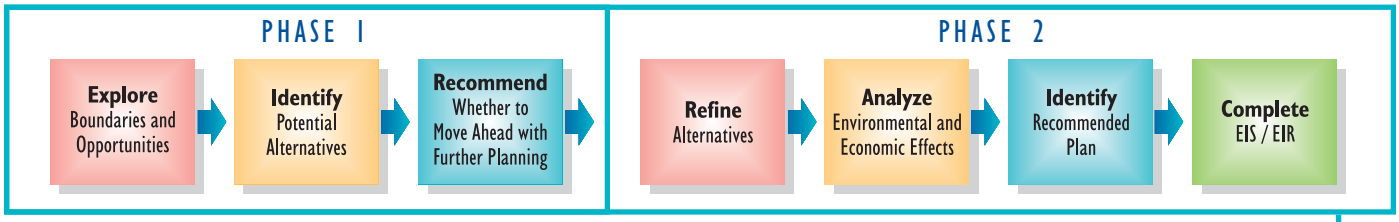
Winter 2002 - 2003

A Joint Project of

Upper San Joaquin River Basin

The Upper San Joaquin River Basin Storage Investigation (Investigation) is considering a range of approaches to increase water supplies through the enlargement of Millerton Lake at Friant Dam or a functionally equivalent storage program. The Bureau of Reclamation (Reclamation) and the California Department of Water Resources (DWR) are conducting this Investigation pursuant to the CALFED Record of Decision (ROD), signed August 28,2000. As recommended in the ROD, additional storage in the upper San Joaquin River watershed would "contribute to restoration of and improve water quality for the San Joaquin River and facilitate conjunctive water management and water exchanges that improve the quality of water deliveries to urban communities."

The Investigation will examine alternatives to increase surface water supplies in the upper San Joaquin watershed consistent with the water supply goals of CALFED. To conduct the Investigation, Reclamation and DWR are using a stakeholder-centered process that begins by investigating the potential for a feasible project and examining whether detailed development of alternatives is warranted.



PLANNING APPROACH

The investigation will consist of two phases. Phase 1 will be an appraisal level evaluation that will allow Reclamation to determine if a potentially viable plan appears likely. The planning approach used in Phase 1 is designed to identify opportunities for water storage development, estimate the extent to which water resources problems could be addressed by new storage, and identify potential partners in the development of a storage project or program. Phase 2 will include a feasibility level evaluation of detailed project alternatives, preparation of an Environmental Impact Statement (EIS) and an Environmental Impact Report (EIR), and development of a ROD. The Phase 1 Investigation Report will provide sufficient information to support decisions regarding initiation of Phase 2 studies.

PROBLEMS AND OPPORTUNITIES

The definition of water resources problems and opportunities shapes a framework for comparison of water storage options by helping to establish the goals and objectives that could be achieved through a potential project. With both guidance from the CALFED ROD and stakeholder input, the Investigation has identified a set of problems and opportunities that have the potential to be addressed by the development of additional water storage in the Upper San Joaquin River Basin.

Primary problems to be addressed with new Upper San Joaquin River storage are:

- San Joaquin River ecosystem
- San Joaquin River water quality
- Water supply reliability

Other opportunies include:

- Flood control
- Hydropower generation
- Recreation
- Increased delta inflow

STAKEHOLDER INVOLVEMENT

The Investigation addresses issues of interest and concern to stakeholders engaged in local and regional water resource planning. Accordingly, the Investigation's public involvement program includes outreach to these stakeholders and other interested parties, as well as interactive public forums in which these stakeholders can provide input and stay informed regarding the planning process.

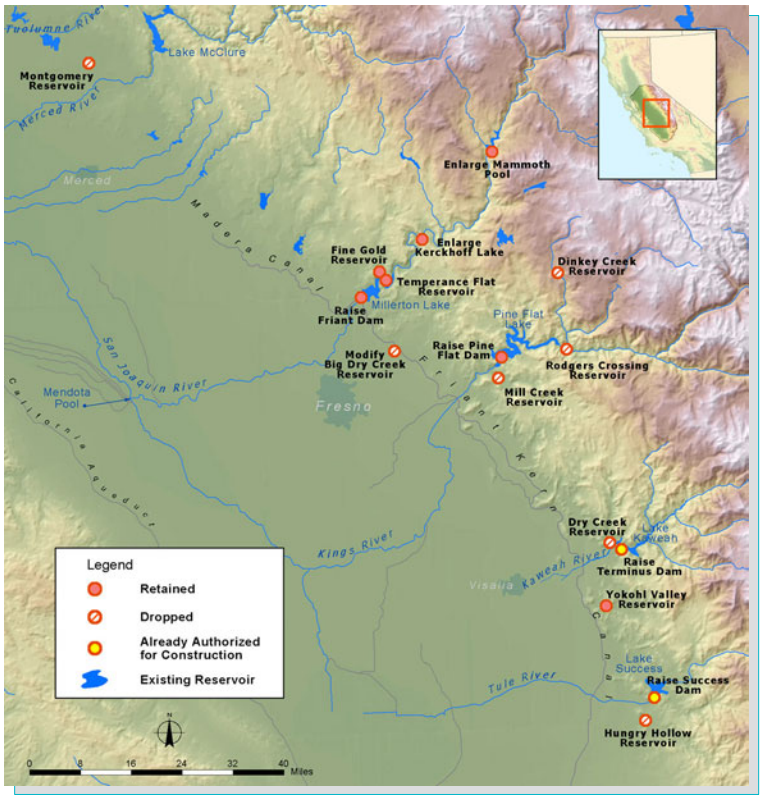
A structured series of public workshops provides Investigation stakeholders timely opportunities to hear presentations by the project team, take part in discussions regarding plan formulation, and provide input regarding the planning process, analyses, and project documents. To date, this process has included four general workshops and a topic-oriented working session. Participants in the workshop series include representatives of water agencies; counties; state and federal agencies; water districts; environmental interest groups; and others with an interest in the Investigation. Summaries of the workshops are posted on the Investigation website. In addition, the project team has provided numerous briefings to various agencies and groups.

WORKSHOP TOPICS

WORKSHOP #1 "Introduction" **May 29, 2002**	**WORKSHOP #2** "Approach & Options" **July 22, 2002**	"Ecosystem Restoration Flows" **September 4, 2002**	**WORKSHOP #3** "Options" **October 18, 2002**	**WORKSHOP #4** "Initial Results" **February 11, 2003**	**APRIL** "Alternatives"	**JUNE / JULY** "Recommendations"
• Investigation Overview • Principles of participation • Phase 1 Approach • Technical Activities to be conducted - Modeling - Engineering - Environmental	• Phase 1 Purpose and Goals • Problems and Opportunities • Initial Analysis Approach and Assumptions • Storage Options • Modeling Assumptions and Approach	• Initial Phase 1 Modeling Approach • Initial Modeling Assumptions for Restoration	• Surface Storage Option Screening • Conjunctive Management • Model Modifications and Preliminary Results	• Functional Equivalence • Preliminary Single Purpose Analysis Results • Continuation Criteria	• Preliminary Alternatives • Draft Analysis Results • Phase 2 Objectives	• Analysis Results • Preliminary Alternatives • Continuation Recommendation • Phase 2 Planning Process

SURFACE STORAGE OPTION SCREENING

In 2002, the Investigation project team worked with stakeholders to identify 16 potential surface storage options, many of which were identified through previous studies. Two of the 16 options had already been authorized for construction. The project team performed an appraisal-level evaluation of each of the remaining 14 options, focusing on the major technical and environmental issues that would affect the ability to construct and operate a surface storage facility at each site. Previous studies and brief field visits provided data for this evaluation. Based on this initial review, the Investigation has dropped seven of the 14 potential options and retained seven for further consideration. Most of the retained sites are in the San Joaquin River watershed at or upstream of Friant Dam (See Figure). The In-Progress Phase 1 Report details this initial surface storage options screening and is available on the Investigation website.



SUMMARY OF STORAGE OPTION INTIAL SCREENING RESULTS

Storage Option		Initial Review Results	Comments
Merced River Watershed	Montgomery Reservoir	⊘	Water quality concerns
San Joaquin River Watershed	Friant Dam Enlargement	●	
	Fine Gold Creek Reservoir	●	Pumped storage from Millerton Lake
	Temperance Flat Reservoir	●	One potential dam site (River Mile 279)
	Kerckhoff Enlargement	●	
	Mammoth Pool Enlargement	●	
"Big" Dry Creek Watershed	Big Dry Creek Flood Plain Detention Basin Modifications	⊘	Retrofit of existing facility
Kings River Watershed	Pine Flat Dam Enlargement	●	Exchange for Friant deliveries
	Mill Creek Reservoir	⊘	Environmental concerns
	Rodgers Crossing Reservoir	⊘	Recreation and other environmental concerns
	Dinkey Creek Reservoir	⊘	Recreation, land use, and other environmental concerns
Kaweah River Watershed	Enlarge Lake Kaweah	●	Authorized for construction by Corps of Engineers
	Dry Creek Reservoir	⊘	Environmental concerns
	Yokohl Valley Reservoir	●	Off-canal storage
Tule River Watershed	Enlarge Lake Success	●	Authorized for construction by Corps of Engineers
	Hungry Hollow Reservoir	⊘	Foundation and environmental concerns

● Option Retained ⊘ Option Dropped ● Option Authorized for Construction

OPERATIONS MODELING

As part of the Investigation, the CALSIM II model, which simulates statewide water operations, has been updated for use as an Investigation analysis tool. The updated model includes Friant Dam operations, and the project team has used the model to examine the benefits of enlarging Friant Dam. The project team is also modeling the other surface storage options to allow comparison of their potential benefits. Multiple simulations will provide data regarding the extent to which each option could address CALFED's goals for additional storage, including ecosystem restoration, water quality, and water supply reliability. The simulations also measure the extent to which each operational strategy could address other regional concerns, such as flood control and hydropower generation.

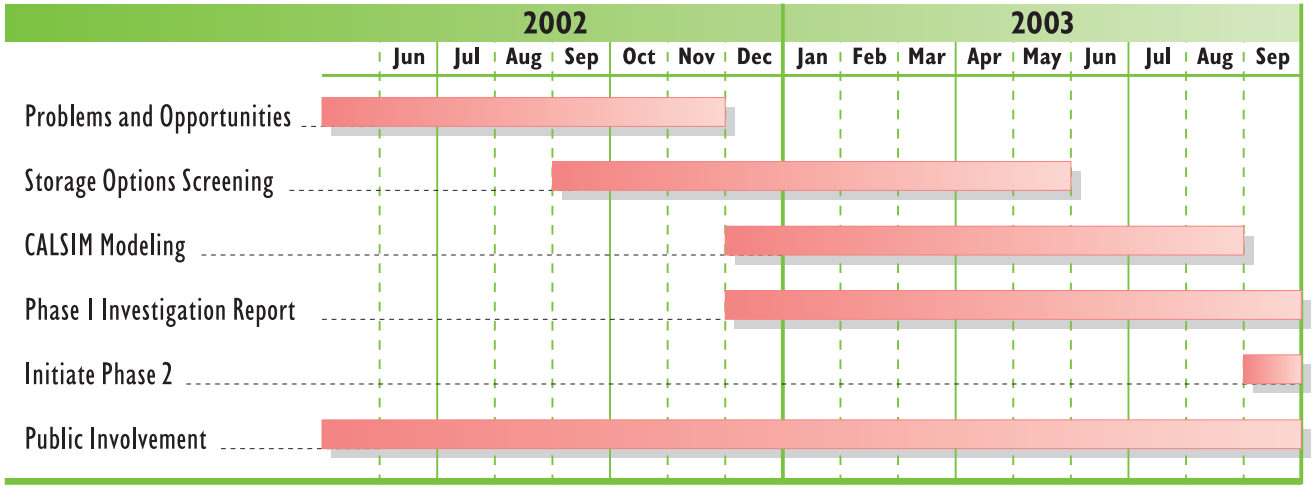
GROUNDWATER CONJUNCTIVE MANAGEMENT UPDATE

Consistent with the CALFED Common Assumptions approach, DWR is developing an inventory of conjunctive use projects that are reasonably foreseeable and likely to be implemented. The Investigation will incorporate information from this effort as it becomes available.

NEXT STEPS

Over the next few months, the Investigation will:

- Perform operations modeling of the retained surface storage options
- Work with stakeholders to fully develop continuation criteria and specific project objectives
- Formulate a strategy for development of alternatives
- Complete the Phase I Investigation Report and provide a recommendation regarding continuation of the Investigation to Phase 2



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www.mp.usbr.gov/sccao/storage