physical interties will be considered for implementation: One intertie would allow for up to 400 cfs of pumping from the CVP Delta Mendota Canal to the SWP California Aqueduct to overcome conveyance impediments downstream. The second would be an intertie connecting the Tracy Pumping Plant to Clifton Court Forebay. This intertie is similar to the one mentioned in the previous bullet but would be considered even if a new screen constructed for the intake to the Tracy Pumping Plant to provide additional operational flexibility for both facilities.

- Construct an operable barrier at the head of Old River to improve survival of downstream-migrating San Joaquin salmon in the spring and to improve water quality for salmon migrating up the San Joaquin River in the fall.

- Additional physical features and associated operational rules may be required to address problems related to SWP and CVP export operations, south Delta water levels, channel scour, fisheries, and water quality. Extensive evaluations conducted under the Interim South Delta Program over the past 12 years have led DWR and USBR to recommend the construction of three additional operable barriers (agricultural barriers) in south Delta channels and limited dredging in certain channels to alleviate these concerns. Substantial changes in the export operation of the CVP and SWP are now being considered. The magnitude and extent of these features will be re-evaluated in this context.

  CALFED will further evaluate the need for, and appropriate alternatives to, the agricultural barriers and channel dredging based upon information presented in the Draft Interim South Delta Program EIR/EIS, draft Biological Opinions, the alternatives analysis required under Section 404 of the federal Clean Water Act, and other information which may be developed as part of CALFED's comprehensive planning process. CALFED will also explore the potential for developing operational criteria for the barriers and export facilities to provide assurance that the local water user, export, and fishery needs are met.

In the north Delta region--

- Develop operational criteria for the Delta Cross Channel that balances flood control, water quality, water supply reliability, and fisheries concerns.

- Evaluate whether a 2,000 cfs screened diversion from the Sacramento River at Hood to the Mokelumne River can be constructed to improve or maintain central Delta water quality, without compromising fish protection achieved by operation of the Delta Cross Channel or creating other adverse fishery impacts.

- Evaluate the implementation of setback levees and/or dredging along the

5. Implement the Joint Point of Diversion for SWC and CVP, which, if permitted by the SWRCB, would allow the SWP to pump CVP export flows and vice versa within the permitted export constraints of each (yr. 1-7).
6. If appropriate, construct an intertie with up to 400 cfs of pumping from the CVP Delta Mendota Canal to the SWP California Aqueduct to overcome conveyance impediments downstream (yr. 5-7).
7. Evaluate, and if appropriate, construct an intertie connecting the Tracy Pumping Plant to Clifton Court Forebay. The forebay intertie would be considered even if a new screened intake is constructed for the intake to the Tracy Pumping Plant to provide additional operational flexibility for both facilities (yr 5-7+).
8. Construct an operable barrier at the head of Old River (yr 2-4).
9. Implement additional physical features and associated operational rules required to address problems related to SWP and CVP export operations including south Delta water levels, channel scour, fisheries, and water quality in the south Delta or some other method to address the concerns (yr 2-4).
10. Evaluate benefits and impacts of recirculation of a portion of Delta Mendota Canal flows through the Newman Wasteway to the San Joaquin River for water quality and ecosystem enhancements (yr 1-4).

North Delta Improvements - *North Delta Improvements consist of methods to address flood control, water quality, fisheries, and water supply reliability concerns. Actions include modification of the Delta Cross Channel operational criteria and creation of additional floodplain, wildlife, and fisheries habitat. A screened diversion at Hood and channel dredging and setback levees in the Mokelumne River will be evaluated and may be implemented if necessary.*

1. Prepare project environmental documentation (yr 1-5).
2. Conduct feasibility studies for screened diversion and fish passage facilities, channel modifications, and habitat improvements (yr 1-5).
3. Conduct field studies (yr 1-5).
4. Prepare environmental documentation for land acquisition for various purposes including habitat and flood protection (yr 2-3).
5. Acquire land and convert land use for habitat and flood protection improvements (yr 4-6).
6. Obtain permits and operating agreements (yr 4-6).
7. Design selected improvements (yr 4-6).
8. Develop operational criteria for the Delta Cross Channel that balances flood control, water quality, water supply reliability, and fisheries concerns.
9. Evaluate whether a 2,000 cfs screened diversion from the Sacramento River at Hood to the Mokelumne River can be constructed to improve or maintain central Delta water quality, without compromising fish protection achieved by operation

of the Delta Cross Channel or creating other adverse fishery impacts.

10. Evaluate the implementation of setback levees and/or dredging along the Mokelumne River from Interstate 5 downstream to the San Joaquin River to improve conveyance and resolve flood concerns in this region. These actions would be carefully coordinated with ecosystem restoration actions to create additional tidal wetlands and riparian habitat to assure that a balanced solution to local and regional concerns would be achieved.
11. Based on the above evaluations, take appropriate action to provide a balanced solution to water quality, flood control, water supply reliability, and fisheries concerns.
12. Conduct pilot studies for dredged material reuse for Delta levee improvements and habitat creation (yr. 1-7).

Isolated Facility - *The isolated facility (a new canal or pipeline connecting the Sacramento River in the northern Delta to the SWP and CVP export facilities in the southern Delta)will only be built when it is determined that the through-Delta conveyance actions coupled with other CALFED actions cannot meet CALFED goals and objectives. The following Stage 1 actions provide progress on initial studies in case the isolated facility is found necessary to meet CALFED objectives. Stage 1 studies relating to continuously improving public health through improved drinking water quality (see **Water Quality** section and **CMARP** section in this chapter) will be considered in determining whether those goals and objectives have been achieved without an isolated facility and/or other means of providing better quality source water. Stage 1 studies relating to actual fishery recovery, the entrainment effects of the south Delta export facilities, and the benefits and negative impacts of relocating the diversion point will also be assessed.*

1. Model potential operation scenarios for an isolated facility tied to modeling of water quality and fisheries to help in overall assessment of the need for an isolated facility and/or other means of providing better quality source water (yr 1-7).
2. Conduct the following actions if there is a decision to proceed with an isolated facility:
   - Prepare project environmental documentation (yr 4-or after).
   - Conduct feasibility studies (yr 4-or after).
   - Conduct field studies (yr 4-or after).
   - Assess right-of-way issues that could impact CALFED's ability to maintain a viable option for a potential future habitat and facility corridor (yr 4-or after).