

*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:**

AFSC/ABL: Movements of Yukon River Chinook salmon

### **1.2. Summary description of the data:**

Upriver movements were determined for Chinook salmon *Oncorhynchus tshawytscha* returning to the Yukon River, a large, relatively pristine river basin. A total of 2,860 fish were radio tagged during 2002-2004, and 2,790 fish (98%) tracked upriver. Most fish exhibited continual upriver movements and strong fidelity to the terminal tributaries entered, with only a small percentage (2.5%) deviating from this pattern. Average movement rates were substantially slower for fish spawning in lower river tributaries (28-40 km d<sup>-1</sup>) compared to upper basin stocks (52-62 km d<sup>-1</sup>). Three distinct migratory patterns were observed, including a gradual decline, pronounced decline, and substantial increase in movement rate as the fish moved upriver. Stocks destined for the same region exhibited similar migratory patterns. Migratory patterns among individual fish within a stock showed substantial variation, but tended to reflect the regional pattern. Differences between consistently faster and slower fish explained 74% of the within-stock variation, whereas relative shifts in sequential movement rates between hares (faster fish becoming slower) and tortoises (slow but steady fish) explained 22% of the variation. Pulses of fish moving upriver were not cohesive. Fish tagged over a 4-day period took 14 and 16 d to pass tracking station sites 580 and 872 km upriver, respectively. Movement data provided valuable insights into the run dynamics of the return, but individual variation among fish complicates efforts to manage in-river fisheries. The diverse migratory patterns exhibited by the fish also suggest that movement studies based on small numbers of individuals may not adequately reflect the patterns exhibited by the larger population. Movement rates were substantially faster and the percentage of atypical movements considerably less than reported in more southern drainages, but may also reflect the pristine conditions within the Yukon River, wild origins of the fish, and relatively discrete run timing of the returns.

### **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:**

2002 to 2004

**1.5. Actual or planned geographic coverage of the data:**

W: -164, E: -133, N: 68, S: 59

Yukon River Basin

**1.6. Type(s) of data:**

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
maps and data

**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:**

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

**2.5. Phone number:**

**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:**

John Eiler

**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?**

Yes

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

Unknown

**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):*

Process Steps:

- See Source Information for cites of papers containing 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):**

Contact the dataset POC 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)
- 2.1. Point of Contact Name
- 2.4. Point of Contact Email
- 7.2. Name of organization of facility providing data access

**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/17267>

#### **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](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:**

##### **7.2.1. If data hosting service is needed, please indicate:**

yes

##### **7.2.2. URL of data access service, if known:**

<https://www.afsc.noaa.gov/ABL/datasets.htm>

##### **7.3. Data access methods or services offered:**

N/A

##### **7.4. Approximate delay between data collection and dissemination:**

unknown

##### **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)*

TO\_BE\_DETERMINED

**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):**

Auke Bay Laboratories - Juneau, AK

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

unknown

**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*

IT Security and Contingency Plan for the system establishes procedures and applies to the functions, operations, and resources necessary to recover and restore data as hosted in the Western Regional Support Center in Seattle, Washington, following a disruption.

**9. Additional Line Office or Staff Office Questions**

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