

# IEP Data Management Plan

## Basic Information

Year: 2020; PEN:047; Date Updated: 2019-05-31; Start Date: 1998-01-01

## Study Title

Yolo Bypass Fish Monitoring Program

## Principal Investigator

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

Brian Schreier, DWR, brian.schreier@water.ca.gov, 916-376-9759

## 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."*

Catarina Pien, DWR, catarina.pien@water.ca.gov, 916-376-9720

Naoaki Ikemiyagi, DWR, naoaki.ikemiyagi@water.ca.gov, 916-376-9822

## 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.*

Dataset is from 1998 to present, composed of catch data for rotary screw trap, fyke trap, egg and larval fish tows, beach seines, zooplankton, and phytoplankton monitoring along with accompanying water quality data. Water temperature, turbidity, EC, pH, and dissolved oxygen are collected at all sampling locations. An 8' rotary screw trap is operated in the Toe Drain 5 - 7 days/wk Jan - June. All fish are identified to species with up to 20 individuals/species measured, then plus counted. Beach seining is conducted on a biweekly basis (weekly during inundation) at 10 sites in the Toe Drain. A 10' diameter fyke trap is used to monitor the adult fish abundance and species composition October-June. Fish monitoring data base is ~45 MB and lower trophic data base is ~28 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.*

Not relevant to this program.

## 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).*

Each YBFMP monitoring element has its own dedicated metadata document. All metadata documents (fyke trap, rotary screw trap, beach seine, eggs and larvae, zooplankton, invertebrate drift, and chlorophyll) are available upon request. [Metadata related to fish sampling](#) (fyke trap, rotary screw trap, beach seine) are 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.*

Hardcopy datasheets are stored in binders in our office at 3500 Industrial Blvd, West Sacramento, CA 95691. All datasheets are scanned annually and the scans are stored on DWR servers. The main electronic databases are stored on DWR servers with tape backup. Additional backup copies are stored on staff desktops in our office and in a portable hard drive in a staff's home, all backups are updated every Friday.

## 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.*

Under contract with KISTERS North America to develop a new database system that will allow for increased reliability, improved QA/QC processes, and will facilitate web portal availability. The new database is anticipated to go live by the end of 2019. All datasheets and databases will continue to be housed and archived at DWR facilities.

## 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.*

[Fish data](#) is published online via Environmental Data Initiatives and is accessible for download. Fish data can also be visualized on [Bay Delta Live](#). Lower trophic data sharing is currently via email request only. After our database upgrade, we will move to a web based data availability format. At this time access is open to anyone. Annual reports are published every year in the IEP newsletter.

## **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).*

All YBFMP data is stored in relational Access (.accdb) databases. One database stores all fish sampling and corresponding water quality data, and one database stores all lower trophic sampling and corresponding water quality data. Data requests will be fulfilled using Excel (.xlsx) files.

## **Quality Assurance**

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

Data QA/QC is a four stage process. First, the data sheets are error checked at the end of each day by the crew leader. Second, data is then entered into a Microsoft Access form with automatic error-checking and data validation. Third, a separate data entry person compares the original data sheets to the electronic database. Finally, each data field is sorted and/or summarized based on unique records to highlight erroneous outliers. Each metadata document linked above provides a description of the QA/QC procedure for that element.

## **Rights and Requirements**

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

DWR does not have specific rights and requirements for data use.