures that complemented CALFED WUE Agricultural Water Conservation goals. NRCS EQIP is considered Category B.

Funding: As available.

Schedule: Annual Budget Appropriated by Congress

Continue to provide technical assistance to producers throughout the state for the adoption of new and improved water management techniques. Compile data and procedures for use of flow meters in irrigation systems and incorporate the information in agency Technical Note and applicable Practice Standard Revisions. Compile data and procedures for use of backflow prevention in irrigation systems and incorporate the information in agency Technical Note and applicable Practice Standard Revisions. Design a water management training

course for field office staff that provides irrigation and water management technical assistance. NRCS developed a contribution agreement with California Department of Food and Agriculture to identify ways to encourage on farm drought planning and intensify on farm water conservation efforts. NRCS provided \$3 million in funding for drought assistance for producers.

Lead Agency: NRCS

Lead Agency State Water Resources Control Board

### **VII. Recycling Technical Assistance**

Continued to provide technical, biophysical, and engineering-oriented knowledge on water recycling and desalination issues; provided staffing and technical support to help implement the Recycled Water Task Force's recommendations. Completed two research projects with local agencies and University of California Davis to in optimizing the energy needs in the treatment and use of recycled water.

Lead Agency: DWR

Participated in the review and evaluation of water recycling project components of various Prop. 84 IRWM grant applications.

Lead Agency: DWR

Continues to provide technical knowledge on water recycling, including: responding to questions from policy makers, regulators, state and local agencies, and the public on permitting issues, public health regulations, and types, locations, and amounts of water reuse occurring. Continued participation on Department of Health Services Recycled Water Committee.

### **VIII. Water Desalination Technical Assistance**

In collaboration and coordination with stakeholders, DWR continues to provide technical, biophysical, and engineering-oriented knowledge on water recycling by:

- Developing guidelines for water desalination regulation and permitting requirements.
- Identifying potential water desalination projects.
- 
- Helping to implement the Desalination Task Force's recommendations.
- Increasing public awareness and disseminating knowledge and information on technical advancements on desalination technologies.
- Coordinating with federal, State, and local agencies, and other stakeholders, to advance local and regional water desalination. Publishing articles in the WCN about desalination.

Lead: DWR

Schedule: Ongoing

Lead Agency: Reclamation

## **IX. Assurances**

### *A. Ag Assurances Package*

DWR will include implementation of EWMP's as a scoring criterion for grant funding. Applicants will be required to monitor and report on the project benefits. Greater emphasis was placed on the linkage between project outcome and TB's and this policy will be implemented in future PSPs.

Quantifiable Objectives/Targeted Benefits:

- Agencies will continue incorporation of QO's and TB's in future programs and projects. DWR PSP will give priority to projects that contribute to high priority TB's.

### *B. Science/Monitoring/Verification*

Proposals submitted under Proposition 50 are reviewed for scientific merit and feasibility. Monitoring plan and Performance

Measures will be required of all applicants for Proposition 50 funding. DWR will analyze monitoring data as projects progress and results are submitted to DWR. DWR will examine the funded projects and pursue any further monitoring needed to verify project benefits. The Monitoring and Performance Evaluation (performance measures) plans of all grant funded projects will be incorporated into agreements with the grantee. The monitoring and verification data and the performance measures will be used to analyze the water savings, in-stream flow benefits, water quality, energy savings, and costs of projects.

Co-Lead agency: DWR, Reclamation, and SWRCB will take the lead for their respective grant programs; ongoing cross-agency coordination.

DWR Funding: Science and Monitoring

DWR will incorporate science review in its PSP process and will continue to monitor the agricultural, urban, and water desalination projects results and analyze data.

Lead Agency: DWR, with participation by SWRCB, NRCS, and Reclamation.

Initiate the ET Adjustment Factor study to determine the maximum amount of water allowed for irrigated landscapes. This study is needed to develop the water budget component of the Landscape Model Ordinance.

Science and Monitoring Program Funding: \$1.2 million

Schedule: 2009-10

Lead Agency: DWR with participation by SWRCB, NRCS, and Reclamation.

