

CALFED Preferred Program Alternative February 17, 2000

The CALFED agencies are developing a long-term comprehensive plan to restore ecological health and improve water management for beneficial uses of the Bay-Delta System. To achieve this goal, the CALFED Program seeks to restore ecological health, improve water quality, improve water supply reliability and ensure levee and channel integrity *within the Delta Sacramento/San Joaquin Delta.*

The CALFED agencies are currently completing a Programmatic Environmental Impact Statement and Report (EIS/EIR) pursuant to the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). That document examines alternatives for meeting the Program goals. The CALFED agencies have identified a Preferred Program Alternative as part of this environmental review. The programmatic EIS/EIR analyzes the environmental implications of each of the alternatives and compares them to the existing conditions and to the expected future conditions without any CALFED action.

The Preferred Program Alternative describes the policy direction and long-term plan the CALFED agencies propose to follow in this effort. A programmatic evaluation is useful in the present case because it allows the agencies to examine the overall impacts of individual, but geographically related, issues. It is also necessary to conduct the environmental review at a programmatic level because of the number of actions, length of time of implementation, and the complexity of the problems and solutions being considered.

PREFERRED PROGRAM ALTERNATIVE

The Preferred Program Alternative consists of a set of broadly described programmatic actions which set the long-term, overall direction of the CALFED Program. The description is programmatic in nature, intended to help agencies and the public make decisions on broad methods to meet Program purposes. The Preferred Program Alternative is made up of the Levee System Integrity Program, Water Quality Program, Ecosystem Restoration Program, Water Use Efficiency Program, Water Transfer Program, Watershed Program, Storage and Conveyance.

Even in this broad programmatic description, actions are intended to take place in an integrated framework and not independently of the other programs. While each Program element is described individually, it is understood that only through coordinated, linked, incremental investigation, analysis, and implementation can we effectively resolve problems in the Bay-Delta system.

LEVEE SYSTEM INTEGRITY PROGRAM

The focus of the Levee System Integrity Program is to improve levee stability to benefit all users of Delta water and land. Actions described in this Program element protect water supply reliability by maintaining levee and channel integrity. Levee actions will be designed to provide simultaneous improvement in habitat quality, which will indirectly improve water supply reliability. Levee actions also protect water quality, particularly during low-flow conditions when a catastrophic levee breach would draw salty water into the Delta.

There are five main parts to the levee program plus Suisun Marsh levee rehabilitation work:

- Trace metals - Reduce the impacts of trace metals, such as copper, cadmium, and zinc, in upper watershed areas near abandoned mine sites. Reduce the impacts of copper through urban storm water programs and agricultural BMP's.
- Mercury - Reduce mercury levels in rivers and the estuary by source control at inactive and abandoned mine sites.
- Selenium - Reduce selenium impacts through reduction of loads at their sources and through appropriate land fallowing and land retirement programs.
- Salinity - Reduce salt sources in urban and industrial wastewater to protect drinking and agricultural water supplies, and facilitate development of successful water recycling, source water blending, and groundwater storage programs. Salinity in the Delta will be controlled both by limiting salt loadings from its tributaries, and through managing sea-water intrusion by such means as using storage capability to maintain Delta outflow and to adjust timing of outflow, and by export management.
- Turbidity and sedimentation - Reduce turbidity and sedimentation, which adversely affect several areas in the Bay-Delta and its tributaries.
- Low dissolved oxygen - Reduce the impairment of rivers and the estuary from substances that exert excessive demand on dissolved oxygen.
- Toxicity of unknown origin - Through research and monitoring, identify parameters of concern in the water and sediment, and implement actions to reduce their impacts to aquatic resources.

ECOSYSTEM RESTORATION PROGRAM

The goal of the Ecosystem Restoration Program is to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta system to support sustainable populations of diverse and valuable plant and animal species. In addition, the Ecosystem Restoration Program, along with the water management strategy, is designed to achieve or contribute to the recovery of listed species found in the Bay-Delta and, thus, achieve goals in the Multi-Species Conservation Strategy. Improvements in ecosystem health will reduce the conflict between environmental water use and other beneficial uses, and allow more flexibility in water management decisions.

The Ecosystem Restoration Program identifies programmatic actions designed to restore, rehabilitate, or maintain important ecological processes, habitats, and species within 14 ecological management zones. Implementation of these programmatic actions will be guided by six goals presented in the Strategic Plan for Ecosystem Restoration. Nearly 100 restoration objectives have been developed which are directly linked to one of the six goals. Each objective further defines the restoration approach for each ecological process, habitat, species, or ecosystem stressor. One to several restoration targets have been developed for each objective to set more specific or quantified restoration levels.

Long-term implementation of the Ecosystem Restoration Program will be guided by the adaptive management approach described in the Strategic Plan for Ecosystem Restoration. This approach to

integrity during high-flow periods. Other watershed actions will improve water quality by reducing discharge of parameters of concern.

The Watershed Program includes the following elements:

- Support local watershed activities - Implement watershed restoration, maintenance, and conservation activities that support the goals and objectives of the Program, including improved river functions.
- Facilitate coordination and assistance - Facilitate and improve coordination and assistance between government agencies, other organizations, and local watershed groups. *or resource mgmt planning groups.*
- Develop watershed monitoring and assessment protocols - Facilitate monitoring efforts that are consistent with the CALFED's protocols and support watershed activities that ensure that adaptive management processes can be applied.
- Support education and outreach - Support resource conservation education at the local watershed level, and provide organizational and administrative support to watershed programs.
- Define watershed processes and relationships - Identify the watershed functions and processes that are relevant to the CALFED goals and objectives, and provide examples of watershed activities that could improve these functions and processes.

STORAGE

Groundwater and /or surface water storage can be used to improve water supply reliability, provide water for the environment at times when it is needed most, provide flows timed to maintain water quality, and protect levees through coordinated operation with existing flood control reservoirs. Decisions to construct groundwater and/or surface water storage will be predicated upon complying with all program linkages, including:

- An assessment of groundwater storage, surface storage, reoperation of power facilities, and a fish barrier assessment as part of the Integrated Storage Investigation.
- Demonstrated progress in meeting the Program's water use efficiency, water reclamation, and water transfer program targets under the Water Management Strategy.
- Implementation of groundwater monitoring and modeling programs.
- Compliance with all environmental review and permitting requirements.

Subject to the above conditions, new groundwater and/or surface water storage will be developed and constructed, together with aggressive implementation of water conservation, recycling, and a protective water transfer market, as appropriate to meet CALFED Program goals. During Stage 1, through the Water Management Strategy (including the Integrated Storage Investigation), CALFED will