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:
2008 USGS South New Jersey County Project Lidar: Cape May County

1.2. Summary description of the data:
The South New Jersey County Lidar project is to provide LiDAR data for the New Jersey Department of Environmental Protection (NJ-DEP) for Cape May, Cumberland, and part of Salem Counties in New Jersey. These datasets will be the initial acquisition to support the United States Geological Survey (USGS) and the New Jersey Department of Environmental Protection (NJ-DEP). This LiDAR data set was collected in April 2008 for Cape May County and covers 285 square miles. The data are classified as follows:

Class 1 - Unclassified/Extracted Features
Class 2 - Bare Earth, Ground
Class 9 - Water
Class 12 - Overlap

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:
2008-04

1.5. Actual or planned geographic coverage of the data:
W: -74.984767, E: -74.525043, N: 39.327576, S: 38.914716

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

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,
5.1. **Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):

Process Steps:

- **2008-07-15 00:00:00** - Leica software was used in the post processing of the airborne GPS and inertial data that is critical to the positioning of the sensor during all flights. This software suite includes Applanix's PosPac and Waypoint's GrafNav solutions. PosPac provides the smoothed best estimate of trajectory (SBET) that is necessary for Leica's post processor to develop the point cloud from the LiDAR missions. The point cloud is the mathematical three dimensional collection of all returns from all laser pulses as determined from the aerial mission. At this point this data is ready for analysis, classification, and filtering to generate a bare earth surface model in which the above ground features are removed from the data set. The point cloud was manipulated within the Leica software; GeoCue, TerraScan, and TerraModeler software was used for the automated data classification, manual cleanup, and bare earth generation from this data. Project specific macros were used to classify the ground and to remove the side overlap between parallel flight lines. All data was manually reviewed and any remaining artifacts were removed using functionality provided by TerraScan and TerraModeler. The project was tiled adhering to the State of New Jersey 5000'x5000' tile schema and each tile was saved in LAS format 1.1 including GPS time. Note: The Julian date and year written in the LAS header is actually the file creation date and has no connection to the acquisition date. However the GPS time (second of the week) is registered for each point in the LAS file and the week of acquisition can be deduced from the file name which include the GPS week (1474 = week starting 04/06/2008; 1475 = week starting 04/13/2008). When an area includes data from flightlines acquired over two different GPS weeks, separate files for the data captured in each of the weeks are delivered. For example tile B18D14 has data from both weeks; therefore there are two separate files: B18D14_1474.LAS & B18D14_1475.LAS.

- **2008-07-01 00:00:00** - A Terrascan macro was used to classify the Lidar points inside rivers and lakes from class 2 to class 9. This classification was visually inspected by comparing the bare earth class against the hydro breaklines. Then the elevations were converted from feet to meters to meet the final delivery specifications.

- **2010-06-01 00:00:00** - The NOAA Office for Coastal Management (OCM) received files in LAS format. The files contained LiDAR intensity and elevation measurements. OCM performed the following processing on the data to make it available within Digital Coast: 1. The data were converted from New Jersey State Plane coordinates to geographic coordinates. 2. The data were converted from NAVD88 heights to ellipsoid heights using Geoid03. 3. The LAS header fields were sorted by latitude and updated.

**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)
  - 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/50107

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=541

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

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 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.