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:

Munitions and Explosives of Concern

1.2. Summary description of the data:

Munitions and explosives of concern (MEC) have been deposited on the seabed of the United States outer continental shelf since World War I. The bulk of these munitions have originated from the U.S. Armed Forces while conducting military training exercises, war-time placement, and disposal and dumping activities. Since 1972 ocean disposal of munitions and other pollutants has been banned by the Marine Protection, Research, and Sanctuaries Act. Federal and state efforts to mitigate, map, monitor, and sometimes remove these munitions are ongoing. The location of these munitions is generally unknown, and their existence remains a hazard to people and the natural resources within this geography.

The term MEC defines a collection of munitions including; a) unexploded ordnance, b) discarded military munitions, and c) munitions constituents that are present in high enough concentrations to pose an explosive hazard.

Additional information on the location of MECs can be found in the data and references listed below:

1. Formerly Used Defense Sites

2. Danger Zones and Restricted Areas

3. U.S. Disposal of Chemical Weapons in the Ocean: Background and Issues for Congress, CRS Report for Congress, January 3, 2007

4. Defense Environmental Programs Annual Report to Congress for Fiscal Year 2009. Chapter 10. Sea Disposal of Military Munitions

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:

2023

1.5. Actual or planned geographic coverage of the data:
W: -177.25, E: 177.75, N: 71.5, S: 13.25

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:

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

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:

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:

- 2023-01-11 00:00:00 - 1. Acquire source data by URL 2. Imported ENC area and point layers for Dumping Ground, and Caution features for bands a) coastal, b) approach, and c) harbor scale 3. Removed duplicate features 4. Removed features not clearly identified as unexploded ordnance 5. Removed features beyond the U.S. Exclusive Economic Zone 6. Removed features if they matched content currently in the Danger Zones and Restricted Areas data set 7. Validated completeness by visual comparison to current NOAA Raster Navigational Charts, Marine Cadastre map services Unexploded Ordnance Areas, Unexploded Ordnance Locations, Formerly Used Defense Sites, and NOAA ENC map services 8. Added new features listed in the Local Notice to Mariners 9. Adjusted the location, size and shape of each feature to align with the highest resolution NOAA Raster Navigational Chart available for each location using the local UTM projection 10. Populated the comment field using the textual description for each feature shown on the RNC 11. Added the values for the U.S. Coast Guard district and the UTM zone for each feature 12. Removed duplicate, extraneous and relic ENC vertex values that did not contribute to defining the shape of a feature 13. Executed the ArcGIS Pro function DENSIFY with a four-meter setting on all newly positioned circular features 14. Executed the ArcGIS Pro functions PROJECT and MERGE to combine features across all UTM Zones 15. Executed and passed the ArcGIS Pro function CHECK GEOMETRY with the OGC parameter 16. Executed and passed the QGIS function VECTOR > GEOMETRY TOOLS > CHECK VALIDITY with all GEOS parameters set to on 17. Visually inspected each feature for accuracy and completeness based on the associated RNC
- 2023-03-08 00:00:00 - 1. Acquire and query features from the Danger Zones and Restricted Areas data set that depict MEC features 2. Modify the Danger Zones and Restricted Areas record set to match the existing Munitions and Explosives of Concern data structure 3. APPEND the Danger Zones and Restricted Areas record set to the existing Munitions and Explosives of Concern data set
- 2024-02-28 00:00:00 - 1. Add newly discovered feature east of New York city 2. Fix several omissions in the following areas, Guam, Mariana Islands, Thunder Bay Michigan, North Carolina, Key West Florida, and Lake Borgne Louisiana

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)
- 2.1. Point of Contact Name
- 2.4. Point of Contact Email
- 3.1. Responsible Party for Data Management
- 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
- 8.2. Data storage facility prior to being sent to an archive facility
- 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/69013

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?

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://marinecadastre.gov/data/
https://marinecadastre.gov/downloads/data/mc/MunitionsExplosivesConcern.zip

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):

Charleston, SC

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.