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:

Yakima River habitat data - Assessing the efficacy of acclimation sites and habitat quality and quantity for supplementation success: tradeoffs between homing and spawning site selection

1.2. Summary description of the data:

The Federal Columbia River Power Supply (FCRPS) Biological Opinion (BiOp) calls for studies that estimate ecological and genetic impacts of hatchery fish on wild populations, and evaluate the effectiveness of hatchery supplementation measures to reduce potentially harmful effects of artificial production to aid recovery through hatchery reform. The FCRPS BiOp further explicitly calls for studies that examine the appropriate role of supplementation and the relationship between supplementation and habitat actions in salmon recovery. A basic premise of supplementation is that artificially produced fish will help develop self-sustaining spawning populations both by increasing current natural production and reestablishing populations in underutilized and recovered habitats.

One hatchery reform measure that has been incorporated into many supplementation programs throughout the Columbia River Basin is the use of satellite acclimation facilities to repopulate underutilized habitat. However, the efficacy of these facilities in re-establishing naturally spawning populations and minimizing negative interactions between wild spawners and supplemented fish has not been established. Our studies have involved comprehensive carcass and redd mapping surveys and radio telemetry to examine the role of acclimation sites in homing and spawning of spring Chinook salmon released as part of the Yakima/Klickitat Fisheries Project (YKFP) supplementation program. In addition, we are examining the complex linkages between habitat quality and spawning site selection in supplemented Columbia River populations. These studies involve mapping and assessing habitat distribution and quality relative to supplementation rearing and release facilities, and coupling these findings to ongoing analysis of homing and spawning patterns. Our results have provided unique insights into the process of homing, straying, and spawning site selection, interactions and success of hatchery and wild spawners, and the efficacy of supplementation and acclimation sites in salmon recovery.

These studies will help identify appropriate locations for recovery-related supplementation rearing and release facilities (acclimation sites), and ultimately allow us to develop scenario models predicting the spatial distribution of spawning relative to proposed supplementation facilities and available habitat (including future habitat restoration sites). The work is being conducted by Northwest Fisheries Science Center (NWFSC) scientists collaborating with the University of Washington, Yakima Nation, U.S. Geological Survey (USGS), and the Washington Department of Fish and Wildlife (WDFW). Products for this project include annual reports, peer-reviewed publications, presentation of results at local and national meetings, and consultation with the Northwest Regional Office (NWR) and supplementation managers.

GIS linked spatially continuous habitat assessments.

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:
2006-05-01 to 2014-12-31, 2006-05-01 to 2014-12-31, 2006-05-01 to 2014-12-31

1.5. Actual or planned geographic coverage of the data:
W: -120.9393, E: -120.9393, N: 47.1965, S: 47.1965
Yakima River: Yakima River in South central Washington state

W: -120.0227, E: -120.0227, N: 48.1365, S: 48.1365
Methow River: Methow River located in far Northern central Washington state

W: -120.7182, E: -120.7182, N: 47.8161, S: 47.8161
Wenatchee River: Wenatchee River located in North central Washington state

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.)
Instrument: Current Meter, GPS
Platform: Survey
Physical Collection / Fishing Gear: Animal and Plant Collection Device

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:
Andrew Dittman

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"):
1%

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:
Analysis.

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):
Checked data entry and analysis. 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 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?
Yes

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

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/20534

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 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:
720 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)
NCEI_MD

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.