CDFW issued Incidental Take Permit No. 2081-2019-006-00 (ITP) to the California Department of Water Resources (DWR) on March 31, 2020, for the long-term operation of the State Water Project (SWP) in the Sacramento San Joaquin Delta (Delta). Condition 7.5.2 of the ITP requires the development and establishment of a spring-run Chinook salmon (Oncorhynchus tshawytscha) juvenile production estimate (JPE) to increase understanding of the impacts that water operations have on the spring-run Chinook salmon population in the Sacramento River watershed and to inform the development of minimization measures to reduce take of spring-run Chinook salmon at Delta fish salvage facilities.

As a part of the JPE effort, CDFW began operating a new rotary screw trap (RST) monitoring station on the lower Feather River near River Mile 17, approximately 1 mile downstream of Star Bend Park and Boat Ramp near Olivehurst, in January 2022. This RST location represents the lowest point in the Feather River Watershed where juvenile salmon are sampled with an RST prior to entering the Sacramento River and includes salmon emigrating from the Yuba River. The expanded juvenile monitoring effort will help resource agencies and water managers identify numbers of salmon emigrating from the Feather River Watershed and contributing to the spring-run Chinook salmon population entering the Delta.

Monitoring is conducted annually from October through June utilizing a pair of eight-foot rotary screw traps (RST). Data collected at the Lower Feather River RST site provides information on the temporal distribution, relative abundance, and race composition of juvenile Chinook salmon; and temporal distribution and relative abundance of steelhead trout (O. mykiss) emigrating from the Feather River and tributaries, including the Yuba River, to the Delta. Salmonid data collected from the Lower Feather River RST, among other datasets, is also used by the Salmon Monitoring Team (SaMT) to understand the movement of juvenile salmon in the Sacramento River Watershed to estimate the number of winter-run and spring-run Chinook salmon that have entered the Delta. SaMT is a real-time operations monitoring team required by Condition of Approval 8.1.2 of the ITP which meets weekly from October through June, to provide advice for real-time management of SWP operations to DWR, CDFW, and the Water Operation Management Team (WOMT) to minimize take of winter-run and spring-run Chinook salmon in the Delta.