# IEP Data Management Plan

#### **Basic Information**

Year: 2020; PEN:093; Date Updated: 2019-04-29; Start Date: 1980-01-01

### **Study Title**

Suisun Marsh Fish Study

### **Principal Investigator**

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

John Durand (jrdurand@ucdavis.edu; 530-601-3001), Teejay O'Rear (taorear@ucdavis.edu; 530-304-0860), Peter Moyle (pbmoyle@ucdavis.edu; 530-574-6695)

#### **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."

Teejay O'Rear (UC Davis; taorear@ucdavis.edu; 530-304-0860)

### **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.

Trawling is conducted using a four-seam otter trawl with a 1.5-m X 4.3-m opening, a length of 5.3 m, and mesh sizes of 35-millimeter (mm) stretch in the body and 6-mm stretch in the cod end. The trawl is towed at 4 km/hr for 5 minutes in small sloughs and for 10 minutes in large sloughs every month in at least nine sloughs. Inshore fishes are sampled monthly with a 10-m beach seine having a stretched mesh size of 6 mm at three beaches. For each site, temperature, salinity, dissolved oxygen parameters, water transparency, tidal stage, and water depths are recorded. Time permitting, hook-and-line sampling for adult striped bass gut-content analyses occurs adjacent to trawl stations. The current database size, containing 40 years of data, is 114 MB.

#### **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.

California Department of Fish and Wildlife's Bay Study, Fall Midwater Trawl, Summer Townet Survey, Spring Kodiak Trawl, and Smelt Larval Survey

#### 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).

Sampling has generally occurred monthly since June 1979. A Word document ("Suisun Marsh Database Primer") describing pertinent tables in the database and a general description of field methods is sent along with any data. Metadata are also included in the <u>annual Suisun Marsh Fish Report</u>, available online.

### **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.

Hard-copy original datasheets are archived in Academic Surge 1336; hard-copy copies of datasheets are housed in 2101 Watershed Sciences. Database is stored on Watershed Sciences file server, an external hard drive, and off-site utilizing CrashPlan, following our principle of having the data stored on as many media types as possible.

### **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.

The project has been ongoing since 1980 and is funded to continue through 2026, with the expectation that it will be extended at that time. The data are curated by the PIs and updated monthly as new data are collected. The founding PI, Peter Moyle, is retired from teaching but is active in research at the university. John Durand and Teejay O'Rear will assume responsibility for the project over the next decade. See also section above.

## **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.

The data are currently available to whoever asks (database queries are directed to Teejay O'Rear on the Center for Watershed Science's webpage). Availability of data through UC Davis's library and through CDWR are in the works. QA/QCd data for the previous year are available by the second week of the current year (e.g., QA/QCd data for calendar year 2017 will be available the week of January 7, 2018); non-QA/QCd data for the current sampling year are available the Monday after the sampling week (e.g., sampling occurred November 6 - 9, 2017; non-QA/QCd data were entered

November 13). <u>Annual reports</u> are generally completed on the previous year's sampling by April of the following year and are available online.

#### **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).

Formats available: Access database (.accdb, if whole database is requested - this is the most common dissemination format), or, if someone wants something smaller and simpler in a flat file, Excel (.xlsx) or a .csv or .txt file, which numerous software programs can read.

### **Quality Assurance**

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

There are two side of the database, a data-entry side, and a permanent side. Data are entered from hand-written sheets into electronic forms on the data-entry side of the database. The data can then reviewed as spreadsheets. Changes can be made, and the data are reviewed again for completion and correctness.

Data are not available in the query side of the database until they have been QA/QCd. After final review, the data are moved by clicking a QA/QC button on the data-entry forms. At that point, the data are archived into the permanent side of the database, where they cannot be easily altered.

QA/QC procedures reside in the "Suisun Marsh Database Primer" document that is sent to every data requester.

# **Rights and Requirements**

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

All rights in data arising from university employment or the use of university resources belong to the university. Title to the copyrightable materials and data that are developed under a contract or grant from a commercial sponsor normally belong to the university. The university must <u>ensure that the data</u>, information, and materials generated during the course of research remain widely available.