

*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:**

Aerial Survey Counts of Harbor Seals in Coastal Alaska (2003-2011)

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

This dataset supports efforts to estimate the abundance and trends in population size of Alaska harbor seals. Annual surveys of harbor seal populations are fundamental to estimation of seal abundance, distribution, and trends, which in turn are essential for stock assessment, conservation, and management. The most feasible approach to determining harbor seal distribution and abundance is to use aircraft to count seals when they haul out of the water and are visible. Harbor seals in Alaska occupy a geographically extensive range from approximately long. 172°E to 130°W (over 3,500 km east to west) and from lat. 51°N to 61.5°N (over 1,000 km north to south). Estimation of the abundance of harbor seals statewide requires broad-scale aerial surveys and these surveys have been conducted by NOAA Fisheries, the Alaska Department of Fish and Game, and other collaborators since the early 1980s. This dataset reflects counts of harbor seals from surveys conducted between 2003 and 2011.

This dataset differs from earlier datasets in a few key areas: 1) records generally correspond to a count of the number of harbor seals within a single, geo-referenced digital photo, 2) photographs were not taken when no seals were present so additional analysis of survey effort and flight tracks was required to determine 0 counts.

### **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:**

2003 to 2011

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

W: 172, E: -130, N: 61.5, S: 51

All coastal habitats (intertidal and offshore rocks and reefs) of Alaska south 61.5 degrees North or Cape Newenham in Bristol Bay

### **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:**

Stacie Koslovsky

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

stacie.koslovsky@noaa.gov

**2.5. Phone number:**

206-526-6433

**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:**

Stacie Koslovsky

**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"):**

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):*

Lineage Statement:

Data collection and processing protocols were updated and improved on a nearly annual basis during the 2003-2011 period. For example, aerial survey observers transitioned from using paper maps and rudimentary GPS units to using advanced GPS units and moving map software on laptop computers for in-flight navigation and data recording purposes. 35 mm film cameras were replaced by digital SLR cameras with new, higher-resolution models being added every few years. And the seal counting process transitioned from projecting slides on a white board to using computers with photo-processing software and high-resolution monitors to mark and count individual seals. In most cases, records within this dataset represent seal counts within a single, geo-referenced photograph taken by a trained observer during dedicated aerial surveys for harbor seals.

**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):

Data represented in this dataset are the result of a culmination of multiple observations, data collection protocols and spatial analysis. Through the process various checks are performed to insure data are of the highest quality. These include, but are not limited to: collection of geographic coordinates with high resolution GPS units, high resolution navigational systems on board the aircraft, the use of high resolution DSLR cameras and quality lenses, synching camera time with GPS provided time, and counting of photographs on large, high quality screens with modern software. Despite these quality control checks, users of these data must understand the data are often collected under challenging field conditions and additional processing and testing must be done before these data can be used appropriately.

## 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/26741>

**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?**

No

**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?**

No

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

The data set is in the process of being archived with the NOAA National Centers for Environmental Information. Once the archival process is complete and verified, the data set will be publicly available.

**7.2. Name of organization of facility providing data access:**

Alaska Fisheries Science Center (AFSC)

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

not needed, planned for NCEI-MD

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

[https://console.cloud.google.com/storage/browser/\\_details/nmfs\\_odp\\_afsc/MML/PEP/Aerial%20Surve](https://console.cloud.google.com/storage/browser/_details/nmfs_odp_afsc/MML/PEP/Aerial%20Surve)

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

The data set is in the process of being archived with the NOAA National Centers for Environmental Information. Once the archival process is complete and verified, the data set will be publicly available.

**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:**

data are not automatically processed

**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):**

Alaska Fisheries Science Center - Seattle, WA

**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.*