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: 2013 NRCS Lidar: Logan County, IL

1.2. Summary description of the data:

Task Order:G13PD00885 Contract ID: G10PC00025

This dataset is LiDAR point cloud data and derivative models of Logan County, Illinois. The area of acquisition is approximately 618 square miles (1600 square kilometers). This dataset consists of LiDAR LAS swath files and tiled LAS files. Tiled LAS files contain LiDAR point information which has been calibrated, controlled, and classified. Tiled LAS and derived data models are named according to a tiling scheme in accordance with the conventions of the U.S. National Grid, using the coordinates at the SW corner of the tile as the tile name.

Quantum Spatial Project No: 1130905

This metadata record supports the data entry in the NOAA Digital Coast Data Access Viewer (DAV). For this data set, the DAV is leveraging the Entwine Point Tiles (EPT) hosted by USGS on Amazon Web Services.

- **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:** 2013-11-23 to 2013-11-30
- **1.5. Actual or planned geographic coverage of the data:** W: -89.606, E: -89.141, N: 40.327, S: 39.916

1.6. Type(s) of data:

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

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?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

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):

Lineage Statement:

The NOAA Office for Coastal Management (OCM) ingested references to the USGS Entwine Point Tile (EPT) hosted on Amazon Web Services (AWS) into the Digital Coast Data Access Viewer (DAV). The DAV accesses the point cloud as it resides on AWS under the usgs-lidar-public-container.

Process Steps:

- 2013-12-01 00:00:00 - Ground based survey points were collected to be compared as check points with airborne data points. These measurements were recorded and provided to Quantum Spatial for use in establishment of the LiDAR data set to ground elevations (indexing). Additional ground survey points may be made to provide for vertical accuracy assessment of LiDAR data or derivative models.
- 2013-11-30 00:00:00 - Airborne LiDAR collection survey is conducted using fixed wing aircraft equipped with a LiDAR scanning system following specifications of the flight plan. The system includes a differential GPS unit and inertial measurement system that provide data to aide in assembly of single best estimate trajectory files.

- 2014-03-01 00:00:00 - Collected data alignment is established per flightline resolving for aircraft attitude and position utilizing in-flight GPS and IMU data. Swath data is saved in LAS format where points are differentiated by discreet time, position, return value, intensity, etc. Relative accuracy of swath strips is checked. Data is arranged into a tile layout and point classification routines are accomplished. Classified points are inspected, manually reclassed where necessary and breaklines added. Derivative data products and quality assessments are produced. 1. Automatic surface classification is performed using algorithms with customized parameters to best fit the project area. Several areas of varying relief and planimetric features were inspected to verify the final ground surface. 2. Each tile is reviewed for accuracy and consistency of the macro ground classification. 3. As automatic processing and the testing of LiDAR is complete technicians review the generated bare-earth surface data to ensure that proper classification was achieved as part of a Quality Control process. Point classification follows the standard established by The American Society for Photogrammetry and Remote Sensing (ASPRS) for LAS data: Code 1 Processed, but unclassified / non-ground Code 2 Bare Earth / Ground Code 7 Noise / Low Points Code 9 Water Code 10 Ignored Ground (Breakline proximity)

- Original point clouds in LAS/LAZ format were restructured as Entwine Point Tiles and stored on Amazon Web Services. The data were re-projected horizontally to WGS84 web mercator (EPSG 3857) and the vertical units were converted to meters (NAVD88 GEOID12A).

- 2024-05-29 00:00:00 - The NOAA Office for Coastal Management (OCM) created references to the Entwine Point Tile (EPT) that was ingested into the NOAA Digital Coast Data Access Viewer (DAV). No changes were made to the data. The DAV will

access the point cloud as it resides on Amazon Web Services (AWS) under the usgslidar-public container. This is the AWS URL being accessed: https://s3-us-west-2. amazonaws.com/usgs-lidar-public/USGS_LPC_IL_LoganCo_2013_LAS_2015/ept.json

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
- 5.2. Quality control procedures employed
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.4. Approximate delay between data collection and dissemination

- 8.3. Approximate delay between data collection and submission to an archive facility

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/72701

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?

Yes

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=10122/details/10122 https://rockyweb.usgs.gov/vdelivery/Datasets/Staged/Elevation/LPC/Projects/IL_NRCS_Logan_4ppsm_

- 7.3. Data access methods or services offered: Data is available online for bulk and custom downloads.
- 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) NCEI_NC

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

Data is backed up to cloud storage.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.