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 ESRI Geotiff - 3m Multibeam Bathymetry of Puerto Rico (La Parguera), Project NF-06-03, 2006, UTM 19 NAD83

1.2. Summary description of the data:

This dataset contains an ESRI Geotiff with 3 meter cell size representing the bathymetry of the southwest shore of La Parguera, Puerto Rico. NOAA's NOS/NCCOS/CCMA Biogeography Team, in collaboration with NOAA vessel Nancy Foster and territory, federal, and private sector partners, acquired multibeam bathymetry data in the US Virgin Islands and Puerto Rico from 3/21/06 to 4/2/06. Data was acquired with a hull-mounted Kongsberg Simrad EM 1002 multibeam echosounder (95 kHz) and processed by a NOAA contractor using CARIS HIPS software. Data has all correctors applied (attitude, sound velocity) and has been reduced to mean lower low water (MLLW) using final approved tides and zoning from NOAA COOPS. Data is in UTM zone 19 north, datum NAD83. The processed CARIS data was used to generate a CARIS BASE surface based on swath angle. An ASCII XYZ file was exported from the BASE surface and opened in ESRI ArcMap 9 as an XY event. Then the ArcToolbox conversion tool 'Feature to Raster' was used to generate the final ESRI Geotiff.The project was conducted to meet IHO Order 1 and 2 accuracy standards, dependant on the project area and depth. All users should individually evaluate the suitability of this data according to their own needs and standards.

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:

2006-03-21 to 2006-04-02

1.5. Actual or planned geographic coverage of the data:

W: -67.146484, E: -66.902388, N: 17.902668, S: 17.844374

1.6. Type(s) of data:

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

- 2006-01-01 00:00:00 - For this project, the Chief Scientist was NOAA/NOS/NCCOS/ CCMA's Tim Battista and the Lead Hydrographer was independent contractor Jay Lazar. Data was collected aboard the NOAA ship Nancy Foster from 3/21/06 to 4/2/06. Multibeam data was acquired in Simrad .all format with a hull-mounted Kongsberg Simrad EM 1002 multibeam echosounder (95 kHz). Backscatter snippet collection was enabled. Line spacing for acquisition was three times the water depth, and data was retained out to 45 to 60 degrees from nadir, depending on project area. Heave, roll, pitch and heading correctors were collected using an Applanix POS/MV Model 320 inertial measurement unit (IMU) and associated Trimble GPS antennas. Sound velocity profiles were acquired with a Seabird Electronics SeaCat SBE19P CTD profiler and processed using Seabird Seaterm software, then applied directly to the raw data. Positioning was obtained using Northstar 941X GPS receivers with differential correctors from U.S. Coast Guard CORS beacon Isabel, Puerto Rico. Data was reduced to Mean Lower-Low Water (MLLW) using final approved tides from NOAA COOPS, based on National Water Level Observation Network (NWLON). (Citation: Raw Multibeam Data NF-06-03)
- 2006-01-01 00:00:00 - Raw Simrad (.all format) were converted and processed using CARIS HIPS v6.0 software, resulting in a CARIS HDCS format dataset with all correctors applied. Attitude and SWMB data was cleaned of fliers, and SWMB data was reviewed in subset mode by a NOAA contractor. (Citation: NF-06-03 HDCS Processed Multibeam Data)
- 2006-01-01 00:00:00 - After being submitted to CCMA by the contractor, CARIS HIPS v6.0 was used to generate a CARIS BASE surface (similar to a DTM), based on weighted swath angle, from the processed HDCS data. Then CARIS export tool " BASE Surface to ASCII" was used to export a comma delimited ASCII XYZ file, with Easting, Northing, and Depth values, using ground position units (NAD83 UTM zone 19N). (Citation: NF-06-03 CARIS BASE Surface)
- 2006-01-01 00:00:00 - The ASCII XYZ file was opened in ArcMap 9.1 and the ' Display XY Data' option was used to add the XY data as an event with spatial reference NAD83 UTM zone 19N. Finally, the ArcToolbox 9.1 conversion tool " Feature to Raster" was then used to convert the XY event into an ESRI Geotiff, based on the depth field Z. These steps were accomplished using an inhouse Arc script which combined these functions and allowed bulk processing. | Source Produced: NF06_laparg_3m.tif (Citation: NF-06-03 CARIS BASE Surface)

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
- 7.4. 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/38838

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:

http://coastalscience.noaa.gov/projects/detail?key=263

7.3. Data access methods or services offered:

Click on link from project page to NCEI archive and download zip file.;

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.