

Progress Report

Pelagic Species Decline in the Sacramento-San Joaquin Delta Office of Public Affairs - August 2006

HERE'S THE ISSUE

A sharp decline in multiple Delta pelagic fish species (those that live near the water's surface) was first discovered in 2005 during a review of fish monitoring data by Inter-agency Ecological Program (IEP) biologists. The IEP is a consortium of Federal and State agencies, including the Bureau of Reclamation, that jointly conduct fisheries monitoring and research in the San Francisco Bay/Sacramento-San Joaquin Estuary.



delta smelt

The decline involves several pelagic fish species, including longfin smelt, threadfin shad, striped bass, and delta smelt. One species, the delta smelt, is listed as threatened under both the Federal and the California Endangered Species Acts. Some of the other involved species, including striped bass, are exotic species that have historically occurred at very high density in the estuary. The most recent (2006) monitoring results indicate that size of the delta smelt and striped bass populations remain at or near all-time lows.

Multiple explanations for the decline have been proposed. Two hypotheses that have broad explanatory power if true are: (1) loss of the ability of the Suisun Bay and west Delta food webs to produce adequate food to feed fish during the summer and fall months; and, (2) excessive loss of the fish at Central Valley Project and State Water Project water export facilities during the winter and early spring months.

WHAT RECLAMATION IS DOING

Studies of the possible causes of the decline are under way by Reclamation biologists and engineers and those representing other State and Federal agencies, academic institutions, and consultants. Interim results of the investigation strongly suggest that multiple causes are responsible, and that some causes may date back decades. Ranking these causes and determining their actual roles in the fish decline are principal goals of the ongoing investigation. A study of the role toxic chemicals may have played has just begun.

Two CALFED-sponsored peer reviews have been conducted to date: a review of the 2005 work plan; and a review (with a public workshop) of the 2005 final report. Copies of the proposals, work plans, reports, and review documents associated with the Pelagic Organism Decline (POD) investigation are available at the CALFED Science POD website at http://science.calwater.ca.gov/pod/pod_index.shtml.



WHAT'S AHEAD

Reclamation and the California Department of Water Resources are considering experimental modifications of their water project operations for winter 2006-2007, contingent on scientific review and agreement of the IEP agency managers. The current investigation is expected to report results no later than fall 2007. As with the 2005 report, the 2007 report will be thoroughly reviewed by a CALFED-appointed panel of experts and possibly by a National Academy of Sciences review panel.

In all, the IEP agencies spent approximately \$1.7 million on the investigation in 2005 and anticipate spending \$3.71 million in 2006. Expenditures are almost evenly divided between the State and Federal governments.

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