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:
National Status and Trends: Contaminant body burdens and histopathology of fish and shellfish from Alaska

1.2. Summary description of the data:
In response to the growing concerns among Chugach communities, contaminant body burden and histopathological condition of chum and sockeye salmon (Oncorhynchus keta and Oncorhynchus nerka) and the shellfish cockles and softshell clams (Clinocardium nuttallii and Mya arenaria) were assessed. The fish and shellfish were collected from traditional subsistence harvest areas in the vicinity of Nanwalek, Port Graham and Seldovia, AK, and were analyzed for trace metals and residues of organic contaminants. Additionally, the fish and shellfish were histologically characterized for the presence, prevalence and severity of tissue pathology, disease, and parasite infections. Data served under this project include measurements of trace elements, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls, DDTs, chlorinated hydrocarbons and histopathology parameters, which include an array of about 30 parasitic taxa (e.g. bucephalus, chlamydia, ciliates, cestodes and nematodes) and 11 diseases (e.g. tumors, neoplasm and necrosis). This project provides invaluable baseline data that is georeferenced and served on the internet through the NOAA's National Status and Trends data portal.

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

1.5. Actual or planned geographic coverage of the data:
W: -151.9611, E: -151.6059, N: 59.487, S: 59.3386
Intertidal coastal areas off Port Graham, Nanwalek and Seldovia in Lower Cook Inlet

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
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:**
      NCCOS Scientific Data Coordinator

   2.2. **Title:**
      Metadata Contact

   2.3. **Affiliation or facility:**

   2.4. **E-mail address:**
      NCCOS.data@noaa.gov

   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:**
      NCCOS Scientific Data Coordinator

   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?**

   4.2. **Approximate percentage of the budget for these data devoted to data management (specify percentage or "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:
- 2010-01-01 00:00:00 - Data Acquisition: The sample collection followed the standard Mussel Watch protocols. Sampling Objective: Fish (chum and sockeye salmon) and shellfish (softshell clams and cockles) were collected for the analysis of environmental contaminants and disease. Sampling Methods Summary: Sampling followed quality controlled and quality assured procedures of the NSandT and national Marine Fisheries Service (NMFS) for sample collection (Apeti et al., 2012; Cantillo and Lauenstein 1998; Meyers and Hendricks, 1985). The salmon and shellfish were collected at the traditional harvest grounds of Nanwalek, Port Graham and Seldovia. For clams and cockles, composites of 30 and 10 individual organisms were collected for the contamination and disease analyses respectively. For the salmon, the intent was to do inter-species comparison, but also investigated any gender differences. Thus, at each location, 10 (5 females and 5 males) specimen of each species were collected. Mollusks were not shucked in the field; cleaned samples were then packed on ice and shipped to the laboratory. Composite samples were prepared by homogenizing the soft parts. Fish necropsy occurred as soon after death of the salmon as possible. The fish were sorted by species and measured to assert proper age range. To prevent cross contamination during necropsy, four sets of dissection tools were used, each for the removal of fish muscle, liver, kidney and gill.

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):

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)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

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/38941

6.4. **Process for producing and maintaining metadata**
(\textit{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**

\textit{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?**

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:

7.2.2. URL of data access service, if known:
https://products.coastalscience.noaa.gov/collections/ltmonitoring/nsandt/default.aspx
https://products.coastalscience.noaa.gov/collections/ltmonitoring/nsandt/default.aspx

7.3. Data access methods or services offered:

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

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)

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):
National Centers for Coastal Ocean Science - Silver Spring, MD

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

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

9. Additional Line Office or Staff Office Questions
Line and Staff Offices may extend this template by inserting additional questions in this section.