

Appendix D

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PROGRAMMATIC ACTIONS

Long-term actions necessary to reduce the vulnerability of the Delta estuary and levee system include the following:

PL-99 Funding Program

- Provide funding equitably distributed to participating local agencies for levee improvements to the PL-99 standard.

Special Habitat Improvements and Levee Stabilization Program

- Implement special levee stabilization projects according to priorities based on island importance relative to water quality, agricultural production, life and personal property, recreation, cultural resources, ecosystem, local and statewide infrastructure, and impacts to adjacent islands. Special habitat improvements on the North and South Forks of the Mokelumne River (identified in the ERPP) will be given the highest priority.
- perform levee and habitat improvement projects linking program objectives with that of the Ecosystem Restoration and Water Quality Programs

Subsidence Control

- Control and reverse the effects of subsidence through shallow flooding of between 30,000 to 60,000 acres of central and western Delta farmland to managed wetlands in order to reduce the probability of levee failures.

Levee Associated Habitat

- Incorporate habitat improvement elements such as landside and waterside berms (identified in the ERPP) into levee stabilization projects and into projects associated with other program elements.

Beneficial Reuse of Dredge Material

Develop a program which identifies material produced by dredging in the Delta and Suisun Marsh/Bay (where that material contains acceptable levels of salinity and other constituents of concern) which can be reused for levee rehabilitation and habitat creation

in the Bay Delta. This program shall:

- Investigate the feasibility of bringing San Francisco Bay dredge material upland for use in the Delta for levee rehabilitation and habitat creation.
- Investigate the feasibility of developing sediment traps in the Delta to retain a portion of river sediment load in areas that can be readily accessed and reused for levee and habitat improvements.
- Develop a process in which a clearing house composed of appropriate member CALFED agencies provides information on beneficial reuse opportunities.
- Investigate the feasibility of a GIS database for management of dredge material data such as sediment quality and historical monitoring results.
- Develop and propose recommendations for dredge material testing protocol and sediment quality criteria.

Delta Levee Emergency Response

- Consistent with existing flood management systems such as the Standardized Emergency Management System, a command structure will be developed that will include communications, planning, strategic, logistics, and finance elements.
- A centralized coordination Center will be developed to lead Delta flood emergency actions and resource dispatching in coordination with the State and Federal Flood Center and local jurisdictions.
- Create a Web site for information dissemination.
- Establish levee qualifying standards, a multi-agency response team, documentation criteria, an emergency fund, and flood fight materials stockpile site(s) in the Delta.
- Ensure adequate marine equipment is available to respond to a seismic event that may result in many Delta islands being flooded

Delta Levee Seismic Susceptibility

- Continue and expand research to define the relative risk of catastrophic events on the Delta levees and critical facilities of the water transport system. Prepare a seismic risk analysis of Delta levees.
- Incorporate seismic retrofit elements in the Levee Stabilization Program. Such elements may include increasing the width and height of the levee section, adding buttresses, and using appropriate construction materials to reduce seismic susceptibility.

Delta In-Channel Islands

- Develop a program to coordinate available resources and information for restoration efforts of in-channel islands.
- Restore and rehabilitate in-channel islands where feasible in conjunction with the

Special Habitat Improvements and Levee Stabilization Program.

Levee Associated Recreation

- Develop beach slope associated with levees for recreational boating and facilities that are compatible with other CALFED Delta programs.
- Enhance current recreational opportunities and create new areas for passive and active recreation which will redirect recreational uses in a manner which is protective of Program improvements for ecosystem restoration, water quality, levee system integrity and water supply reliability.

Delta Flood Conveyance Improvements

- Incorporate flood conveyance improvements into the Program alternatives so as to safely pass inflows into the Delta from the Cosumnes, Sacramento, San Joaquin rivers and other Delta tributaries. These improvements may include levee modifications, setback levees, and islands converted to bypass systems.