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:
    NCCOS Long-term Monitoring Project: Regional Ecological Assessments and National Benthic Inventory

1.2. Summary description of the data:
    NOAA’s National Centers for Coastal Ocean Science (NCCOS) works in partnership with other federal agencies and coastal states to conduct assessments of ecological condition and potential stressor impacts throughout our Nation’s estuaries, coastal-ocean waters, and NOAA protected areas; carry out studies to determine environmental impacts of specific pollution events or natural disasters; and perform additional related research to develop new ecological indicators and improved diagnostic tools to assess, predict, and manage future conditions.

    NCCOS has conducted a series of Regional Ecological Assessments (REA) aimed at evaluating condition of living resources and ecosystem stressors in estuarine and coastal areas including National Estuarine Research Reserve System (NERRS), National Marine Sanctuaries (NMS), and continental shelf regions of the Mid-Atlantic Bight, South-Atlantic Bight, Florida Shelf, and Gulf of Mexico. Information from these studies provides a means to assess the current status of ecological condition and stressor impacts throughout these areas, and serves as a baseline for evaluating future changes due to natural or human-induced disturbances.

    The NOAA National Benthic Inventory (NBI) is a quantitative database on benthic species distributions obtained from studies conducted by NOAA and partnering institutions in estuarine and other coastal-ocean areas around the country.

    A corresponding taxonomic voucher collection of preserved benthic specimens collected in studies conducted between 1991 and 2007 was maintained at the NCCOS Charleston lab until April 2019. The voucher collection was transferred to the North Carolina Museum of Natural Sciences in May 2019 and will be incorporated into their Non-Molluscan Invertebrate research collections. More information can be found at the North Carolina Museum of Natural Sciences website.

1.3. Is this a one-time data collection, or an ongoing series of measurements?
Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:
   1991-03-18 to Present

1.5. Actual or planned geographic coverage of the data:
   W: -178.4, E: -68.6, N: 49, S: 23.1

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.)
   Instrument: CTD, Niskin Bottle, Grab Sampler, Box Corer, Sediment Corer, Suction Sampler
   Platform: Research Vessel
   Physical Collection / Fishing Gear: Hook and line

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?
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:
- We have conducted a series of offshore surveys and reports assessing ecological conditions and stressor impacts throughout coastal shelf waters of the lower continental US, as well as NMSs, NERRs, and the Great Lakes. • We have developed a dynamic quantitative database on benthic species distributions obtained from studies conducted by NOAA and partnering institutions in estuarine and other coastal-ocean areas around the country (http://nbi.noaa.gov/). • We helped to develop the 2006 Management Plan and 2008 Sanctuary Condition Report for Gray’s Reef NMS off the coast of Georgia. • We have worked in partnership with the U.S. Environmental Protection Agency (EPA) to develop multi-agency National Coastal Condition Reports (NCCRs), which serve as environmental report cards of the health of our nation’s coastal resources. While previous NCCRs have focused primarily on estuaries, our scientists were given the lead to develop a new series of offshore sections assessing the health of our coastal-ocean waters. • We have participated in a Natural Resource Damage Assessment (NRDA) study of potential effects of the Deepwater Horizon oil spill on soft-bottom, deepwater benthic communities. • We have assessed the environmental impacts of extreme natural events such as Hurricane Katrina (USEPA 2007, Engle et al. 2009) and other major hurricanes (Balthis et al. 2006). • We have developed new ecological indicators and other diagnostic tools that improve our methods and abilities to assess coastal ecosystems.

We will: • conduct additional surveys of ecological condition and stressor impacts in offshore coastal-shelf waters, Great Lakes, NMSs, and NERRs; • continue to partner with the EPA to develop future National Coastal Condition Reports; and • continue to advance the development of new indicators and data-analysis tools. (Citation: 01. Balthis, W.L., C. Cooksey, M.H. Fulton, J.L. Hyland, L.A. May, E.F. Wirth, and C.M. Woodley. 2018. Assessment of Ecological Condition and Potential Stressor

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):
For details of data quality control methods, see Lineage Sources. All users should independently analyze the datasets according to their own needs and standards to determine data usability.

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?
Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

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/57167

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:
National Centers for Environmental Information - Stennis Space Center, Mississippi (NCEI-MS)

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/NBI/
  https://products.coastalscience.noaa.gov/rea/

7.3. Data access methods or services offered:
  Download from website

7.4. Approximate delay between data collection and dissemination:
  Four years

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-MS

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:
   Four years

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
   NCCOS IT Policy

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