Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Field and laboratory notes on development of a PIT-tag system for spillways - Research and Development of New Marking and Monitoring Technologies

1.2. Summary description of the data:

This project addresses how to expand the current fish-tracking technologies to enable the fisheries community to successfully carry out the actions, research, and monitoring activities outlined in the 2000, 2004, and 2008 BiOps, 2004 UPA, Fish and Wildlife Program, and 2003 systemwide passage summary. The goal of the project is to satisfy these needs by developing interrogation systems that will collect data on migrating juvenile and adult salmonids through mainstem Columbia River Basin (CRB) dams, including juvenile salmon transiting surface-bypass systems and all life-stages transiting small streams. These fish-tracking technologies are then used to assess the effectiveness of management actions and strategies for recovery of ESA-listed fish populations.

For example, development of PIT-tag systems that will work in large streams or even rivers are essential for determining the effectiveness of all types of restoration programs on stock recovery supported by BPA. In addition, these systems would help delineate the different types of interactions between hatchery and wild stocks in the field. Within this project, we propose to develop technologies that help monitor the stocks at critical (and if possible, all) life stages and critical locations. For example, many juvenile salmonids now use unmodified spillbays, spillbays outfitted with temporary spillway weirs (TSWs) or removable spillway weirs (RSWs), and turbines during their migration, but we are unable to monitor them in these locations because they lack PIT-tag interrogation systems. Consequently, we are collecting fewer data points for the different survival models. Therefore, we are proposing to start or continue development programs for interrogation systems (tags, antennas, receivers, etc) that will enable us to monitor these migrating fish through these pathways. Besides project administration, the proposed work for the performance period (October 2010-January 2012) covers four main research areas or work elements:

1. Finished development of the ogee-based PIT-tag system for Ice Harbor Dam.

2. Install and evaluate the ogee-based system for Ice Harbor Dam.

3. Continue the development of in-stream interrogation systems -- antennas and multiplexing transceiver.

4. Evaluate alternative interrogation technologies - HDX systems and ISO transceivers.

PIT-tag system development data and notes.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
One-time data collection

1.4. Actual or planned temporal coverage of the data:
2010-10-01 to 2012-01-31, 2010-10-01 to 2012-01-31, 2010-10-01 to 2012-01-31

1.5. Actual or planned geographic coverage of the data:
W: -122.2572, E: -122.2572, N: 47.6864, S: 47.6864
Laboratory at Sand Point: NOAA Fisheries Sand Point lab, Seattle

W: -122.3062, E: -122.3062, N: 47.6449, S: 47.6449
Stream sites throughout the Northwest: Stream sites throughout the Northwest USA

W: -122.3062, E: -122.3062, N: 47.6449, S: 47.6449
Dams throughout the Columbia River Basin: Dams throughout the Columbia River Basin

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
Metadata Contact

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
nmfs.nwfsc.metadata@noaa.gov

2.5. Phone number:
(206) 860-3433

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:
Sandra Downing

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?
No

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):
20%

5. Data Lineage and Quality
NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible
(describe or provide URL of description):
Lineage Statement:
These data were collected and processed in accordance with established protocols and best practices under the direction of the projects Principal Investigator. Contact the dataset Data Manager in section 3 for full QA/QC methodology.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):
These data were collected and processed in accordance with established protocols and best practices under the direction of the projects Principal Investigator. Contact the dataset Data Manager in section 3 for full QA/QC methodology.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:
- 1.7. Data collection method(s)

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/18505

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly 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. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Northwest Fisheries Science Center (NWFSC)

7.2.1. If data hosting service is needed, please indicate:
No

7.2.2. URL of data access service, if known:
http://www.ncei.noaa.gov

7.3. Data access methods or services offered:
At this time, contact the Data Manager for information on obtaining access to this data set. In the near future, the NWFSC will strive to provide all non-sensitive data resources as a web service in order to meet the NOAA Data Access Policy Directive (https://nosc.noaa.gov/EDMC/PD.DA.php).

7.4. Approximate delay between data collection and dissemination:
14 days

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:
No Delay

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)
NO_ARCHIVING_INTENDED

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Northwest Fisheries Science Center - Seattle, WA

8.3. Approximate delay between data collection and submission to an archive facility:
365 days

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection
The Northwest Fisheries Science Center facilitates backup and recovery of all data and IT components which are managed by IT Operations through the capture of static (point-in-time) backup data to physical media. Once data is captured to physical media (every

1-3 days), a duplicate is made and routinely (weekly) transported to an offsite archive facility where it is maintained throughout the data's applicable life-cycle.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.