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:

NOAA NCCOS Assessment: Prioritizing Areas for Future Seafloor Mapping, Research, and Exploration on the Southeast U.S. Atlantic Coast (GA, SC, and NC) and Outer Continental Shelf from 2020-02-01 to 2020-05-01

1.2. Summary description of the data:

Spatial information on the arrangement of geological features, habitats and living marine resources on the seabed are often the foundation for decision-making in ecosystem management and ocean planning. Collecting information on the seabed depths and geomorphology is an expensive operation requiring airborne platforms like satellites, planes or drones, or small vessels to large research ships. Coordinating these data needs and data collection efforts will better leverage collective resources and meet shared goals. To help enable this coordination, in 2020 the National Oceanic and Atmospheric Administration (NOAA) National Centers for Coastal Ocean Science (NCCOS) developed a spatial framework, process, and online application to identify common data collection priorities for seafloor mapping, sampling, and visual surveys along shore and offshore of the Southeast United States (North Carolina, South Carolina, and Georgia).

Twenty-five representatives from federal and state agencies, academic institutions, and non-governmental conservation groups, designated seafloor mapping priorities using an online prioritization tool. Participants allocated virtual coins across 5 km x 5 km grid cells to denote their organization's regions of seafloor mapping needs. Grid cells with more coins were higher priorities than cells with fewer coins. Participants also reported why these locations were important and what data types were needed. Results were analyzed and mapped using statistical techniques to identify significant relationships between priorities, reasons for those priorities and data needs. These data are the summarized results from this project and can also be viewed in an online web map (https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=04cdd2a68c4f427f893f2042f326dc80).

Several common areas of interest were identified in the spatially explicit analysis of the responses. Nearshore surfzone along Georgia, South Carolina, and North Carolina were

highlighted by several agencies and organizations interested in sediment and sand resources as well as potential for rocky reef habitats. Inshore estuarine areas were highlighted by state agencies and conservation groups interested in monitoring change in managed areas like National Estuarine Reserves. On the outer continental shelf, areas near Blake Plateau off South Carolina and the continental shelf break off North Carolina were identified by federal agencies and conservation organizations as areas of sensitive habitats or historically significantly shipwrecks and maritime resources.

The seafloor mapping prioritization approach described in the Buckel et al. (2021) report associated with these data provides recommendations to organizations charged with mapping the seabed for navigation and commerce as well as resource assessments and management. Already, the priority areas identified in this exercise are being used by NOAA to focus planned seafloor mapping missions. Furthermore, the outcomes from this regional exercise contribute into a National Mapping Prioritization under the lead of NOAA to coordinate mapping activities across the entire US EEZ. Together, these quantitative seafloor mapping prioritization approaches will enable improved coordination and more efficient allocation of resources needed to conduct seafloor mapping providing data to support environmental stewardship, safe navigation and commerce.

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:
2020-02-01 to 2020-05-01

1.5. Actual or planned geographic coverage of the data:
W: -81.6, E: -71.6, N: 36.4, S: 30.3

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:

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:
- There were four main steps in the Southeast US spatial prioritization process. The first step was to identify the technical advisory team, consisting of individuals from NOAA's Integrated Ocean and Coastal Mapping Program, Office for Coast Survey, Office for Coastal Management, US Geological Survey, and University of South Florida. This advisory team invited 45 participants for the prioritization. Step two was to develop the spatial framework and an online application. To do this, the 365, 709 square km region was divided into six subregions and 14,724 square 5x5 km

grid cells. Existing relevant spatial datasets (e.g., bathymetry, protected area boundaries, etc.) were compiled to help participants understand information and data gaps and to identify areas they wanted to prioritize for future data collections. These spatial datasets were housed in the online application, which was developed using Esri's Web AppBuilder. In step three, this online application was used by 25 participants to enter their priorities in each subregion of interest. Participants allocated virtual coins in the 5x5 km grid cells to denote their priorities. Grid cells with more coins were higher priorities than cells with fewer coins. Participants also reported why these locations were important and what data types were needed. Coin values were standardized across the subregions and used to identify spatial patterns across the Southeast US study region as a whole. The number of coins were standardized because each subregion had a different number of grid cells and participants. Standardized coin values were analyzed and mapped using statistical techniques, including hierarchical cluster analysis, to identify significant relationships between priorities, reasons for those priorities and data needs. This ESRI shapefile contains the 5x5 km grid cells used in this prioritization effort and associated the standardized coin values overall, as well as by justification, product, and organizational type. For a complete description of the process and analyses please see: Buckel et al. 2021. (Citation: Buckel, C.A., Taylor, J.C., Bollinger, M. 2021. Prioritizing Areas for Future Seafloor Mapping, Research, and Exploration for the Southeast U.S. Atlantic Coast. NOAA Technical Memorandum, NOS NCCOS 289. 71pp. doi:10.25923/qh2c-hs73)

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?
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/65527

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:
Zenodo

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

7.2.2. URL of data access service, if known:
https://doi.org/10.5281/zenodo.4678431
https://noaa.maps.arcgis.com/apps/webappviewer/index.html?id=04cdd2a68c4f427f893f2042f326dc8

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

7.4. Approximate delay between data collection and dissemination:
Six months

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)

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):

National Centers for Coastal Ocean Science - Silver Spring, MD

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

Six months

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.