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To: CALFED Science Staff. Attn 2006 PSP. FAX (916) 445-7297
From: Joan Lindberg, UC Davis, Fish Conservation and Culture Lab.
Subject: Public Comments on 2006 CALFED Science PSP

Proposal Name: An Experimental and Modeling Approach to Evaluate Environmental Water Effects on Threatened Delta Smelt (#0068)

Applicant Organization: U.S. Fish and Wildlife Service
Principal Lead Investigator(s): Castillo, Gonzalo; Fujimura, Robert

Response to Reviewers:

Thank you for the valuable comments in review of our proposal. Your comments regarding the scope of the project being overly ambitious are well taken, and we are very willing to scale the experiment back to a pilot-scale project. It was our intention to gain more information on release and recapture of fish – which is a costly part of the project. In the revised scope of work, with the reduced funds, we still plan to include two replications of one set of environmental-conditions with each life stage. This will give initial useful information and inform further testing. We have chosen conditions which should maximize the movement of fish through the Forebay and fish-screen facility for the preliminary tests.

As one of the leads for the delta-smelt-culture work, we are confident we can produce the required smelt with the scaled back budget. The number of fish required of the program is reduced to 22,200 juveniles and 11,200 adults over two years. In the previous full-scale proposal 64,800 juveniles and 22,400 adults were required over three years. The considerably higher fish-culture costs for the original proposal were for labor and facility-expansion to meet the production level. All employees at our site (off-campus location) are funded through state and federal contracts ("soft money"), and therefore have no means to timeshare.

Marking techniques for juveniles and adults will be investigated to a certain extent this spring (2007), before the project begins. We will investigate calcein levels, fin clips, and multiple marking techniques so that we can retain as much information as possible about each fish release in Clifton Court Forebay. Recovery efforts can be streamlined as well, if fish-markings are distinct.

This pilot-study will lead to a host of further questions promoting further work until water allocations and fish transport through the facilities can be better characterized.

Thank you for your consideration,



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