

Interagency Ecological Program 2023 Work Plan Element Smelt Larva Survey (SLS)

Project Manager and Affiliation

James Hobbs, CDFW

Principal Investigator and Affiliation

Lauren Damon, CDFW

Annual Costs (thousands) and Funding Sources

\$375 DWR; \$125 USBR

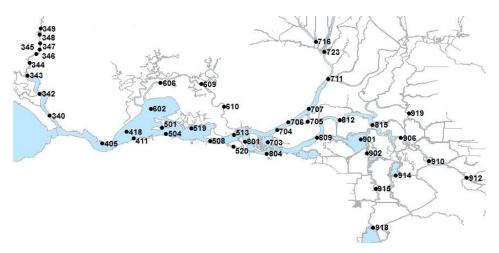


Figure 1. Map of the Smelt Larva Survey station locations in the upper San Francisco Estuary sampled by the California Department of Fish and Wildlife. Map is currently missing 6-15 stations in San Pablo Bay since station locations are still TBD.

Description

The Smelt Larva Survey (SLS), initiated in January 2009, provides near real-time distribution data for Longfin Smelt larvae in the Delta, Suisun Bay and Suisun Marsh for the protection of larval and juvenile Longfin Smelt from January through March.

Need

The data obtained from SLS are used by agency managers to assess vulnerability of Longfin and Delta Smelt larvae to entrainment in south Delta export pumps. This larval fish survey is designed to provide a more comprehensive coverage of distribution and abundance of larval Longfin and Delta Smelt in the upper estuary and augment other sources of data used in the decision-making process for water operations, including the existing IEP 20-mm Survey field operations when the two programs overlap

temporally. This survey is required by the Incidental Take Permit No. 2081-2009-001-03 for the State Water Project, issued by CDFW under the California Endangered Species Act and Fish and Game Code Sections 2081(b) and 2081(c), and Calif. Code of Regulations, Title 14. Export and flow management are guided through distribution and catch criteria based on this study.

Objectives

- Determine the larval Longfin and Delta Smelt abundance, temporal and spatial distribution in near real time
- Determine whether the temporal and spatial distribution and abundance of larval and post-larval Longfin and Delta Smelt are determinate factors on the level of entrainment losses

Schedule of Milestones

December to March: Every two weeks from December to March field surveys will be conducted and field and laboratory results will be reported weekly to the Smelt Monitoring Team (SMT) and the WOMT team starting 5 days after the field sampling are concluded. Shortly afterwards, raw, and calculated data will be uploaded to the Region 3's SLS Survey web page.

End of Year: By the end of the calendar year a draft survey summary article will be submitted to the Editor of the IEP newsletter for publication.