

CALFED Bay-Delta Program

STORAGE PROGRAM Program Plan Year 9 (State FY 2008-2009; Federal FY 2009)

Implementing Agencies:

Department of Water Resources
United States Bureau of Reclamation

June 25, 2008



Introduction

This Storage Program Plan identifies the CALFED Program activities that are scheduled to be completed during State Fiscal Year (FY) 2008-2009 and Federal FY 2009. 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.

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 storage 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.

Priorities for CALFED Year 9

Surface Storage Program Priorities

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.

The overarching priority of the surface storage program is to continue to advance the feasibility study process in order to: (1) identify alternative plans for potential projects; (2) narrow the range of alternative 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 and interests in specific surface storage projects. During Year 9, draft Feasibility Reports and NEPA/CEQA documents are due for all of the active storage investigations. Specific priorities for the individual surface storage projects in the upcoming year are:

- Shasta Lake Enlargement: Complete draft Feasibility Report and EIS to (1) address alternative plans for the potential expansion of Shasta Dam and Reservoir to improve the supply and reliability of water for agricultural, urban, and environmental purposes; and (2) identify non-Federal cost sharing partners and potential beneficiaries and implementation

responsibilities. Alternative plans include the potential for up to 634,000 acre-feet of additional storage capacity.

- North-of-the-Delta Offstream Storage: Complete draft Feasibility Report and EIS/EIR to (1) address alternative plans to improve the water supply and water supply reliability for agricultural, urban, and environmental purposes, improve water quality; and support ecosystem restoration; and (2) identify cost sharing partners and potential beneficiaries and implementation responsibilities. Alternative plans include the potential for up to 1.8 million acre-feet of new off-stream storage capacity.
- Los Vaqueros Reservoir Expansion: Complete a draft Feasibility Report and EIS/EIR documents to (1) develop water supplies for environmental water management; (2) increase water supply reliability within the San Francisco Bay Area; and (3) to the extent possible improve the quality of water deliveries to municipal and industrial customers without impairing the project's ability to meet the environmental and water supply reliability objectives. Alternative plans include the potential for up to 175,000 acre-feet of additional storage capacity.
- Upper San Joaquin: Complete a Progress Report on plan formulation activities that (1) includes changes to the planning objectives, assumptions, scope, and project purpose as a result of the San Joaquin River Settlement Agreement; and (2) narrows the array of alternative plans under consideration. Additional field studies will be conducted for incorporation into a draft Feasibility Study Report and EIS/EIR. Alternative plans include the potential for up to 1.260 million acre-feet of additional storage capacity.
- San Luis Low Point: Complete draft Feasibility Report and NEPA/CEQA documents to: (1) avoid supply interruptions when water is needed by increasing the certainty of meeting the requested delivery schedule throughout the year to south-of-Delta contractors dependent on San Luis Reservoir; (2) increase the reliability and quantity of yearly allocations to south-of-Delta contractors dependent on San Luis Reservoir; and (3) announce higher allocations earlier in the season to south-of-Delta contractors dependent on San Luis Reservoir without sacrificing accuracy of the allocation forecasts.
- Common Assumptions¹: Update the common model package (common analytical framework, tools, and methodology for integrated hydrologic and

¹ Because of the complexity of the CALFED Water Storage Program, Reclamation and DWR have established Common Assumptions about existing and reasonably future conditions as a basis for feasibility studies and associated model studies. For the purposes of this program plan, the Common Assumptions effort is discussed as a project under Surface Storage.

economic analyses) for a future no-action condition and an existing condition with the new 2008 Operations Criteria and Plan (OCAP) operations criteria.

Groundwater Program Priorities

The groundwater storage program priorities are to facilitate and fund locally 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 9 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 and EWA. 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.

Progress Report for CALFED Year 8

I. Surface Storage. Progress on the Surface Storage Investigations during Program Year 8 is highlighted below.

A. Shasta Lake Enlargement Feasibility Study

Activity and Progress related to the activity

- Complete Plan Formulation Report in December 2007. After Washington-level review, the PFR was revised and released to the public in March 2008.
- Continued refinement of feasibility level engineering designs and costs estimates on dam, appurtenant structures, and relocations.
- Continued refinement of biological and physical surveys for environmental documentation.
- Completed Section 106 Process which included inventory of cultural resources and tribal consultation on cultural issues of concerns.

- Completed Real Estate gross appraisal study.
- Continued public, tribal and stakeholder coordination and outreach.

B. North of the Delta Offstream Storage Feasibility Study

Activity and Progress related to the activity

- Complete Plan Formulation Report in fall 2007
Progress: Due to the Pelagic Organism Decline and South Delta Improvements Program Stage 2 actions not moving forward, modeling studies were reassessed, scope expanded, and schedule extended. PFR rescheduled to May 2008 for submittal to Washington.
- State Feasibility Progress Report
Progress: Continued a state feasibility progress report evaluating future scenarios
- Complete draft Sacramento River Flow Regime Status Report in Fall 2007
Progress: A draft Sacramento River Flow Regime Status Report is scheduled for completion by DWR and Reclamation in spring 2008.
- Completed biological and physical surveys for environmental assessment and documentation
Progress: Most biological and physical surveys are completed.
- Refined alternative plans and related mitigation actions and costs
Progress: HEP Team is developing mitigation measures and plans.
- Continue cultural resources identification process consistent with Section 106 of National Historic Preservation Act
Progress: Work continues on Section 106 coordination process
- Refine feasibility level engineering designs and cost estimates
Progress: Refining designs and cost estimates for all facilities except the fish screen intake for new pipeline.
- Continue to formulate, evaluate, and compare alternative plans using iterative planning processes, based on Federal principles and guidelines and other Federal and State statutes, policies and performance measures to meet project objectives
Progress: Initial alternatives are addressed in Plan Formulation Report; refinement continuing for Feasibility Report and EIS/EIR.
- Continued public and stakeholder coordination and outreach
Progress: Public and stakeholder coordination and outreach will continue after the PFR is completed and released.
- Applied Reclamation's suite of predictive models to measure potential effects of geomorphology and river processes on alternative operations.
Progress: Completed report entitled: *A Conceptual Framework for Modeling of Physical River Processes and Riparian Habitat on the Sacramento River, California* in April 2007. Results will be addressed in Feasibility Report and EIS/EIR.

C. Los Vaqueros Reservoir Expansion Feasibility Study

Activity and Progress related to the activity

- *Progress:* The Draft EIS/EIR is scheduled for completion by July 2008. The State Feasibility Progress Report is due in August 2008. The Draft Feasibility Report is scheduled for completion in December 2008.

D. Upper San Joaquin River Basin Feasibility Study

Activity and Progress related to the activity

- Planning activities
Progress: Inclusion of the San Joaquin River Settlement in the without project condition has delayed the evaluations in Plan Formulation Phase; a progress report is scheduled for summer 2008.
- Water Operations
Progress: The San Joaquin River Settlement and pumping restrictions in the Delta have changed priorities on potential uses of water supplies beyond the Friant Unit and San Joaquin River. Opportunities are being explored for integrated operations between additional upper San Joaquin River storage and the SWP and CVP. Operation scenarios have been developed to increase reliability, but alternatives could be developed to increase south of Delta flexibility and ecosystem benefits.
- Environmental Resources
Progress: The vegetation mapping was refined in the summer of 2007. Surveys for sensitive species were conducted in the spring and summer of 2007. USFWS prepared the baseline Habitat Evaluation Procedure for reservoir areas in summer 2007.
- Groundwater Storage and Conjunctive Management
Progress: DWR identified several potential conjunctive management or groundwater storage projects in the Conjunctive Management Opportunities in the San Joaquin Valley draft report in 2006. Specific projects need to be identified in order to be evaluated for inclusion in the Investigation.

E. San Luis Reservoir Low Point Feasibility Study

Activity and Progress related to the activity

- *Progress:* The Draft Plan Formulation Report is scheduled for completion by June 2008. Public scoping meetings for preparation of the EIS/EIR will be held in summer 2008.

F. Common Assumptions

Activity and Progress related to the activity

- *Progress:* Completed the development of a common model package for a reasonably foreseeable future no-action condition and an existing condition with the 2004 OCAP operations criteria.

II. Groundwater Storage/Conjunctive Water Management

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 128 Local Groundwater Management Assistance Act (AB 303) grants have been awarded funding and 125 are complete as of Year 8. A total of 28 feasibility studies/pilot projects were funded under Proposition 13, and 22 of the 28 projects are complete as of Year 8. The current solicitation for AB 303 grants received 122 proposals, and available funding will cover approximately two dozen additional awards.

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 GMPs. 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. Conducted solicitation of Proposition 50, Round 2 IRWM implementation grant proposals.

- *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 8.

In 2007, DWR and the State Water Resources Control Board awarded \$307 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. An additional \$58 million in remaining Proposition 50 IRWM funding is scheduled to be awarded in Year 8 and will likely fund a similar proportion of groundwater projects.

Activity Proposed for CALFED Year 9

I. Surface Storage. Key activities for the Surface Storage Investigations during Program Year 9 are highlighted below. The schedules for the draft and final Feasibility Reports show dates when they would be sent from Reclamation's Mid-Pacific Regional Director to the Commissioner for review and processing at the Washington-level (by the Secretary of the Department of the Interior and the Office of Management and Budget/OMB); then the reports may be revised before release to the public for review and comment.

A. Shasta Lake Enlargement Feasibility Study

Activity and Products

- Complete draft Feasibility Report and EIS documents.

Schedule

- Complete/transmit Draft Feasibility Report and EIS in November 2008.
- Complete/transmit Final Feasibility Report and EIS in January 2010.

Public Involvement and Outreach

- Continue public, tribal and stakeholder coordination and outreach.

B. North of the Delta Offstream Storage Feasibility Study

Activities

- Continue the identification process for cultural resources associated Section 106 of the National Historic Preservation Act (i.e., inventory cultural resources, and ethnography studies, including tribal coordination on cultural resources).
- Complete feasibility level engineering design and cost estimates of the fish screen facilities for the new pipeline intake.
- Complete draft feasibility report and environmental documentation.

Products

- Technical memorandum of feasibility level design and cost estimates of the fish screen facilities for the new pipeline intake.
- Draft Feasibility Report, EIS/EIR, and supporting documents

Schedule

- Draft Feasibility Report and EIS/EIR -- Winter 2008-2009.
- State Feasibility Study Progress Report – September 2008
- Final Feasibility Report and EIS/EIR -- January 2010.

C. Los Vaqueros Reservoir Expansion Feasibility Study

Activities

- Complete biological and physical surveys for environmental documentation
- Complete identification of mitigation properties and cost estimates
- Formulate, evaluate and compare alternatives using principles, guidelines, policies, and performance measures to meet project objectives.

- Conduct public meetings and other stakeholder coordination and outreach to receive public comments for potential inclusion into project plans.

Products and Schedule

- Draft EIR/EIS – July 2008
- State Feasibility Study Progress Report – August 2008
- Draft Feasibility Report – December 2008
- Public Hearing on EIR/EIS – August 2008
- Final EIR/EIS – April 2009
- Final Feasibility Report – January 2010

D. Upper San Joaquin River Basin Feasibility Study

Activities

- Public information and workshops on Plan Formulation Progress Report
- Continue feasibility level design and cost estimates
- Complete draft feasibility report and environmental documentation
- Public information and workshops on draft feasibility report and environmental documentation

Products

- Periodic Newsletter updates
- Draft Federal Feasibility Study Report and environmental documentation

Schedule

- Public workshops and Newsletter updates: fall 2008 and fall 2009
- State Feasibility Study Progress Report – August 2008
- Draft Feasibility Report and EIS/EIR – July 2009
- Final Feasibility Report and EIS/EIR – July 2010.

E. San Luis Reservoir Low Point Feasibility Study

Activities

- Complete Draft Plan Formulation Report
- Complete Final Plan Formulation Report
- Initiate public scoping activities for preparation of the EIS/EIR.

Products:

- Plan Formulation Report will be completed in Summer 2008. Planning process will continue resulting in completion of the Draft Feasibility Report and EIS/EIR in Spring 2009. The Final Draft Feasibility Report and EIS/EIR will be completed by January 2010.
- Public Scoping Report will be completed in Fall 2008.

F. Common Assumptions

Activities

- Update the common model package with the new 2008 OCAP operations criteria for the future no-action and existing conditions

Products

- Common model package with the new 2008 OCAP operations criteria

Schedule

- Complete the common model package update in fall 2008

II. Groundwater Storage/Conjunctive Water Management

A. Feasibility Study Grants

Activities

- Continue to provide administration and oversight of feasibility study projects awarded funded.

Products

- In addition to the continued oversight and administration of existing grants, two dozen new grants will be awarded.

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 provide 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 EWA and WUE programs is ongoing with the groundwater storage programs.

C. Implementation Grants and Loans

Activities

- Continue to provide 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. Award Proposition 50 Round 2 IRWM implementation grants. Conduct solicitation for Proposition 84 IRWM planning grant proposals.

Schedule

- Proposition 84 funds will begin to be awarded over the next 6-9 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 to meet local, regional, and statewide needs, and improvements in water quality.

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

Groundwater Storage – Groundwater storage funded by the Department of Water Resources. Funding for CALFED Year 9 is:

- Implementation Grants and Loans: \$307.5 million Proposition 84 is proposed in governor's FY 08-09 Budget for DWR
- Technical Assistance to Locals: \$3.0 million Proposition 50 proposed in governor's FY 08-09 Budget for DWR
- Feasibility Study Grants: \$4.5 million Proposition 84 is proposed in governor's FY 08-09 Budget for DWR

Surface Storage – Funding for surface storage projects is included in both DWR and USBR budgets. These are allocated in the following manner:

- For the Department of Water Resources: \$9.8 million is proposed in governor's FY80-09 Budget for DWR. The \$9.8 million is not allocated to specific surface storage projects.
- For Reclamation: The President's FY 2009 Budget for storage investigations is \$6.5 million.