

## Goals and Objectives

The overall goal of the TDF is to “develop improve fish protection technologies for potential implementation at fish salvage facilities in the South Delta, California, to support environmentally and economically sound water diversions and use”.

Objectives for reaching this goal are:

- Develop more efficient fish friendly abilities to handle and minimize debris interference on major components of a fish salvage facility including screens, louvers, fish separation systems, and holding tanks
- Determine the feasibility of using small mesh positive barrier screens for collecting fish and retaining them in holding tanks prior to transport
- Determine the feasibility for long-term use of fish friendly lifts for producing bypass flows and flows to above ground fish separating/holding facilities
- Determine the feasibility of gravity-fed bypass systems for providing flows from the main experimental channel to fish separation/holding facilities
- Development of efficient, gentle fish transfers systems from holding tanks to transport tanks and vehicles
- Develop enhanced predator control abilities through:
  - Developing abilities to sort fish by size up front by experimenting with a combination “leaky louver” and positive barrier screen in the main experimental channel
  - Determining effective use of fish crowder’s in channels and holding facilities for moving fish rapidly to bypasses or through sorters
  - Developing fish sorting systems in flows emanating from bypasses driven either by fish lifts or gravity
  - Maintaining fish collections segregated by size in holding tanks for transfer to designated transport tanks
- Developing and assuring that all systems are user friendly, reliable, and economical for future operations and maintenance staff
- Carrying out all developments using established fish facility design criteria whenever possible, plus testing components using different criteria (variances from criteria) as deemed needed to establish workable future fish salvage facilities

In addition to above objectives, the overall goal of improving fish salvage facilities and operations requires improvements in trashracks and all that surrounds them (debris issues, fish passage, predation) and improvements in transport and release systems (fish stocking back into the Delta). Both the Department of Fish and Game and Department of Water Resources are addressing those needs. The TDF program would integrate with these programs and be in a supporting and coordination role, but would not develop key overlap studies.