# Clifton Court Forebay Predator Reduction Alternative(s) Electrofishing (Interim Measure)

### Project Description:

This three year study consisted of electroshocking non-native predatory fish in Clifton Court Forebay (CCF) and relocating them to Bethany Reservoir. Each year of the study had a specific focus. During 2016, we conducted a pilot effort focusing on field logistics, equipment and personnel needs, developing effective sampling methods, and collecting initial data on predator density patterns. During 2017, we determined spatial and temporal patterns in predator catch rates using a standardized sampling regime, assessed environmental variables that may affect catch rates, and assessed factors contributing to mortality of predators transported to Bethany Reservoir. During 2018, we utilized the information gained regarding the factors that affect predator catch rates, as well as additional lessons learned from the 2016 and 2017 efforts, to maximize predator removal rates. During the three years of this study, 21,975 predatory fish were removed from CCF.

#### Project Need:

To comply with the requirements of **Action IV.4.2(2)** contained in the Reasonable and Prudent Alternative of the National Marine Fisheries Service's (NMFS) Biological Opinion and Conference Opinion (BiOp) on the Long-term Operations of the Central Valley Project and State Water Project (June 2009). Action IV.4.2(2) requires implementation of predator control methods for CCF that will reduce Chinook Salmon and Central Valley steelhead pre-screen loss in CCF to no more than 40 percent. As a condition for extending the timeline for full compliance with the BiOp requirements, NMFS identified four interim measures and is requiring DWR to implement them immediately. Electrofishing is one of the identified interim measures.

### **Project Objectives:**

- 1. Improve the survival of Chinook Salmon and Central Valley steelhead in CCF.
- 2. Satisfy NMFS electrofishing interim measure requirement.

#### Schedule of Milestones:

Completed December 2016	2016 Pilot-Year Annual Report
Completed December 2017	
Completed December 2018	2018 Annual Report

## Project Cost:

2016-2019 \$5.35 million

# Project Manager:

Michael Cane Michael.Cane@water.ca.gov (916) 653-3496

