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:

2018 ILHMP Lidar: Boone and Winnebago Counties, IL

# 1.2. Summary description of the data:

LIDAR-derived binary (.las) files ASPRS ver 1.4 format containing classified points of all returns. We have 11 classifications: Unclassified, Ground, Low Veg (0.5 - 5 ft), Medium Veg (5 - 20 ft), High Veg (> 20 ft), Buildings, Low Noise, Water, Ignore Ground, Bridge Decks and High Noise. Model key points are bit-flagged and created from ground (class = 2) points using a two foot horizontal and a 0.2 foot vertical variance. The files are delivered in section formatted tiles. These files adhere to the National Enhanced Elevation Assessment (NEEA) Quality Level 2 (QL2) standards. The contractual aggregate nominal pulse spacing (ANPS) is less than or equal to 0.5m. The contractual aggregate nominal point density (ANPD) is 4.0 points or greater per square meter.

Boone County is approximately 303 square miles.

Winnebago County is approximately 554.5 square miles.

# 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:

2018-04-22 to 2018-04-23, 2018-04-24 to 2018-04-25, 2018-04-28

#### 1.5. Actual or planned geographic coverage of the data:

W: -89.4, E: -88.699328, N: 42.499958, S: 42.147692

#### 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) downloaded this data from the USGS rockyweb site. OCM processed the data to make it available for custom download from the NOAA Digital Coast Data Access Viewer (DAV) and for bulk download from AWS S3.

# **Process Steps:**

- 2018-08-17 00:00:00 LIDAR data was collected using the Optech Galaxy sensor. The raw data was verified in MARS software for complete coverage of the project area, and boresighted to align the flightlines. Raw data files were parsed into manageable client-specific tiles. These tiles were then processed through automated filtering that separates the data into different classification groups; unclassified points, ground points, low veg, medium veg, high veg, buildings, low noise, water, ignored ground, bridge decks and high noise. The data was next taken into MARS to reclassify the erroneous points that may remain in the LIDAR point cloud after auto filter. Four points or greater per square meter (QL2) ASPRS ver 1.4 format. - 2023-08-31 00:00:00 - The NOAA Office for Coastal Management (OCM) downloaded 5977 (Boone - 2112 files, Winnebago - 3865 files) laz point data files from these USGS sites: https://rockyweb.usgs.gov/vdelivery/Datasets/Staged/Elevation/LPC/Projects/ USGS LPC IL Boone 2018/laz/ https://rockyweb.usgs.gov/vdelivery/Datasets/Staged/ Elevation/LPC/Projects/USGS\_LPC\_IL\_Winnebago\_2018/laz/ The data were in IL State Plane East (Boone County) and IL State Plane West (Winnebago County) ( NAD83 (2011)), US survey feet coordinates and NAVD88 (Geoid12B) elevations in feet. The data were classified as: 1 - Unclassified, 2 - Ground, 3 - Low Vegetation (0.5 -5 ft), 4 - Medium Vegetation (5 - 20 ft), 5 - High Vegetation (>20 ft), 6 - Buildings, 7 -Low Noise, 9 - Water, 10 - Ignored Ground, 17 - Bridge Deck, 18 - High Noise. OCM processed all classifications of points to the Digital Coast Data Access Viewer (DAV). Classes available on the DAV are: 1, 2, 3, 4, 5, 6, 7, 9, 10, 17, 18. OCM performed the following processing on the data for Digital Coast storage and provisioning purposes: 1. Internal OCM scripts were run to check the number of points by classification and by flight ID and the gps, elevation, and intensity ranges. 2. Internal OCM scripts were run on the laz files to: a. Convert from orthometric ( NAVD88) elevations to NAD83 (2011) ellipsoid elevations using the Geoid12B model b. Convert from IL State Plane East and West (NAD83 (2011)), US survey feet coordinates to geographic coordinates c. Convert the elevations from feet to meters. d. Assign the geokeys, sort the data by gps time and zip the data to database and to AWS S3
- 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/70718

## 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=9887/details/9887 https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/9887/index.html

#### 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\_CO

- 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 tape and 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.