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:
2005 Delaware Coastal Program Lidar: Sussex County

1.2. Summary description of the data:
The data were acquired in March 2005 using the NASA Experimental Advanced Airborne Research Lidar (EAARL) platform in Sussex County, Delaware. Once acquired, the data were processed by USGS personnel into both 2-foot contours and digital elevation models. Multiple returns were recorded for each laser pulse. This is a bare earth data set. The points have approximately a 3 m ground spacing. Water points remain in the bare earth data set, they have not been classified as water.

Original contact information:

Contact Org: Delaware Geological Survey
Phone: 302-831-2833
Email: delgeosurvey@udel.edu

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:
2005-03-01 to 2005-03-31

1.5. Actual or planned geographic coverage of the data:
W: -75.723623, E: -75.046341, N: 38.967831, S: 38.41544

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

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:
   NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:
   Metadata Contact

2.3. Affiliation or facility:
   NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:
   coastal.info@noaa.gov

2.5. Phone number:
   (843) 740-1202

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:

- 2005-01-01 00:00:00 - Data were collected by NASA EAARL (Experimental Advanced Airborne Lidar) during March of 2005. Flying was done out of Salisbury, Maryland. Nominal post spacing was approximately 3 meters, with data denser in areas of flight line overlap. A GPS base station was established and operated for 1 hour prior to, during, and for at least 30 minutes after completion of data collection flights (take off to touch down). The GPS collected data at 1 Hz intervals. GPS data were used for aircraft location correction. Lidar data collected for cross tracks were flown during each data collection flight. Preliminary fundamental vertical accuracy testing was performed against data collected by NRCS surveyors. Three landuse classes were tested woods, roads, and farm lanes with the aggregate average RMSe being 0.102m and the greatest RMSe observed was 0.148m. Processing was done in Airborne Lidar Processing Software (ALPS) by USGS personnel in Reston VA. Final bare-earth point data inspection and clean up was manually performed by USGS personnel in Dover Delaware and Baltimore, MD using ArcMap.

- 2009-03-31 00:00:00 - The NOAA Office for Coastal Management (OCM) received the data in shapefile format with x, y, and z. The x, y, and z values were extracted from the shapefiles and converted to ASCII formatted text using a processing loop in arc/info. The ASCII files were then converted to LAS format using an internal processing script. OCM then performed the following processing on the data to make it available within the Digital Coast: 1. The data were converted from State Plane coordinates to geographic coordinates. 2. The data were converted from orthometric to ellipsoid heights using Geoid03. 3. The LAS header fields were sorted by latitude and updated. 4. The data were filtered to eliminate outliers.

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:
   - 1.6. Type(s) of data
   - 1.7. Data collection method(s)
   - 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
   - 7.4. 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/48170

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:
NOAA Office for Coastal Management (NOAA/OCM)

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

7.2.2. URL of data access service, if known:
https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=111

7.3. Data access methods or services offered:
This data can be obtained on-line at the following URL: https://coast.noaa.gov/dataviewer;

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

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 for Coastal Management - 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.*