IEP Data Management Plan

Project Element Number:

2024-354

Year:

2024

Date Updated:

30 May 2023

Start Date: 31 July 2023

Study Title

Physical and Biological Drivers of Fish Distribution in Suisun Bay

Principal Investigator

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Point of Contact

Same as above.

Data Description

Variability in lateral and vertical distribution of fishes can have important implications for resource managers assessing dredging impacts on fish habitat use. Vertical and lateral distribution studies will be conducted at various locations in the central San Francisco Estuary. Fish will be collected with midwater and otter trawls. Data will consist of flat files that contain information summarizing fish catch and associated sample collection metadata. Fish collection data file size is not expected to exceed 1MB. Concurrent with fish collection, acoustic doppler current profilers (ADCPs) will measure water velocity at the location of fish collection. Data collected from acoustic doppler current profiler transects will not exceed 1GB.

Related Data

There will be bioacoustics transects collected by cooperating agency (United States Army Corps of Engineers) but these data are not part of this study element.

Metadata

Metadata will be developed and applied consistent with USGS Fundamental Science Practices. These metadata will be stored with the collected field data and available in all publicly available formats as an .xml file.

Storage and Backup

All data will be collected on USGS portable computers and backed up to USGS servers at the completion of each sampling day.

Archiving and Preservation

After quality assessment of field data, all data will be added to a dedicated Microsoft Access database maintained by the USGS California Water Science Center and stored on internal USGS servers. Upon completion of the project, data will be published via the USGS open-access data repository ScienceBase. The published data release is the succession plan for these data.

Format

Data will be generated and maintained in a relation database (Microsoft Access format). Publicly available data will be provided as a series of spreadsheets linkable using unique identifiers (.csv). Metadata will be available in .xml format.

Quality Assurance

For a detailed description of quality assurance procedures, please see the embedded document which describes steps and responsibilities of USGS personnel from the California Water Science Center. Briefly, field data is entered directly into digital databases by field staff. Upon entry, data will be reviewed by supervisory field staff before collection of the next sample. Field crew leads will ensure that data are backed up at the end of every field day. All data will be fully audited for completion and accuracy prior to further release.



Access and Sharing

For access to preliminary data, all requests must go through the data point of contact (listed above). These data may be shared provisionally once they have been thoroughly reviewed for accuracy and consistency. Upon review and approval by USGS data management specialists, data will be published to the open access data repository ScienceBase (sciencebase.gov). Target timeframes for final data publication are generally approximately one year after data collection, but this is only approximate and is contingent on review and approval.

Rights and Requirements

Federal data management requirements are stated in a series of federal laws and mandates, DOI and USGS policies, and agency directives which together orchestrate the management of federal research data to ensure that the highest levels of data quality, integrity, and utility are achieved for the benefit of current and future scientists, decision-makers, and the public. All USGS data are subject to USGS Fundamental Science Practices, which clarify how science is conducted and resulting data products are developed, reviewed, approved, and released.