

IEP Data Management Plan

Basic Information

Year: 2020; PEN:096; Date Updated: 2019-06-03; Start Date: 2020-01-01

Study Title

Smelt Larval Survey

Principal Investigator

Individual(s) responsible for the project. Include name, agency, e-mail, & phone.

Lauren Damon, California Department of Fish and Wildlife, Bay-Delta Region, Stockton

Lauren.Damon@wildlife.ca.gov 209-234-3485

Point of Contact

Individuals who data users should contact for access to the data or questions about the data. Include name, agency, e-mail, & phone number or write "same as above."

Same as above.

Data Description

A very brief description of the information to be gathered; the nature and scale of the data that will be generated or collected. Include approximate size (in MB) of the resulting data set.

The Smelt Larval Survey collects fish and environmental data at fixed locations ('stations') through the upper San Francisco Estuary annually during January through March. The survey describes the temporal distribution and relative abundance of young-of-the-year Longfin Smelt. The survey samples 44 stations every another week. The sampling frequency has changed as needed or by request of Management or our stakeholders. The data are stored in a Microsoft Access database that is 27 MB in size. The gear targets larval fish less than 20 mm in size. Data collected include collection date, geographic location, water temperature, water clarity, turbidity, specific conductance (at 2 depths), channel depth, tidal stage, fish species, catch, and fish length.

Related Data

Optional. Existing datasets that you incorporate into analysis and reporting for this program element, existing data that are relevant to your study, or data that are collected simultaneously.

N/A

Metadata

A description of the metadata to be provided along with the generated data, including the metadata standards used. Provide the file name and information on how users can access the metadata (e.g., a link).

Metadata documentation is available at the [Native Fishes Project's FTP](#) site.

For current information (as of 2017) on the database structure, format, and calculation procedures for key survey metrics, please refer to: SLS_Metadata.pdf

The metadata also provides information on the database changes and key field methodology since its inception in 2009.

Storage and Backup

A description of the short-term storage methods and backup procedures for the data, including the physical and electronic resources to be used for the short-term storage of the data.

The SLS data are initially stored on a shared drive. Back up versions of the SLS database are stored on an ES's computer. All data is regularly uploaded to a CDFW Tier 3 SQL server offsite at the Department's Data and Technology Division (DTD) in Sacramento. Paper data sheets are placed into binders, held at the Stockton Office and eventually scanned for electronic backup after the end of each field season.

Archiving and Preservation

The procedures for long-term archiving and preservation of the data, including succession plans for the data should the expected archiving entity go out of existence.

Data are currently preserved on paper and digitally. Paper datasheets will be stored in binders in the Stockton office. Digital data will be stored temporarily on the local CDFW server, ES computers, and archived on the CDFW's Tier 3 server as soon as reasonably possible at least once per month.

The principal investigator (PI) will ensure that study element's data sets and their metadata are maintained or transferred to long-term archiving facility in the rare event that either the Project or DTD servers are no longer viable. Although the methods of digital archiving of data has evolved through time, CDFW is a long-established agency with no anticipated end date of existence.

Access and Sharing

A description of how data will be shared. Include (1) access procedures, (2) embargo periods, (3) technical mechanisms for dissemination (e.g., website addresses, listserv information), (3) whether access will be open or granted only to specific user groups, and (4) a timeframe for data sharing and publishing.

Data are publicly available for downloading via the [FTP site](#). The FTP site is updated once per year with most current information along with a log of changes to previous years' data. [Catch, CPUE, and size distribution data](#) of fish are also publicly available via maps, bubble plots, and table summaries on interactive web pages.

[Annual reports and publications](#) are available for downloading.

Requests for customized data files, queries or formats should be directed to the PI.

Format

Formats in which the data will be generated, maintained, and made available. Include BOTH general data type (e.g., spreadsheet, relational database) and file format (extension).

Field and larval fish data are recorded on paper data sheets. Data from data sheets are later key entered into computer database. Data is currently stored as a relational database (SLS_query.mdb) locally and on a SQL server using an Microsoft Access 2002 (.mdb) although later in 2018 we will start migrating to Access 2010 (.accdb) database. The MS Access database can be downloaded in its entirety (SLS.mdb = 27 MB) from our FTP site or a subset of the data can be made available in a .csv flat file upon request.

Quality Assurance

Brief description of procedures for ensuring data quality. Provide links to Quality Assurance Project Plan and/or QA/QC Standard Operating Procedures.

Field crew leaders review the field data sheets for legibility, completeness, and accuracy. Data entry accuracy is checked by comparing listings of entered data against the data sheet entries twice immediately after their entry into the local database. Data entry is checked again after the end of the Native Fishes field season (July or August). Project ESs perform reasonableness checks by running computer queries that flag outliers or erroneous entries. Detailed descriptions of QA/QC procedures can be found in the SLS Standard Operating Procedures document that is available upon request to the PI (SLS_SOP.pdf; attached to the 2019 Checklist document).

Rights and Requirements

A link to or instructions to locate the agency's rights and requirements for data use.

None.

All data used for publication should acknowledge CDFW's Smelt Larva Survey Project and the Interagency Ecological Program for the San Francisco Estuary.