

*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:**

2012 Lidar: Kewaunee County, WI

**1.2. Summary description of the data:**

LiDAR data for Kewaunee, WI was collected by Pictometry International Corp (Pictometry) in 5 missions from March 26 – April 20, 2012. The data was collected at a nominal post spacing of 0.97 meters (3.18 feet) over an area covering approximately 380 square miles. Lidar Data Products for the Kewaunee, WI collection area include a 10ft Digital Elevation Model (DEM), and tiled 2ft Contours.

This metadata record was created by NOAA Office for Coastal Management (OCM) from information taken from the project report.

The NOAA Office for Coastal Management (OCM) downloaded the las files, breaklines, and report from the WisconsinView site:

[ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar/Kewaunee/Kewaunee\\_2012\\_County\\_Delivery/](ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar/Kewaunee/Kewaunee_2012_County_Delivery/) and processed the data to the Data Access Viewer (DAV) and to https. While processing the las files, it was noted that there are ground classified points in water bodies, including Lake Michigan.

The hydro breaklines are available for download at the link provided in the URL section of this metadata record. Please note that the breaklines have not been reviewed by the NOAA Office for Coastal Management (OCM) and any conclusions drawn from the analysis of this information are not the responsibility of NOAA or OCM.

**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:**

2012-03-26 to 2012-04-20

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

W: -87.776156, E: -87.3576, N: 44.685104, S: 44.314536

**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):*

Process Steps:

- LiDAR data for Kewaunee, WI was collected by Pictometry International Corp ( Pictometry) in 5 missions from March 26 – April 20, 2012. The data was collected at a nominal post spacing of 0.97 meters (3.18 feet) over an area covering approximately 380 square miles. Pictometry processed the raw point cloud data to ensure proper alignment of the data between flight lines. The data was then classified for “Ground” by using a series of automated filters in Terra Solid software to remove above ground vegetation and buildings. Points in water and on bridges were manually removed from the Ground class. The data was then tiled and saved in the industry standard LAS 1.2 format. The data was delivered to Groundpoint in classified LAS format in the summer of 2012.

- 2012-09-20 00:00:00 - Terrain, DEM, and 2ft Contours:For the Bare Earth Data, the Lidar Point Data was converted to a Multipoint feature class, with a filter for Ground (class 2). A Collection Area Boundary breakline was created from the classified lidar points. Breaklines for water bodies and wide rivers were created from the lidar data. The multipoint feature classes and the breaklines feature classes were used to create a Ground terrain for the collection area. The terrain was converted to a DEM with 10ft cell resolution. The DEM was used to create the 2ft tiled contours. The contours were edited in the following manner: Lines shorter than 60ft (1.5 raster cells) were deleted, the lines were smoothed using a PAEK algorithm. Attributes were added for 10ft, 20ft, and 50ft Index contours. A Lidar Tile Index Feature Class was created for the original lidar files and a Contour Tiles Index feature class was created for the contour tiles. A hillshade was also created for the DEM using default ESRI illumination parameters.

- 2020-02-13 00:00:00 - The NOAA Office for Coastal Management (OCM) downloaded 381 las files from [ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar/Kewaunee/Kewaunee\\_2012\\_County\\_Delivery/](ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar/Kewaunee/Kewaunee_2012_County_Delivery/) The 381 files contained elevation and intensity measurements for Kewaunee County, WI. The data were in WI State Plane Central NAD83, US feet, coordinates and NAVD88 (Geoid09) elevations in feet. The data were classified as: 1 - Unclassified, 2 - Ground, 7 - Noise. The NOAA Office for Coastal Management processed all classifications of points to the Digital Coast Data Access Viewer (DAV). Classes available on the DAV are: 1, 2, 7. While processing the las files, it was noted that there are ground classified points in water bodies, including Lake Michigan. OCM performed the following processing on the data for Digital Coast storage and provisioning purposes 1. LAStools script laszip was run to convert the las files to laz format. 2. An internal OCM script was run to check the

number of points by classification and by flight ID and the gps and intensity ranges.  
3. Internal OCM scripts were run on the laz files to convert from orthometric (NAVD88) elevations to ellipsoid elevations using the Geoid09 model, to convert from WI State Plane Central NAD83, US feet, coordinates to geographic coordinates, to convert vertical units from feet to meters, to assign the geokeys, to sort the data by gps time and zip the data to database and to http.

**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/58872>

**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](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=9018>

<https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/9018/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.*