

Proposed Three Year Federal Program Activities and Cost Estimate

Issue: The CALFED Bay-Delta Program is developing a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system. This program is critical to the future of California because the Bay-Delta system is the largest estuary on the West Coast, providing habitat for 120 fish and wildlife species including many listed as threatened or endangered. The Bay-Delta system is also critical to California's economy, providing drinking water for two-thirds of Californians and irrigation water for 200 crops, including 45 % of the nation's produce. A guiding assumption for this program is that a comprehensive program of ecosystem restoration which combines physical habitat improvements with enhanced flows will result in fewer constraints on the operation of water supply systems.

The CALFED Bay-Delta Program is preparing a Programmatic EIR/EIS and is scheduled to select an alternative in September 1998. All alternatives being considered include an Ecosystem Common Program that will guide the ecosystem restoration efforts. Efforts are currently underway to implement consensus elements of the Ecosystem Common Program to meet a number of pressing needs. These include:

- The need to increase public confidence in the assumption that comprehensive habitat restoration will provide the anticipated benefits to both the ecosystem and to water supply interests through demonstrated success stories,
- The need to make key land acquisitions to protect ecological functions such as connectivity and critical patch sizes for restoration sites in the face of rising land values and increased competition for land,
- The need to address sources of direct mortality to safeguard species that are already listed such as the Sacramento River winter-run salmon or species being considered for listing such as the spring-run salmon and the steelhead,
- And the need to begin the process of adaptive management or "learning by doing" so the benefits can be generated for the ecosystem and for the water supply interests.

The Proposed Federal Program: The three year federal program to fund ecosystem restoration activities in the Sacramento-San Joaquin delta watershed is based on the Ecosystem Common Program to address the primary ecosystem quality objective which is to "Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species."

Coordination with State and Stakeholder Funding: The three year federal program is designed

to match state funding which would be available through Proposition 204 and stakeholder funding. Stakeholder funding has totaled almost \$22 million to date and \$10 million or more in additional funding is expected in 1997. State funding from Prop 204 includes \$60 million to match the stakeholder contributions, \$93 million to match existing federal funding for the Central Valley Improvement Act, \$390 million available for habitat restoration once the preferred alternative is selected, and additional funding for watershed management, water quality improvements, and levee improvements.

The three year federal program is designed to place emphasis on restoration of habitat functions, reduction in sources of mortality, programs to control impacts due to exotic species and toxics, and a monitoring program to implement adaptive management. These three areas of expenditure will be well integrated with the state and stakeholder expenditures.

Approximately three quarters of the three year federal program directly addresses restoration of habitat functions through land acquisition and habitat restoration. These activities are the key to the Ecosystem Common Program and so are the largest component in the federal program. In this early implementation phase, land acquisition is even more crucial because, as the California economy continues to expand, land prices are beginning to rise and key parcels that are needed to maintain habitat connectivity and to augment existing conservation areas may no longer be available in the future. Habitat acquisition and development activities include :

- development of habitat on existing levees along the Sacramento River and in the delta,
- land acquisition to allow the Sacramento River to meander and restore natural functions,
- expanding existing habitat areas through acquisition, and
- habitat restoration activities that also benefit other CALFED objectives.

The program to directly reduce sources of mortality is focussed on preventing direct losses for species most at risk including San Joaquin salmon, spring-run and winter-run salmon, and steelhead by preventing entrainment at water diversions and improving passage at key locations. These types of programs are vital to the restoration of anadromous salmonids but do not provide the broad ecosystem benefits that habitat restoration efforts offers. Therefore, this program represents approximately 15% of the three year federal program.

The remaining 10% of the three year federal program addresses introduced species and toxics and provides information needed for adaptive management. The program to control impacts due to exotic species is designed to include both a program to reduce introductions and to control

impacts due to species already present in the system. These activities include isolation of riverine habitat from old gravel pits in the San Joaquin system to decrease predation by introduced warmwater species and a program to control introduced species in the delta. The program to control impacts due to toxics includes pollutant source control and reduction of the impacts of point discharges through wetlands wastewater treatment. To gather the information needed to begin adaptive management, the three year federal program allocates less than 2% of the funding to monitor the ecosystem to determine how it is changing.