

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:

NEPR Geographic Zone Map 2015

### 1.2. Summary description of the data:

This geographic zone map was created by interpreting satellite and aerial imagery, seafloor topography (bathymetry model), and the new NEPR Benthic Habitat Map (2015). The area of interest includes the nearshore shallow waters (0-35m) of Fajardo and Luquillo to the Former Roosevelt Roads Navy Base, the Vieques Sound, La Cordillera Reserve, the Luis Pena Reserve, and the waters around Culebra Island. A zone refers to each benthic community's geographic location and geomorphological structure. The geographic zone map was manually digitized the shoreline and the zone features for the entire area of interest in ArcGIS at the 1:6000 scale. The map was classified into 12 geographic zones based on the schema that has been developed by the Biogeography Branch, and which also match the Coastal and Marine Ecological Classification Standard (CMECS).

### 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:

2013-02 to 2015-02

### 1.5. Actual or planned geographic coverage of the data:

W: -65.759998, E: -65.168596, N: 18.446613, S: 18.196796

### 1.6. Type(s) of data:

*(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)*  
vector digital data

### 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?****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:

- 2013-05-01 00:00:00 - A multiresolution bathymetry model was created for northeast Puerto Rico and Culebra Island. The model was derived using geostatistical modeling of depth sounding data from 1900-2013, including led soundings, single-beam sonar, multibeam sonar surveys and LiDAR surveys. The source depth layers were kriged into multiple resolutions (4m, 20m and 100m depending on source data density) and merged using Global Mapper, Surfer and ArcGIS to produce a continuous 4m surface. | Source Produced: NEPR Geographic Zone Map (Citation: NEPR Bathymetry Model)
- 2015-02-01 00:00:00 - The geostatistical bathymetry model was processed into derived morphometric layers using the Biogeography using the Generate Metrics tool in ArcGIS. The slope, slope of slope, rugosity, curvature profile, curvature plan, standard deviation, and mean were derived from the bathymetry model and analyzed for the principle components. The PCA image was then exported as a 32bit RGB raster. | Source Produced: NEPR Principle Component Analysis (Citation: NEPR Bathymetry Model)
- 2013-06-01 00:00:00 - An orthophoto mosaic was created from merging USACE aerial photographs of the NEPR from 2007. The imagery was imported into geodatabase as gridded layers were mosaicked into a new 32bit raster using the data management toolbox in Arc. | Source Produced: USACE Orthophoto Mosaic 2007 (Citation: USACE Orthophoto Mosaic 2007)
- 2013-02-01 00:00:00 - This geographic zone map of the Northeast Ecological Reserve was digitized by interpreting the bathymetry, PCA, satellite mosaic, benthic habitat map and aerial photos at the 1:6000 scale using digitizing tools in ArcGIS. The created polygons were topologically analyzed to remove overlapping features, dissolve adjacent features that were from the same zone, and to find any gaps in the area of interest. | Source Produced: NEPR Geographic Zone Map (Citation: NEPR Geographic Zone Map)

**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)
- 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
- 8.3. 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/38777>

**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](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:**

**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):**

National Centers for Coastal Ocean Science - Silver Spring, MD

**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.*