# **IEP Data Management Plan**

## **Project Element Number:**

053 and 302

**Year:** 2024

Date Updated:

04-04-2023

**Start Date:** 01-01-2024

**Study Title** Delta Juvenile Fish Monitoring Program

## **Principal Investigator**

Adam Nanninga, Lodi Fish and Wildlife Office, U.S. Fish and Wildlife Service; adam\_nanninga@fws.gov, phone: (209) 200-9841

## **Point of Contact**

Jonathan Speegle, Data Manager, DJFMP, Lodi Fish and Wildlife Office, US Fish and Wildlife Service; jonathan\_speegle@fws.gov, Phone: (916) 880-6653

## **Data Description**

Data collection via beach seining and boat trawling (which began in 1976) occurs in the lower Sacramento and San Joaquin Rivers, Delta and Bay to support DJFMP's goal of documenting the relative abundance and distribution of juvenile salmonids and other migratory and resident fishes in the system. A beach seine efficiency study is included within the current work plan to test assumptions and expand inferences linked to abundance of key littoral species within shallow water habitats. In addition to basic fish information, environmental data are collected for each sampling event (including DO, conductivity, temperature, and turbidity). Database size is approx. 450 MB.

## **Related Data**

N/A

## Metadata

A metadata file lists the details of sampling locations, methods, frequency, period of record, units, species abbreviations, and other pertinent information concerning DJFMP operations. The metadata file documents all changes to sampling location, frequency, etc. that have occurred since monitoring began. The file is available on the <u>Juvenile</u> <u>Fish Monitoring page</u>. URL location https://www.fws.gov/project/delta-juvenile-fish-monitoring-program

#### **Storage and Backup**

The DJFMP data are located on a SQL server housed at US Fish and Wildlife Service offices in Denver, CO. Physical data sheets are stored in binders in the Lodi Fish and Wildlife Office. Data sheets are scanned after entry and saved onto an external hard drive and into a folder on the shared server in the Lodi Fish and Wildlife Office.

#### **Archiving and Preservation**

An archive is maintained at the Lodi Fish and Wildlife Office containing originals and copies of datasheets. The online database is backed up by the server administrators in the Denver, CO US Fish and Wildlife Service office. If the Denver, CO server storing the database becomes unavailable in the future, the database will be transferred to an alternate home within the US Fish and Wildlife Service. In addition, local copies of the online database are saved monthly on the shared server in the Lodi Fish and Wildlife Office. The shared server is backed up daily and once a month the backup is transferred to a fireproof safe on site.

#### Format

Data are recorded on data sheets in the field and upon return to the office are entered into an online data entry portal, which is connected to a SQL server. Data are then accessed and retrieved through a Microsoft Access application (.accdb). Data are made available on the Lodi Fish and Wildlife Office website in Excel (.xlsx) and .pdf files, and upon request can be available in other file formats. When accessed via the website Bay-Delta Live, DJFMP data can be downloaded as .csv, Excel (.xlsx), or .pdf.

## **Quality Assurance**

Data are collected following the DJFMP Standard Operating Procedure (available upon request), which every employee is trained on prior to commencing work. A QA/QC program exists to ensure accurate identification of fish species in the field and accurate collection of environmental data. Double entry of datasheets is used to check the accuracy of entry. Every three months, additional proofing (e.g., outlier searches) occurs in the database.

## **Access and Sharing**

Data files are available to the public upon request and the most frequently requested data are available at the <u>DJFMP web site</u> (https://www.fws.gov/project/delta-juvenile-fish-monitoring-program). Files found on the website include CWT survival tables for the Chipps Island and Sherwood Harbor trawl sites and catch information for the Pelagic Organism Decline (POD) species and species of management concern. Depending on the data, files become available online on a weekly basis or upon completion of a sampling year. In addition, upon entry, DJFMP seine and trawl data become available through the online web portal <u>Bay Delta Live</u> (http://www.baydeltalive.com/) and <u>SacPAS: Central Valley Prediction & Assessment of Salmon</u>

(https://www.cbr.washington.edu/sacramento/data/juv\_monitoring.html). The DJFMP produces annual reports that are also available on the DJFMP web site. Additionally,

DJFMP data is available on the EDI (<u>Environmental Data Initiative website</u>) which is updated annually after all data for the sampling year is QC and edited. The EDI website URL: https://environmentaldatainitiative.org/

## **Rights and Requirements**

Data use rights and requirements for federal government datasets can be found on the government works website. URL location: https://www.usa.gov/copyrighted-government-works