

Prior to adoption of the water right decision, the USBR intends to meet San Joaquin River flow requirements, in accordance with the March 6, 1995 U.S. Fish and Wildlife Service (USFWS) biological opinion for the threatened Delta smelt, which are consistent with the San Joaquin River flow objectives in this plan. These flows are interim flows and will be reevaluated as to timing and magnitude, up or down, within the next three years. During the three-year period, decisions by the FERC or other regulatory orders may increase flows to the Estuary required of upstream water users. These flows will be considered by the SWRCB in its allocation of responsibility among the water rights holders in the watershed during the water rights proceeding.

B. Implementation Measures Requiring SWRCB Water Quality and Water Rights Authority and Multi-Agency Cooperation

Implementation of four water quality objectives in this plan will require measures by the SWRCB, under both its water quality and water rights authorities, in concert with actions taken by other agencies. These objectives are: (1) the dissolved oxygen objective for the San Joaquin River; (2) the narrative objective for salmon protection; (3) the narrative objective for the tidal brackish marshes of Suisun Bay; and (4) the salinity objectives for southern Delta agriculture. A summary of implementation measures for these objectives is provided below.

1. San Joaquin River dissolved oxygen objective. Factors which contribute to low levels of dissolved oxygen in the lower San Joaquin River include: the Stockton Wastewater Treatment Plant; upstream sources of biochemical oxygen demand (BOD); the deepened Stockton ship channel; the commercial use of the dead-end portion of the ship channel; the enlarged turning basin at the Port of Stockton; and low river flows in the fall. Feasible measures to implement the dissolved oxygen objective in this plan include: (1) regulating the effluent discharged from the Stockton Wastewater Treatment Plant and other upstream discharges that contribute to the BOD load; (2) providing adequate flows in the San Joaquin River; and (3) installing barriers at locations (e.g., head of Old River) to increase flows in the river past Stockton. Wastewater discharges to the river are currently regulated by the Central Valley RWQCB. The RWQCB is requiring the City of Stockton to make improvements in its wastewater treatment plant to achieve reduced BOD loadings. This plan's objectives for flows in the San Joaquin River at Vernalis are expected to contribute to achieving the dissolved oxygen objective, and additional flow-related measures will be considered by the SWRCB during the water rights proceeding. The DWR and the USBR are evaluating the effectiveness of a barrier at the head of Old River, as described more fully in section C.5 of this chapter.

2. Narrative objective for salmon protection. It is uncertain whether implementation of the numeric objectives in this plan alone will result in achieving the narrative objective for salmon protection. Therefore, in addition to the timely completion of a water rights proceeding to implement river flow and operational requirements which will help protect salmon migration through the Bay-Delta Estuary, other measures may be necessary to achieve the objective of doubling the natural production of chinook salmon from average 1967-1991 levels. **This narrative objective is consistent with the anadromous fish doubling goals of the CVPIA;** thus, prompt and efficient actions taken to implement this CVPIA goal, in concert with other

recommended actions in this plan, are important to achieving the narrative salmon protection objective. Monitoring results will be considered in the ongoing review to evaluate achievement of this objective and the development of numeric objectives to replace it.

3. Narrative objective for brackish tidal marshes of Suisun Bay. Implementation of the numeric objectives in this plan, particularly the Delta outflow objectives, will likely result in achieving the narrative objective for the brackish tidal marshes of Suisun Bay. However, because the extent of the effectiveness of the numeric objectives in providing water quality conditions necessary to achieve a brackish marsh throughout all elevations of tidal marsh bordering Suisun Bay is still uncertain, additional measures by other agencies are recommended under section C.14 of this chapter, including the formation of a Suisun Marsh Ecological Work Group. Among the actions indicated in section C.14, the work group will identify specific measures to implement the narrative objective and make recommendations to the SWRCB in the ongoing review to evaluate achievement of this objective and the development of numeric objectives to replace it.

4. Southern Delta agricultural salinity objectives. Elevated salinity in the southern Delta is caused by low flows, salts imported in irrigation water by the State and federal water projects, and discharges of land-derived salts, primarily from agricultural drainage. Implementation of the objectives will be accomplished through the release of adequate flows to the San Joaquin River and control of saline agricultural drainage to the San Joaquin River and its tributaries. Implementation of the agricultural salinity objectives for the two Old River sites shall be phased in so that compliance with the objectives is achieved by December 31, 1997.

This plan's objectives for flows in the San Joaquin River at Vernalis are expected to contribute to achieving the salinity objectives in the southern Delta. Presently, the USBR is responsible for meeting Vernalis salinity objectives through the release of water from New Melones Reservoir, as required under Water Right Decision 1422. Additional releases from other reservoirs for fish and wildlife protection in San Joaquin River tributaries may be required through ongoing FERC proceedings. Implementation of the SWRCB's Nonpoint Source Management Plan, adopted in 1988, and recommended activities of the multi-agency San Joaquin Valley Drainage Program (SJVDP), discussed below, will also contribute to achieving the salinity objectives. Additionally, the Central Valley RWQCB should continue its salt load reduction program, initiated in response to adoption of the 1991 Bay-Delta Plan, to reduce annual salt loads discharged to the San Joaquin River by at least 10 percent and to adjust the timing of such discharges from low flow to high flow periods. These source control and drainage management measures will decrease the need for releases of water from New Melones. The SWRCB will evaluate implementation measures for the southern Delta agricultural salinity objectives in the water rights proceeding.