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:
Effects of hydraulic shellfish harvesting on benthic communities and sediment chemistry 2009-2013

1.2. Summary description of the data:
The effects of hydraulic shellfish harvesting on the ecology of biological communities and chemistry of benthic sediments were investigated through a series of experiments conducted over a 5-year period from 2009 to 2013. Studies on a variety of different clam beds were undertaken in collaboration with local shellfish harvesters. Sediment samples were collected over the summer and early fall (June to October) and sorted to identify and count benthic organisms and to measure chemical parameters (e.g., pH, oxygen, aragonite saturation state), at the sediment/water interface. Comparisons of dredged to not dredged seafloor found that the effects of season (date of sampling) and location (sediment grain size) exceeded those of shellfish harvesting. Numbers of newly settled bivalves were often higher on recently harvested bottom. Shallow inshore marine communities appear to be highly resilient to disturbance, whether natural or manmade. Shellfish harvesting had only minor impacts on the ecology of seafloor communities and on chemistry of marine sediments.

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:
2009-05-28 to 2013-09-04

1.5. Actual or planned geographic coverage of the data:
W: -73.09153333333, E: -73.04065, N: 41.20613333333, S: 41.16618333333

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:
    Renee Mercaldo-Allen

2.2. Title:
    Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
    renee.mercaldo-allen@noaa.gov

2.5. Phone number:
    203-882-6549

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:
    Paul E Clark

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):

Lineage Statement:
Data derived from sediment samples collected from dredged and not dredged bottom, benthic organisms removed, identified and counted, sediment analyzed for grain size, pH, oxygen and other chemical variables

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):

Individuals sorting sediments are trained to recognize benthic organisms and one staff member has become an expert on identifying benthic organisms in Long Island Sound and conducts all the identifications.

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/26577

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:
   Northeast Fisheries Science Center (NEFSC)

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

7.2.2. URL of data access service, if known:

7.3. Data access methods or services offered:
   Contact Renee Merçaldo-Allen

   NEFSC Data Access Procedure:
   1. Formal request in writing usually to the data owner/contact or Center Director;
   2. Requester is contacted by data owner to review and verify the request content and details for data delivery options.
   3. If data is confidential then owner will determine if the data may be released to the requester;
   4. If data can be released, the data is downloaded and packaged for delivery electronically; or the requester may be directed to where the data is available online.

7.4. Approximate delay between data collection and dissemination:
   At this time our data are not available to the public so this needs to be determined. Currently our data is distributed via publication of manuscripts which usually are completed within 3 years of data collection.

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:
Not applicable

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)

OTHER

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):
NEFSC Milford Lab - Milford, CT

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

Data is stored on the network drive which is backed up daily. Remote storage backups.

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