Major Areas of Loss at Fish Screens

There are many loses that contribute to fishery losses at screened diversion facilities. As the CALFED Fish Facility Technical stated," No screening facility has or can be constructed and operated without some negative impacts to fisheries." The major losses at fish screen facilities can be divided into three general categories:

Screen surface- Two factors could contribute to fishery loss at the screen surface; entrainment, where the openings in the screens are larger than the life stage of the fisheries that are to be protected, so fish, eggs, and/or larvae pass through the screen and are lost; impingement, where the velocity through the screen is stronger than the ability of the fish to swim away, and the fish is held on the screen until it is mortally injured or dies.

Bypass- The bypass system provides a route for the fish that are screened to return to the receiving water. A gravity bypass system that directly discharges fish into the receiving water has the least potential losses. Systems that require pumps to discharge the fish back into their receiving waters subjects the fish to greater loss. The greatest loss is associated with a system that requires pumps, collection, sorting, and trucking to a discharge point considerable distance from the screen facility.

Predation- Predation can occur at the screen surface, in the bypass, and at the discharge point of the bypass. A well designed facility will minimize the predation loss at the screen and in the bypass. If the fish have to be trucked to the receiving water predation losses can be extremely high both transport and at the discharge. If the point of discharge is in a area with suitable habitat (velocities and cover) for predators high losses can occur.

Talk about Tracy and Banks as present.
What would be different with new screen at head end of CCF
Sacramento River screens.