

# IEP Data Management Plan

## Basic Information

Year: 2020; PEN: 343; Date Updated: 2019-09-17; Start Date: 2020-01-01

## Study Title

Patterns of Biodiversity and Biotic Homogenization of the Sacramento-San Joaquin Delta

## Principal Investigator

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

Brian Mahardja, U.S. Fish and Wildlife Service; Phone: (209) 242-5648

## 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."*

Brian Mahardja, U.S. Fish and Wildlife Service; Phone: (209) 242-5648

## 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.*

This synthesis effort will make use of existing boat electrofishing and beach seine data collected by the California Department of Fish and Wildlife, United States Fish and Wildlife Service, and other agencies within the IEP from the 1980s to 2010s. The data sets will include fish catch, fish length, and water quality information collected from the field. Combined electrofishing data will be roughly 4 megabytes and combined beach seine data will be roughly 150 megabytes in total.

## 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.*

No new data collection (i.e. data unique to this study) will be done under this study. All data are collected from past (completed) studies, long-term monitoring programs under IEP, or newer studies under the IEP workplan (see proposal for more information).

## 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).*

Information on how data was collected, compiled, and analyzed will be detailed in the final manuscript (either as an appendix or part of the manuscript). There is no plan for a separate metadata. We plan to have the published manuscript available as open access article.

## 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 compiled dataset and R codes will be stored on the PIs networked drive at USFWS, and/or DWR, which have automatic back-up routines. Additional R codes will also be held by collaborators under their respective agencies.

## 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 compiled dataset and R codes will be preserved on USFWS and DWR networked drives. In the case that the project's principal investigator, Brian Mahardja, is no longer in his current position, then one of the collaborators shall determine where the files will be stored.

## 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.*

Because this study will utilize data collected by other projects, the availability of data to the public will be up to each project's principal investigator(s). We expect at least the following datasets to continue to be publicly available either online or by request: Delta Juvenile Fish Monitoring Program, California Department of Fish and Wildlife Resident Fish Monitoring, UC Davis 2008-2010 Electrofishing, and Yolo Bypass Fish Monitoring Program. Methods for data transformation and analysis will be detailed in the final manuscript. R codes used to compile data and conduct analysis will be available upon request from the project members.

## 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).*

Data will be in a csv (.csv), Excel (.xlsx), or Access (.mdb) format. Data analyses and visualizations will be conducted in R. R codes will be available upon request from the project members.

## Quality Assurance

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

As this project is a synthesis using existing data sources, data quality assurance will lie with protocols of base datasets. Before using data for analyses, we will ensure data has been through QA/QC procedures that are routine for each individual dataset.

Preliminary analyses derived from data sets will be reviewed by collaborators to ensure proper use and interpretation of data.

## Rights and Requirements

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

[Data use rights and requirements for federal government datasets](#) can be found online.