# IEP Data Management Plan

## Basic Information

Year: 2020; PEN: 279; Date Updated: 2019-05-14; Start Date: 2020-01-01

## Study Title

Liberty Island Fish Survey (DJFMP)

## Principal Investigator

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

Brian Mahardja, Acting Program Manager, DJFMP, Lodi Fish and Wildlife Office, U.S. Fish and Wildlife Service; brian_mahardja@fws.gov

## 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."*

Jonathan Speegle, Data Manager, DJFMP, Lodi Fish and Wildlife Office, US Fish and Wildlife Service; jonathan_speegle@fws.gov, Phone: (209) 334-2968 ext. 322

## 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.*

Monitoring by the DJFMP is conducted at Liberty Island to provide baseline data concerning the restoring wetland. Beach seines and larval and zooplankton trawls are employed. All fish collected are identified (in field when possible, in lab for early life stages) and recorded. In addition to fish and zooplankton information, environmental data are collected for each sampling event (including DO, conductivity, temperature, and turbidity). Database size is ~30 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.*

NA.

## 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).*

A metadata file lists the details of sampling locations, methods, frequency, and other pertinent information concerning Liberty Island monitoring operations. The metadata file is available upon request to the Lodi Fish and Wildlife Office. There are plans to publish the Liberty Island dataset to the Environmental Data Initiative (EDI) in 2019 or 2020.

## 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 Liberty Island trawl data are located on the shared server housed in the Lodi Fish and Wildlife Office. The Liberty Island seine 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

*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.*

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, copies of the online and local databases 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 fire proof safe on site.

## 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.*

DJFMP data files and quarterly data summaries are available to the public upon request and the most frequently requested data are available at the DJFMP web site

(https://www.fws.gov/lodi/). An annual report concerning Liberty Island monitoring will be produced and made available on the website.

## 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 are recorded on data sheets in the field and lab. Trawl data are entered into a local database via Microsoft Access. Seine data are entered into an online data entry portal, which is connected to a SQL server. Data are accessed and retrieved through Microsoft Access (.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.

## 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 are collected following the DJFMP's Liberty Island 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. For early life stage fish identification, two or more experienced identifiers examine every fish until consensus is reached on species. 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.

## 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.