IEP Data Management Plan

Basic Information

Year: 2020; PEN: 333; Date Updated: 2019-06-03; Start Date: 2019-10-01

Study Title

Expanded Acoustic Tagging, Analysis and Real-time Monitoring

Principal Investigator

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

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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."

National Marine Fisheries Service, 110 McAllister Way, Santa Cruz CA 95060.

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.

Tagged Salmon data: source, fish type, date tagged, tag type, fish size, fish weight, and release details (1MB). Receivers deployed data: location, start/stop time, receiver details and data coverage (1MB). Receiver detection data: files produced by receivers, 1 file for each deployment, date and time of detection, tag code, signal strength, frequency, and receiver status (temp, tilt, volts) (10's GB). Data sources will be combined, compiled and filtered to create a single file that contains fish identity, location and time of each detection with false positives removed (2GB). Sturgeon site visit data: site ID, visit date, start time, end time, GPS file and DIDSON files (10's KB). Sturgeon count data: DIDSON file, view ID, and count (10's KB). Didson files (10's GB). GPS files (10's KB).

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.

Chinook salmon: Related data include: Flow, water temperature, and turbidity from appropriate CDEC water quality monitoring stations. Other related data include: Tidal currents, Old and Middle River (OMR) flows, daily exports and Delta Cross Channel (DCC) position. The NMFS RAFT model.

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).

All components:

Metadata documenting geospatial and environmental data will adhere to NOAA Administrative Order 212-15. This order encompasses ISO standard 19115 regarding geospatial data as well other specifications related to environmental data, environmental/geospatial data access and data stewardship practices.

Our data access portal was developed to adhere to NOAA Administrative Order 212-15, thus users will acquire xml based metadata as an explicit step of data access.

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.

All receiver files, tables, DIDSON and GPS files will be stored on the NOAA NMFS Santa Cruz internal network servers (these servers are externally backed up per NOAA NMFS IT standards and practices).

Copies of Vemco receiver files and tables will be transferred and stored on servers at UC Davis. These will be appended to the existing multi-year database maintained by UCD.

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 NOAA NMFS Santa Cruz servers are considered long-term storage.

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.

Chinook Salmon: The <u>CalFishTrack</u> website will be periodically updated for fish tagging plans and actual tagging logs, receiver deployment logs, and detections and metrics from real time receivers.

All Projects will be available on the NOAA website.

Dataset name is: Sacramento River Valley Salmonid Tagging Project

ERDDAPP makes tabular data available in 36 formats available here:http://coastwatch.pfeg.noaa.gov/erddap/tabledap/documentation.html#fileType

ERDDAPP makes gridded data available in 32 formats available online.

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).

Chinook salmon: The fish tagged and receiver's deployed data will be tables in a MS Access (version 2010) relational database. Raw receiver files will be comma separated value (csv) text files. Processed files will go through several iterations using Matlab, then final file will be csv. This file will be imported into the MS Access relational database. The MS Access database will link to a SQL database.

Quality Assurance

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

Tagged fish data are entered directly into electronic forms by a designated data recorder. Values are inspected for possible data entry errors. Transmitter ID codes are recorded automatically by electronic device and saved to log file. These logs are compared to tagged fish table and field receivers, any incongruence is further investigated and errors corrected. Receiver deployment data are transferred from field datasheets to table in database, then compared to data files from receivers to confirm congruency.

Receiver detection data are run through several automated scrips to plot diagnostic data, add a unique Fish ID value, and Receiver location. Detections are filter to remove false positives. Movement in space/time plots for each fish are manually inspected to mark possible false detections. These are marked and removed from the detection dataset.

Rights and Requirements

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

All projects. <u>NOAA Administrative Order 212-15</u> can be found online.

Section 3.01: Environmental data will be visible, accessible and independently understandable to users, except where limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements.