

**Draft Issue Paper - Solution(s) to Alleviate Diverter Concerns That Non-operating Fish
Screens Could Impact Their Crops
February 11, 2000**

Issue:

What assurances can we provide agricultural diverters in the Sacramento-San Joaquin Delta that clogged or malfunctioning fish screens will not impact their water deliveries during normal operations and result in crop loss?

Background:

Throughout the Delta various agencies and the CALFED Bay-Delta Program are sponsoring screening programs. Agricultural diverters however, are concerned about screen operation and maintenance and fear that poorly maintained or damaged screens will interfere with their ability and right to divert water. One of these programs, DWR's - Temporary Barriers Program, has proposed extending/modifying up to fourteen diversions in Grant Line Canal downstream of the temporary Grant Line Canal barrier. These extensions, in combination with selective channel dredging, are proposed to address barrier induced reductions in water elevations that can interfere with crop irrigation. Several of these diversions will need to be screened as a result of the proposed modifications. The necessity to screen has caused some diverters to become concerned that DWR, who will assume operations and maintenance responsibilities, will not properly operate and maintain the screens or respond quickly enough to address screen malfunctions.

Proposed Assurance(s):

Below are three potential approaches to providing assurances to relieve agricultural diverter concerns. Under all of the approaches all diversions in the Delta screened under either DWR or CALFED programs would be outfitted with a radiotelemetry unit that would send status updates back to the DWR's Delta Field Division and the diversion owner on an hourly basis when water is being diverted. This information will reflect the diversion's current operational status (flow rate through the landside outfall). The system will be fully automated and pump operations will be variable to meet the screen and approach velocity criteria. If the fish screen becomes fouled or operates incorrectly the telemetry unit will send notification to the diversion owner and DWR's Delta Field Division.

- 1) Under the first approach DWR maintenance crews will be dispatched within 12 hours to identify and resolve any problems. If water deliveries are or are expected to be interrupted for longer than 24 hours, the diverter will have the ability to either remove or bypass the damaged or fouled screen and take water through a the unscreened intake. This approach could be facilitated by installing a dual pipe system that uses a butterfly valve to switch from the screened intake to an unscreened intake. Diversions through an unscreened intake will be restricted to a maximum of 48 hours, unless cause can be shown that diversion repairs will take longer than 48 hours. It will be the responsibility of DWR to notify the fishery agencies that the diversion is not operating properly and that diversions are occurring through a non-screened intake. Diversions through unscreened intakes of longer than 24 hours will result in an increase in the incidental take number for delta smelt at the State facility, this increase would be measured as one delta smelt/per hour of unscreened operation when delta smelt are present in the salvage.

- 2) A second approach would be to have a second screened diversion at the location that the operator can switch to if the primary screen becomes inoperable.
- 3) Under the third approach the diverter would not have a bypass system, but will be allowed to conduct any necessary maintenance and repair activities on the intake. Their costs for those activities will be reimbursed under a contract provision with DWR or CALFED.

DRAFT