

# IEP Data Management Plan

## Basic Information

Year: 2020; PEN:311; Date Updated: 2019-05-30; Start Date: 2015-07-23

## Study Title

SAMPLING FISH AND FOOD-WEB RESOURCES IN TIDAL WETLANDS:  
RESTORATION MONITORING IN 2020

## Principal Investigator

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

Dave Contreras/CDFW/dave.contreras@wildlife.ca.gov/209-234-3459

Daniel Ellis /CDFW/daniel.ellis@wildlife.ca.gov/209-234-3680

## 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."*

Dave Contreras/CDFW/dave.contreras@wildlife.ca.gov/209-234-3459

## 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.*

The Fish Restoration Program (FRP) samples fish and invertebrates in tidal wetlands and their adjacent channels in order to inform monitoring of restoration sites. In 2019, sampling will occur around the current and future tidal wetland locations. Data includes fish and invertebrate catch, water quality, submerged aquatic vegetation biomass, chlorophyll-a concentrations, associated sampling information (effort), and associated environmental variables (weather, tides, etc). Data from the 2020 workplan will be added to the existing FRP database, and is estimated to be 30 MB in size.

## 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.*

FRP will also use data collected by the DWR Yolo Bypass survey (IEP element #047), the USFWS Liberty Island Fish Survey (IEP element #279), UC Davis Suisun Marsh Program (IEP element #093), 20mm survey (IEP element #033), EMP survey (IEP

element #077), and Fall Midwater Trawl (IEP element #003) where study areas overlap with ours whenever possible to avoid double-sampling.

## 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).*

[Metadata](#), including citation information, geographic scope, standard operating procedures, and QA/QC procedures is available online. Tables within the MS Access Database contain detailed descriptions of all the metrics collected.

## 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 FRP database is located on a shared drive housed by DFW. Back up versions of the database are stored on the environmental scientist's computer every week. An additional back up of the database will be preserved on Google's cloud storage every month.

## 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.*

Data is currently preserved on paper and digitally. Paper data sheets will be stored between both of the Environmental Scientist's cubicles in binders. Digital data will be stored temporarily on the local CDFW server, to be backed up on CDFW's Tier 3 server as soon as reasonably possible and backed up once per month. An archiving system is currently in development with the Department of Water Resources Data Management Branch and expected to be in production this year.

## 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.*

Currently the database is not online, so access to the data will be sent over email when the project investigator is contacted. [Data from 2015-2017](#) is publicly available as a .csv file on the EDI Data Portal.

## 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).*

Field data will be collected on paper datasheets or iPads. Data collected in lab will be entered directly into computer database when possible, or recorded on paper and transferred to the computer database. Data is currently stored in an Microsoft Access 2010 (.accdb) database. Data can be made available in its entirety (22 MB) as an Access database, or a subset of the data can be made available in a .csv flat-file upon request.

## Quality Assurance

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

All data collection SOPs have quality assurance and quality control methods, including regular calibration of instruments, checks of identifications, and checks of data entry. See SOPs described in metadata for details. Contact D. Contreras for documents.

## Rights and Requirements

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

We adhere to all [CDFW and CDWR policies](#) on data quality.