

Individual Proposal Report

Title: Twitchell Island restoration (K250)

Geographic Area: Delta

Primary Stressor Addressed: Channel Form Changes

Project Type: Implementation--pilot study

Applicant Type and Name: State. Curt Schmutte, Department of Water Resources, (916) 227-7567.

Funding: The applicant has requested \$12.8 million. It is recommended that \$3 million be appropriated from 1998 funds to implement Alternative B (this is an estimate only and needs to be discussed with applicant). Funding would be used to research restoration of island surface elevations (ie reverse subsidence) and restore wetland habitat.

Cost Share: The applicant will provide cost share for land and labor; amount to be determined.

Project Description: The approved funds will be used to restore island surface elevations (ie reverse subsidence) and habitat on Twitchell Island. A small cross levee will be constructed and tidal flow will be controlled onto restoration plots through the use of siphons.

ERPP Linkage: The proposal meets the goals of the Ecosystem Restoration Program Plan (CALFED, Volume II, 28 July 1997) as it should help to (1) restore 1,000 acres of nontidal freshwater marshes on Twitchell Island (page 47), (2) increase tidal freshwater marsh habitat in the Delta by restoring 30,000 to 45,000 acres of lands designated for floodplain restoration (page 46).

AFRP Linkage: This proposal contributes toward making all reasonable efforts to at least double natural production of anadromous fish as it supports the following evaluations listed in the Revised Draft Restoration Plan for the Anadromous Fish Restoration Program (USFWS, 30 May 1997): (1) Evaluate potential benefits of and opportunities for increasing salmonid and other anadromous fish production through improved riparian habitats in the Delta (Sacramento-San Joaquin Delta Evaluation 4, page 105); and (2) Evaluate benefits of and opportunities for additional tidal shallow-water habitat as rearing habitat for anadromous fish in the Delta (Sacramento-San Joaquin Delta Evaluation 6, page 105).

Applicant's Proposed Monitoring: Both biological and physical monitoring are in integral part of this proposal. In addition to monitoring the degree to which specific CALFED targets are achieved, the efficacy and broader applicability of the various subsidence and habitat restoration techniques will be evaluated. CALFED staff will review the proposed monitoring plan and revise as necessary.