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/RACE/GAP/McConnaughey: Trawlex Chronic Effects: UAF Infauna

1.2. Summary description of the data:

Benthic communities are structured by dynamically interacting factors that determine habitat quality. Since benthic macrofauna demonstrate strong and often narrowly defined affinities, forces altering (or disturbing) the environment will be of considerable importance to their distribution and abundance. Commercial fishing with mobile gear, such as bottom trawls and dredges, and the physical disturbance that results, is widespread in continental shelf areas. Because of its prevalence and the potential for adverse effects, there have been numerous attempts to quantify sea-floor exposure at various spatial scales. The well documented development of commerical fisheries in the eastern Bering Sea (EBS) since 1954 presents a unique opportunity for studying trawling impacts. The Crab and Halibut Protection Zone 1 (CHPZ1; also known as management area 512), located north of the Alaska Peninsula in Bristol Bay, has a long and complex history of trawl prohibitions that extend from 1959 to the present. Using detailed accounts of closures and fishing activity, it is possible to reconstruct historical effort and identify essentially pristine areas immediately adjacent to areas that have been heavily fished with bottom trawls. This physical arrangement permits an examination of chronic disturbance by bottom trawls, without confounding environmental effects that result from geographic separation. Sampling locations were preselected on the basis of historical fish effort. Starting positions for commercial bottom trawls (n=392 743 through July 1996) were spatially joined with a 1 nm2 grid to calculate total number of trawls per nm2, and thus identify heavily fished (HF) and unfished (UF) areas along the boundary of the CHPZ1 (NORPAC fishery observer database maintained at the NMFS Alaska Fisheries ScienceCenter, Seattle, Washington). HF and UF cells on opposite sides of the boundary line were paired a priori on the basis of spatial proximity and were generally separated by 1 nm to allow for prior navigational discrepancies. A total of 42 pairs was identified at the northeastern corner of the CHPZ1. In 1997, 54 grab samples were obtained using a 0.05 m^2 Sutar van Veen (SvV) sampler deployed from the FV Golden Dawn at many, but not all, of the paired sites in the sandy, high-current northeast corner of management area 512. An additional 28 grabs were acquired in the central region of

management area 512 as part of a completely different BACI project while sampling protocols were being ironed out in the early stages of the effort. This point file contains the weights (g) of various infauna obtained from 83 grab samples.

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:
2006-08-06 to 2006-08-19

1.5. Actual or planned geographic coverage of the data:
W: -161.008159, E: -159.979626, N: 58.0609, S: 57.066909

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

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
steve.intelmann@noaa.gov

2.5. Phone number:
(206) 526-4157

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:

Bob McConnaughey

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):
Process Steps:
- Ship targeted the center of a 1nm trawl block and stopped to deploy Sutar van Veen sampler
- 1997-08-09 00:00:00 - Infauna samples were sieved through 1 mm mesh and the invertebrates were fixed in buffered formalin, stained, and transferred to 50% isopropyl alcohol prior to sending to the University of Alaska Fairbanks.
- 1999-04-20 00:00:00 - Laboratory processing followed a priority listing provided to UAF by the AFSC. Processing each infauna sample included identification to at least the family level of taxonomy, counting, and wet weighing (blotted dry). The 199 0 NODC code was used for all taxonomic data. All data was entered onto a PC computer and 100 percent verified.
- 2009-01-01 00:00:00 - Excel file was converted to text file and data were imported into ArcGIS as point features.

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):
see Abstract, process steps

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/27874

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?
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:
none

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:
Yes

7.2.2. URL of data access service, if known:
https://access.afsc.noaa.gov/data-zips/27874_GAP_1997_Trawlex_chronic-effects-UAF_infauna.zip

7.3. Data access methods or services offered:
unknown

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:

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.