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:
Olympic Coast National Marine Sanctuary - mos110_0204c.tif - Multibeam backscatter mosaic from survey area 110_0204c

1.2. Summary description of the data:
A multibeam backscatter image (0-35 m water depths) mosaiced from hydrographic data collected during a August/September 2003seafloor survey. A Reson 8101 multibeam echosounder (240 kHz) was hull mounted to NOAAS Rainier survey launch to acquire the sonar data. A Applanix POS/MV was used to compensate for vessel motion and a Seabird SVP 19 plus was used to measure sound speed. Navigation and line planning were accomplished using Hypack software using a CSI wireless DPGS. Sonar packets, motion sensor, and navigation data were logged in Isis Sonar as XTF files. Backscatter was normalized and mosaiced using software developed by the University of New Brunswick Ocean Mapping Group.

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:
2003-08-15

1.5. Actual or planned geographic coverage of the data:
W: -124.723726, E: -124.636953, N: 47.991864, S: 47.888594

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
remote-sensing image

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:
OCNMS GIS Coordinator

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
olympiccoast@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:
OCNMS GIS 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:

- Sonar packets, attitude and position data logged in Isis Sonar.
- XTF conversion to Caris HDCS format.
- Swath editing and subset editing of multibeam bathymetry data in Caris Hips
- Build PFM dataset in Fledermaus by importing Caris HDCS libraries.
- Area-based editing of multibeam bathymetry in Fledermaus
- Dump PFM edits of multibeam bathymetry back into the Caris HDCS libraries.
- Using Caris Hips, export day, time, profile, and beam for all rejected soundings for each line file as individual text files.
- Unravel the XTFs to OMG format to create merged files specific to sonar (ie 8101).
- Filter soundings on Reson quality Flags
- Load HDCS rejected flags for previous Caris export process.
- Convert XTF navigation to OMG format.
- Copy vessel configuration for each survey line.
- Reduce bathy data by merging orientation and raytrace using svp data.
- Invert heave data -- XTF opposite of OMG convention.
- Compile decimated navigation data for quick viewing.
- Thin navigation removing redundant points.
- Merge navigation into bathymetry.
- Make DTM and sun illuminate.
- Compute angular response curve estimates from backscatter by using a rolling bin of 100 pings. DTM is used for grazing angle estimation.
- Generate calibrated backscatter for ri theta, snippets, and side scan packets specific to sonar type(ie 8101 or 8125) using rolling beam pattern
- Fill lone pixels (cosmetics)
- Mosaic lines using autoseam option (splits adjacent lines and sews seam) and auto_dg (down samples to mosaic resolution to avoid aliasing.
- Calculate histogram and apply stretch to DN values.
- Export mosaic from OMG as pgm file.
- Convert PGM file to TIF file using linux XV utility.
- Create tif world file from mosaic bounds file.

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/40083

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:

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):
Office of National Marine Sanctuaries - 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.