BUREAU OF RECLAMATION

Protection, restoration and enhancement of fish and wildlife, Central Valley Project Improvement Act (CVPIA)

Introduction

The 1992 Central Valley Project Improvement Act (CVPIA), Title 34 of Public Law 102-575, amended previous authorizations of the Central Valley Project (CVP) to include fish and wildlife protection, restoration, enhancement and mitigation as project purposes having equal priority with irrigation and domestic uses of water and power production.

The Department of the Interior's Bureau of Reclamation and U.S. Fish and Wildlife Service (Service), in collaboration with state and local governments, tribes, non-governmental organizations and stakeholders, implement activities to meet the purposes of the CVPIA.

Implementing CVPIA

Since 1993, the California-Great Basin Region, in partnership with the Service's Pacific Southwest Region, has worked on 23 CVPIA programs. Most of the funding to implement CVPIA actions and programs comes from the Restoration Fund, established under CVPIA Section 3407 and derived from fees paid by the beneficiaries of the CVP's water and power supplies. The remainder of the money comes from Reclamation's Water and Related Resources appropriations, contributions by the State of California, and donations.

Seven of the CVPIA's key programs are:

Anadromous Fish Restoration Program (AFRP) – Section 3406(b)(1):

Goals include improving fish habitat by providing flows of suitable quality, quantity, and timing and improved physical habitat. Up to 800,000 acre-feet of CVP water is applied annually to improve stream flows in the Sacramento and San Joaquin River Basins.

This water increases the survival of juvenile fish passing through the Delta to the sea and assists the CVP in meeting endangered species and water quality obligations. Dams, diversions and other obstacles to fish migration have been removed to improve access to spawning areas. Thousands of acres of habitat have been acquired and land along basin streams has been restored and/or enhanced to provide cover and shade for spawning fish.

Red Bluff Fish Passage Improvement Project – Section 3406(b)(10):

The project goal was to minimize fish passage problems for adult and juvenile anadromous fish at the Red Bluff Diversion Dam. Funding for the $200 million project included $115.5 million from the 2009 American Recovery and Reinvestment Act, the largest single outlay of ARRA funding in the nation by the Department of the Interior. Completed in 2012, a pumping plant, screened to protect fish, was built to convey water from the Sacramento River to the Tehama-Colusa and Corning Canals. The pumping plant replaces the Red Bluff Diversion Dam, which had created a barrier to green sturgeon and five runs of listed salmon species and allows the continued delivery of water to 150,000 acres of prime farmland throughout a four-county area served by 17 water districts.

Spawning and Rearing Habitat Restoration Program – Section 3406(b)(13):

Goals include increasing the availability of spawning and rearing habitat for Chinook salmon and steelhead trout by pacing gravel in the Sacramento, American and Stanislaus River Basins. The gravel placement sites are identified based on key habitat locations and ready river access. All gravel conforms to criteria developed by the Service, the California Department of Fish and Wildlife (CDFW), and the National Marine Fisheries Service. At each river, salmon have been observed spawning on the placed gravel, which has provided high-quality conditions for egg incubation. The program is increasingly emphasizing habitat restoration, such as side channels, to address limited juvenile rearing habitat.

Anadromous Fish Screen Program (AFSP) – Section 3406(b)(21):

Goals include assessing fish screen bene-fits and prioritizing diversions for screening, improving fish screen effectiveness/efficiency, and coordinating with other agencies, such as CDFW, who are involved in screening activities. Since 1994, the AFSP has screened 35 high-priority diversions from 11 to 960 cubic feet per second (cfs). The AFSP provides up to 50 % of a fish screen project's cost, with the remaining amount coming from state and/or local contributions. In 2009, the AFSP began a 4-year effort to screen 12 diversions from 9 to 128 cfs on the Sacramento River and obtain fish entrainment data at each site. The results significantly improved understanding of entrainment factors and helped the AFSP prioritize future fish screening efforts.

Trinity River Restoration Program (TRRP) – CVPIA Sections 3406(b)(1) other/(b)(23):

The TRRP's December 2000 Record of Decision (ROD) established a comprehensive science-based adaptive management program to restore the river's fisheries. The TRRP has implemented many projects to improve anadromous fisheries habitat, including completing 28 of 47 channel rehabilitation site projects, annual spawning gravel placement and fine sediment control activities, and watershed restoration. Progress is being made on implementing flow schedules as defined in the ROD. The flows, based on the five water-year types, are designed to mimic the pre-dam snowmelt. Based on monitoring performed in the Lower Trinity River, adult anadromous fish runs continue to improve.

San Joaquin River Comprehensive Plan – Section 3406(c)(1):

Through the San Joaquin River Restoration Program (SJRRP), Reclamation is working to reestablish a naturally reproducing Chinook salmon fishery in the San Joaquin River below Friant Dam to the confluence of the Merced River, consistent with the September 13, 2006, Stipulation of Settlement

for *NRDC, et al., v. Rodgers, et al.* This is being accomplished while reducing and/or avoiding adverse water supply impacts from the restoration flows. In March 2010, the San Joaquin River was reconnected to the Delta, a stretch of roughly 330 miles, which had not occurred in more than 60 years, except for flood flows. The SJRRP's ROD was released in early October 2012.

Refuge Water Acquisition Program (RWAP) – Section 3406(d)(2):

The goal is to provide two classifications of water to 19 CVPIA federal, state and private wildlife refuges: 422,251 acre-feet of Level 2 water, which is the historical annual average refuge water deliveries, and 133,264 acre-feet of Incremental Level 4 water annually, which is the difference between the Level 2 amount and the water needed to achieve optimal waterfowl habitat management. The amount of water that can be delivered depends on factors that include water availability and the ability to physically deliver the water. Reclamation has funded the building of refuge conveyance facilities and groundwater wells at certain refuges to improve delivery of more reliable water supplies.

Visit the CVPIA website for additional information: https://www.usbr.gov/mp/cvpia/index.html