

# CALFED Bay-Delta Program

## STORAGE PROGRAM Program Plan Year 10 (State FY 2009-2010; Federal FY 2010)

Implementing Agencies:

Department of Water Resources  
Bureau of Reclamation

July 1, 2009



## Introduction

This Storage Program Plan identifies the CALFED Program activities that are scheduled to be completed during State Fiscal Year (FY) 2009-2010 and Federal FY 2010. 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.

The goal of the Storage Program is to increase water supply reliability, improve water quality, and support ecosystem restoration through expanded storage capacity and increased operational flexibility. The program includes both surface water and groundwater storage components. DWR and Reclamation are the CALFED surface storage implementing agencies. DWR is the CALFED groundwater storage implementing agency.

DWR and Reclamation are conducting planning and feasibility studies for potential surface storage projects identified by CALFED and as part of California's overall water management strategy. Reclamation and the Santa Clara Valley Water District are also conducting a feasibility study for potential complementary San Luis Reservoir Low Point improvements. Contra Costa Water District is participating in the Los Vaqueros study as the California Environmental Quality Act (CEQA) lead agency and Reclamation is the National Environmental Policy Act (NEPA) lead agency.

Improving the effectiveness of groundwater management throughout the state is an identified need and priority of the groundwater storage program. Effective monitoring and institutional structures are critical to the success of local and regional conjunctive management projects, as well as to other CALFED programs, such as water transfers. Passage of SB 1938 in 2002 provided new requirements for groundwater management plans (GMPs), and made the award of grant funding contingent on compliance. This incentive has led to the development or update of many GMPs in the state.

## Progress Report for CALFED Year 9

**I. Surface Storage.** Progress of the Surface Storage Investigations during Program Year 9 is highlighted in the following discussion.

### A. Shasta Lake Enlargement Feasibility Study

#### Activity and Progress related to the activity

- Continued planning activities, feasibility studies, design and cost estimates, economic and environmental evaluation, coordination, report development

- Refined engineering designs on dam, appurtenant structures, relocations
- Refined biological and physical surveys for environmental documentation
- Continued public, tribal, and stakeholder coordination and outreach

#### B. North-of-the-Delta Offstream Storage Feasibility Study

##### Activity and Progress related to the activity

- Continued planning activities, feasibility studies, design and cost estimates, economic and environmental evaluation, coordination, report development
- Completed most biological and physical surveys
- Completed Plan Formulation Report in September 2008 and released to the public in May 2009
- Refined alternative plans and related mitigation actions and costs
- Continued cultural resources activities consistent with Section 106 of National Historic Preservation Act
- Refined feasibility-level engineering designs and cost estimates
- Completed feasibility-level design and cost estimates for fish screen facilities for pipeline intake options

#### C. Los Vaqueros Reservoir Expansion Feasibility Study

##### Activity and Progress related to the activity

- Continued planning activities, feasibility studies, design and cost estimates, economic and environmental evaluation, coordination, report development
- Completed biological and physical surveys as basis for preparation and release of the Draft EIS/EIR in February 2009
- Completed identification of mitigation properties and cost estimates
- Formulated, evaluated, and compared alternatives using principles, guidelines, policies, and performance measures to meet objectives
- Conducted public meetings and other stakeholder outreach in March-April 2009 to receive public comments regarding the Draft EIS/EIR

#### D. Upper San Joaquin River Basin Storage Feasibility Study

##### Activity and Progress related to the activity

- Continued planning activities, feasibility studies, design and cost estimates, economic and environmental evaluation, coordination, report development
- Completed Plan Formulation Report in October 2008 and released to the public in May 2009
- Conducted public information meetings and workshops to update study status, exchange information, and obtain input on feasibility studies  
Provided periodic Newsletter updates

## E. San Luis Reservoir Low Point Feasibility Study

### Activity and Progress related to the activity

- Continued planning activities, feasibility studies, design and cost estimates, economic and environmental evaluation, coordination, report development
- Initiated public scoping activities in August 2008 and completed the Public Scoping Report in December 2008
- Completed a Plan Formulation Report in June 2009

## F. Common Assumptions

### Activity and Progress related to the activity

- Continued the refinement of a common model package for a reasonably foreseeable future no-action condition and an existing condition with the 2004 OCAP operations criteria. Applied the common model package in support of the ongoing feasibility studies to evaluate potential effects.

## II. Groundwater Storage/Conjunctive Water Management

Progress of the Groundwater Storage/Conjunctive Water Management Program projects in Program Year 9 is highlighted in the following discussion.

### A. Feasibility Study Grants

#### Activity and Progress related to the activity

- Administered and provided oversight on previously funded Feasibility Study grants.
- *Progress:* A total of 178 Local Groundwater Management Assistance Act (AB 303) grants, 8 of which were Capacity Building Grants, have been awarded funding and 127 are complete as of Year 9. A total of 28 feasibility studies/pilot projects were funded under Proposition 13, and 26 of the 28 projects are complete as of Year 9.

### B. Technical Assistance to Locals

#### Activity and Progress related to the activity

- Provided technical and financial assistance to existing local MOU agency partnerships to study the groundwater basins, assess in-basin needs and opportunities for conjunctive and integrated regional water management, and develop groundwater management plans (GMPs). The Program provided independent facilitation/mediation services to local partners for improving stakeholder involvement, fostering local support for improved groundwater management, and for enhancing stakeholder understanding of local and regional water resource issues and needs.

- *Progress:* Work continued to expand partnerships regionally and integrate additional water management elements into the planning process. Although the number and location of GMPs throughout the state are now being tracked, because local agencies are not required to submit the plans to DWR, the ability to quantify the progress towards the goal of improving groundwater management is limited.

### C. Implementation Grants and Loans

#### Activity and Progress related to the activity

- Provided oversight on the implementation of previously funded groundwater storage construction and IRWM grants and loans.
- *Progress:* A total of 32 projects, having an estimated total projected capacity of over 300 TAF, have been awarded funding under Proposition 13 and 9 of the projects funded in the three cycles were completed by Year 9.
- Through 2009, DWR and the State Water Resources Control Board have awarded \$365 million in Proposition 50 for integrated regional water management (IRWM) proposals. Although this funding is not specifically targeted at groundwater projects, many of the projects in the regional proposals would expand groundwater storage, desalt brackish groundwater, or improve groundwater quality to make new supplies available. Overall, about 40% of the awarded funds will go toward groundwater projects.
- Initiated and conducted a Region Acceptance Process (RAP). The RAP establishes a procedure and criteria for determining the acceptability of a region for purposes of future IRWM funding eligibility.

## Activity Proposed for CALFED Year 10

### 1. Surface Storage.

Key activities for the Surface Storage Investigations during Program Year 10 are highlighted below. Common activities for all investigations include: continuation of technical studies and evaluations; coordination and outreach with concerned agencies, stakeholders, tribes, and the public; and report preparation and processing. In late 2009, the implementing agencies plan to release interim progress reports for each active investigation to inform and update the public, stakeholders, and decision makers of the status of the feasibility studies.

The overarching commitment of the surface storage program is to continue to advance the feasibility study process in order to: (1) refine and narrow the range of alternative plans for potential projects; (2) evaluate and compare the plans and move forward to the final stages of the process (e.g., draft and final Feasibility Reports, environmental documentation, and financial analysis); and (3) work with

potential participants to assess their needs, interests, and responsibilities regarding specific surface storage projects. During Year 10, development of draft Feasibility Reports and NEPA/CEQA documents for the active surface storage investigations will continue to progress.

Over the past two years, the Surface Storage Program has faced two major challenges that are delaying completion of the feasibility studies: (1) no state budget for FY 2007-08 and a delay in receiving FY 2008-09 appropriations until March 2009 (a 20-month total delay); and (2) the state and federal water systems' ability to convey water through the Delta has been greatly curtailed to protect listed fish species. While the state budget has been restored, the reconsultation process pursuant to the Federal Endangered Species Act on the coordinated operation of the State and Federal water projects (SWP and CVP) has not yet been completed. In addition, current constraints on the existing facilities used to export and convey water from the Delta limit benefits of new storage capacity, even in the driest of years.

Planning for the Bay-Delta Conservation Plan and Delta Habitat Conservation and Conveyance Program (BDCP/DHCCP) is focused on developing an ecological solution for Delta fisheries while providing a sustainable and reliable water conveyance system for California. The BDCP/DHCCP Public Draft EIR/EIS is expected by March 2010 with a proposed plan to meet the goals of fisheries recovery and reliable Delta conveyance. Once addressed in the Draft EIR/EIS for BDCP/DHCCP, the CALFED Surface Storage Investigations intend to incorporate the proposed Delta conveyance and operations as a reasonably foreseeable future condition (baseline) and may reformulate the storage alternatives as necessary. This process will delay the release of Draft and Final Feasibility Reports and EIS/EIRs.

Resultantly, draft Feasibility Reports and NEPA/CEQA documents for the storage investigations are expected for public release approximately 9 months after the release of the public draft DHCCP EIS/EIR. Final Feasibility Reports and EIS/EIRs are expected for public release approximately one year after release of the respective surface storage investigation's Draft Feasibility and EIS/EIR. State Feasibility Reports will be released as requested by the Legislature.

#### A. Shasta Lake Enlargement Feasibility Study

##### Activity

- Continue planning and feasibility studies (engineering, environmental, economic, financial), refine design and estimates of costs and benefits, agency and stakeholder coordination, public involvement and outreach
- Continue development of draft Feasibility Report and EIS

##### Products and Schedule

- Complete and release interim progress report: October 2009

#### B. North-of-the-Delta Offstream Storage Feasibility Study

##### Activity

- Continue planning and feasibility studies (engineering, environmental, economic, financial), refine design and estimates of costs and benefits, agency and stakeholder coordination, public involvement and outreach
- Continue development of draft Feasibility Report and EIS/EIR

##### Products and Schedule

- Complete and release interim progress report: November 2009

#### C. Los Vaqueros Reservoir Expansion Feasibility Study

##### Activity

- Continue planning and feasibility studies (engineering, environmental, economic, financial), refine design and estimates of costs and benefits, agency and stakeholder coordination, public involvement and outreach
- Continue development of draft Feasibility Report and EIS/EIR

##### Products and Schedule

- Complete and release interim progress report: September 2009

#### D. Upper San Joaquin River Basin Storage Feasibility Study

##### Activity

- Continue planning and feasibility studies (engineering, environmental, economic, financial), refine design and estimates of costs and benefits, agency and stakeholder coordination, public involvement and outreach
- Continue development of draft Feasibility Report and EIS/EIR

##### Products and Schedule

- Complete and release interim progress report: November 2009

#### E. San Luis Reservoir Low Point Feasibility Study

##### Activity

- Continue planning and feasibility studies (engineering, environmental, economic, financial), refine design and estimates of costs and benefits, agency and stakeholder coordination, public involvement and outreach
- Continue development of draft Feasibility Report and EIS/EIR

##### Products and Schedule

- Complete and release interim progress report: December 2009

#### F. Common Assumptions

### Activity

- Update the common model package in consideration of:
  - 1) the future no-action and existing conditions resulting from the 2008 OCAP operations criteria and related Biological Opinions (and Reasonable and Prudent Alternatives) from the U.S. Fish and Wildlife Service (December 2008) and NOAA Fisheries/NMFS (June 2009); and
  - 2) the BDCP/DHCCP Public Draft EIR/EIS with its proposed plan to meet the goals of fisheries recovery and reliable Delta conveyance as the basis for a reasonably foreseeable future condition to enable evaluation of the potential effects of alternative surface storage alternatives.

### Products and Schedule

- Complete the common model package update by summer 2010

## **2. Groundwater Storage/Conjunctive Water Management**

The groundwater storage program is committed to facilitating and funding locally and regionally supported, managed, and controlled groundwater and conjunctive management projects for providing additional storage capacity. Progress toward achieving this goal is being assessed in terms of the capacity to deliver additional water with new projects, facilities, and operations, rather than just available storage. This is thought to be a better measure of the improvement in water supply reliability. Actions for Year 10 include completing implementation of the most promising projects and aggressively pursuing implementation of additional projects initiated in Stage 1 of the CALFED Record of Decision.

Improving the effectiveness of groundwater management throughout the state is an identified need and priority of the groundwater storage program. Effective monitoring and institutional structures are critical to the success of local and regional conjunctive management projects, as well as to other CALFED programs, such as water transfers. Passage of SB 1938 in 2002 provided new requirements for groundwater management plans (GMPs), and made the award of grant funding contingent on compliance. This incentive has led to the development or update of many GMPs in the state.

In developing regional conjunctive management projects, local agencies are considering proposals that will provide multiple project benefits.

### **A. Feasibility Study Grants**

#### Activities

- Continue to provide administration and oversight of two feasibility study projects previously awarded under Proposition 13.

### Products

- In addition to the continued oversight and administration of existing grants, will conduct solicitation of another round of Local Groundwater Assistance (LGA) grant proposals. Grants will be funded using the Proposition 84 IRWM bond funds.

### Schedule

- Ongoing

## B. Technical Assistance to Locals

### Activities

- DWR will continue to work with local and regional agencies to develop locally controlled and managed groundwater and conjunctive use programs. In addition, DWR will continue to provide oversight on projects awarded funding through the grants and loans program. DWR is working with local agency partners to implement SB 1938, which placed requirements on groundwater management plans, most notably, an element of integrated regional water management coordination.

### Products

- DWR will continue providing assistance to local agencies to develop locally controlled and managed groundwater and conjunctive use projects and programs providing local and regional benefits. DWR will work with local agencies to assist in developing more competitive proposals for future grant funding.

### Schedule

- Ongoing.

### Other

- The local planning processes for groundwater storage include tribal representation where applicable. Groundwater storage projects are leading to drinking water quality improvements, primarily in southern California. Coordination with the Water Use Efficiency program is ongoing with the groundwater storage programs.

## C. Implementation Grants and Loans

### Activities

- Continue providing oversight on the implementation of previously funded groundwater storage construction grants and loans and development of guidelines for IRWM grant programs

### Products

- Complete final guidelines for Proposition 84 IRWM grant programs.  
Conduct solicitation for Proposition 84 IRWM planning grant proposals.

### Schedule

- Proposition 84 funds will begin to be awarded over the next 12 months and development of updated IRWM plans by regional groups will commence.

### Other

- DWR is exploring additional alternatives to expedite award of Proposition 84 funds. CWMP will continue to coordinate with the Science Program in developing Performance Measures to assess feasibility studies and ability to implement the project, and in determining potential benefits and beneficiaries to ensure program consistency. Performance measure standards will consider: criteria for completion and conclusions of feasibility studies conducted; economic efficiency; environmental benefits provided; water produced meeting local, regional, and statewide needs; and improvements in water quality.

**3. Funding.** Funding for Storage projects is divided between surface storage and groundwater storage.

Groundwater Storage – Groundwater storage is funded by the Department of Water Resources. Funding for CALFED Year 10 is:

- Implementation Grants and Loans: \$100 million Proposition 84 is proposed in the Governor's FY 09-10 Budget for DWR
- Technical Assistance to Locals: \$4.0 million Proposition 50 proposed in governor's FY 09-10 Budget for DWR
- Feasibility Study Grants: \$4.5 million Proposition 84 is proposed in governor's FY 09-10 Budget for DWR. These funds will be used to fund LGA projects.

Surface Storage – Funding for surface storage projects is included in both DWR and USBR budgets.

- For the Department of Water Resources: \$14.76 million was appropriated last year through Senate Bill 2x 1 for FY08-09 and FY09-10. \$3.76 million is from Proposition 50 funds and \$11.0 million is from Proposition 84 funds. The \$14.76 million is not allocated to specific surface storage projects. Also, DWR has a cooperative agreement with Reclamation for \$.98 million to support the surface storage studies.
- For Reclamation: The appropriation for FY 2009 surface storage investigations is \$8.150 million. The FY 2010 Budget Request is \$4.05 million.