



Multiple Option Programs

Fish and Wildlife Management Programs

One of the programs having multiple implementation options is the Fish and Wildlife Management Program. This program includes actions to improve habitat, as defined by the Anadromous Fish Restoration Program (AFRP), and refuge water supplies. The program associated with refuge water supplies was defined in the 1989 Refuge Water Supply Study and the San Joaquin Basin Action Plan completed by the Bureau of Reclamation (Reclamation).

Anadromous Fish Restoration Program

The AFRP's goal is to undertake reasonable efforts to sustain the natural production of anadromous fish in the Central Valley rivers and streams by the year 2002, at numbers double the average levels exhibited during the period from 1967 through 1991. The objectives of the AFRP are to:

- Obtain the best available scientific and commercial data;
- Develop a long-term Restoration Plan that identifies the general approaches and actions to attain the goal; and
- Develop short-term implementation plans as tiers to the Restoration Plan.

The PEIS alternatives incorporate instream and Delta habitat and flow improvements, which are major elements of the AFRP. The flow improvements were based upon information developed by the U.S. Fish and Wildlife Service (Service) in October 1996. The following three tools were identified in the CVPIA to improve flows.

- **Reoperation of the CVP in accordance with Section 3406(b)(1)(B)** Reoperation is defined as changes in CVP operations that do not impact water deliveries to CVP water users.
- **Dedication of 800,000 acre-feet of CVP water in accordance with Section 3406(b)(2)** The "(b)(2) Water Management" is defined as operation of the CVP in a manner that would allow the CVP to dedicate and manage 800,000 acre-feet/year of CVP yield for fish and wildlife purposes. For the PEIS, the (b)(2) Water Management included an instream component for CVP-controlled streams, a Bay-Delta Plan component for the CVP, and an additional Delta component.
- **Water acquisitions in accordance with Section 3406(b)(3)** Water acquisitions from willing sellers would be used to provide increased instream flows in specific months to improve habitat, in accordance with preliminary information developed by AFRP. The acquisition targets vary among action alternatives.

Refuge Water Supply

Many refuges historically received water supplies from multiple sources such as irrigation return flows and temporary annual water contracts. In years preceding the CVPIA, water conservation programs and increased demand for water reduced the reliability of these sources. The CVPIA provides for a firm water supply for Central Valley wildlife refuges from existing CVP yield at the levels described in the 1989 Refuge Water Supply Study and the San Joaquin Basin Action Plan. The refuges include both National Wildlife Refuges and state-owned Wildlife Management Areas.

- All alternatives, except the No-Action Alternative, provide firm Level 2 CVP water supplies to 21 refuges. Level 2 water supply is the average historic water delivery between 1978 and 1984.
- The Preferred Alternative, Alternatives 2, 3, 4, and the associated supplemental analyses, also include firm Level 4 CVP water supplies. Level 4 is the water supply needed to fully develop the refuges as defined in the 1989 Refuge Water Supply Study and the San Joaquin Basin Action Plan.