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:

2007 Florida Division of Emergency Management (FDEM) Lidar Project: Eastern Indian River County

1.2. Summary description of the data:

This Light Detection and Ranging (LiDAR) LAS dataset is a topographic survey conducted for a coalition of GIS practitioners,

including the Florida Division of Emergency Management (FDEM), Florida Water Management Districts, Florida Fish and Wildlife

Conservation Commission, Florida Department of Environmental Protection, Army Corps of Engineers Jacksonville District, and

other state and federal agencies. The goal for this project is to use the LiDAR data as new elevation inputs for updated SLOSH

data grids. The ultimate result is the update of the Regional Hurricane Evacuation Studies (RHES) for the state. The State of Florida

Division of Emergency Management LiDAR Survey was collected under the guidance of a Professional Mapper/Surveyor.

Data were collected for 255 square miles in the eastern portion of Indian River County, Florida from August 24 - 28, 2007.

This is a classified lidar data set. The data are classified: 1 = Unclassified, 2 = Ground (Bare Earth), 7 = Noise, 9 = Water

and 12 = Overlap. The data was collected at a maximum post spacing of 4 feet in unobscured areas for random point data.

Original contact information:

Contact Org: Florida DEM

Phone: 850-413-9907

Email: gis@dca.state.fl.us

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:
2007-08-24 to 2007-08-28

1.5. Actual or planned geographic coverage of the data:
W: -80.61717, E: -80.30907, N: 27.867889, S: 27.550789

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:

- 2009-01-05 00:00:00 - LiDAR was collected within portions of Indian River County. System Parameters/Flight Plan: The LiDAR system acquisition parameters were developed based on a maximum average ground sample distance of 4 feet. Two Leica ALS50 sensors were used for acquisition. Acquisition specifications for the two sensors were as follows: Sensor 19 Field of View (full angle) - 29 degrees Nominal flight altitude (AMSL) - 3999.30 feet Airspeed - 54.02 meters/sec Laser pulse rate - 75,000 Hz Nominal swath width (on ground) - 2068.58 feet Maximum cross track point spacing - 3.91 feet Maximum along track point spacing - 3.94 feet Average point spacing - 2.21 feet Flight line spacing - 1544.95 feet Side overlap - 25. 31%. Sensor 59 Field of View (full angle) - 29 degrees Nominal flight altitude (AMSL) - 3999.30 feet Airspeed - 60.70 meters/sec Laser pulse rate - 84,400 Hz Nominal swath width (on ground) - 2068.58 feet Maximum cross track point spacing - 3.94 feet Maximum along track point spacing - 3.91 feet Average point spacing - 2.21 feet Flight line spacing - 1413.72 feet Side overlap - 31.66%. LiDAR System Calibration: Prior to the LiDAR acquisition, the system underwent a calibration to verify the operational accuracy and misalignment angles. Boresight calibrations were performed for each LiDAR system at the beginning and end of each flight mission. LiDAR Data Acquisition: LiDAR data acquisition only occurred when the sky was sufficiently clear of clouds, smoke, and atmospheric haze. The LiDAR data was processed immediately after the acquisition to verify the coverage had no voids. GPS/Inertial Measurement Unit (IMU) Post Processing: The GPS and IMU data was post processed using differential and Kalman filter algorithms to derive a best estimate of trajectory. The quality of the solution was verified to be consistent with the accuracy requirements of the project. LiDAR Processing and Classification: The LiDAR data was post processed and verified to be consistent with the project

requirements in terms of post spacing and absence of artifacts. The point cloud underwent classification to determine bare-earth points (class 2), noise points (class 7), water returns (class 9), and unclassified data (class 1). Class 12 contains LiDAR points removed from the overlap region between adjacent flight lines.
- 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 State Plane Florida East 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:
- 1.6. 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/49673

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=539
https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/539/index.html

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.