In-Delta AFRP Flow-Related Actions

1. Vernalis Adaptive Management Program (VAMP)

Increase flow at Vernalis and reduce CVP and SWP exports during the 31-day pulse flow period (generally April 15-May 15) as an experiment to determine effects on San Joaquin salmon smolt survival through the Delta.

2. Head of Old River Barrier

Survival of San Joaquin fall-run chinook salmon smolts migrating through the Delta is higher when the Old River barrier is in place than when it is not , at the same export levels. Cannot be install above 5,000 cfs or operated above 7,000 cfs. April 15-May 15.

3. Additional X2 Protection

Increase X2 requirements in spring to the 1962 level of development during March-June and calculate X2 as for the SWRCB's Water Quality Control Plan (WQCP). Increase in number of days when X2 is seaward of Chipps Island. Striped bass young-of-year.

4. Maintain Sacramento River Flow

Establish Sacramento River flows at Freeport from 9,000 to 15,000 cfs (7-day average) when striped bass spawn. Flow levels will be established for 1-week periods over a 30-day period (May or as triggered) by Keswick releases if water is available in Shasta Reservoir and release changes at Keswick Dam do not exceed flow fluctuation criteria.

5. Ramping of San Joaquin River Flows

Ramp the San Joaquin River flows down, ramp exports up, or maintain Vernalis flows and exports provided under Delta Action 1 for up to 15 additional days , after the 31-day pulse flow period. San Joaquin chinook smolts, young striped bass, Delta smelt. Triggers are temperatures at Vernalis and salmon presence at Mossdale.

6. Close DCC Gates in December-January and October-November based on the CALFED Ops Spring-run Chinook Salmon Protection Plan.

7. July Flows and Exports

Establish July exports based on X2 location and June exports.

8. Evaluate Effects on Exports on Smolt Survival in December-January

Perform an adaptive management experiment to determine how variation in exports in December and January affects survival of chinook salmon smolts.