

*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:**

2017 USGS Lidar DEM: Chenier Plain, LA

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

Product: These are Digital Elevation Model (DEM) data for LA Chenier Plain Lidar 2017 B16 Project Level as part of the required deliverables for LA Chenier Plain Lidar 2017 B16 project. Class 2 (ground) lidar points in conjunction with the hydro breaklines and bridge breaklines were used to create a 1 meter hydro-flattened Raster DEM.

Geographic Extent: AOI was located along an area of coastal Louisiana referred to as Chenier Plain, which includes portions of Calcasieu, Cameron, Vermillion, Iberia, and St. Mary Parishes. The area of interest covered approximately 2942 square miles. Dataset Description: LA Chenier Plain Lidar 2017 B16 project called for the planning, acquisition, processing and derivative products of lidar data to be collected at a nominal pulse spacing (NPS) of 0.70 meter. Project specifications are based on the U.S. Geological Survey National Geospatial Program Lidar Base Specification, Version 1.2. The data was developed based on a horizontal projection/datum of NAD83 (2011), UTM Zone 15N, Meter and vertical datum of NAVD88 (GEOID12B), Meter. Lidar data was delivered as: flightline-extent raw LAS v1.4 swaths, classified point cloud LAS v1.4 files formatted to 3817 individual 1,500 m x 1,500 m tiles in NAD83 (2011), UTM Zone 15N, Meter. Derivatives were produced as tiled; Bare Earth Surface DEMs, Digital Surface Models, Intensity Images; all tiled to the same 1,500 m x 1,500 m schema.

Ground conditions: Lidar was collected in Winter of 2017 by Aerial Services, Inc. (ASI), and WOOLPERT. The Chenier Plain Wetland areas contain hundreds of impoundments related to aquaculture operations. These fields are flooded and contained within the impoundments on a semi-permanent basis, including during the Chenier Plain lidar acquisition timeframe. This is an understood and accepted acquisition condition. Furthermore, impoundments equal to or greater than 2 acres are treated as hydrologically flattened features within the data deliverables. Tidal Restriction: The following tide gauges were considered suitable for prediction of regional water levels within the AOI; Sabin Pass North, TX NOS (8770570), Calcasieu Pass, LA NOS (8768094), Freshwater Canal Locks, LA NOS (8766072), and Amerada Pass, LA NOS (8764227).

Water levels at flight time shall were below -0.10 meters (mean seal level) for the Calcasieu Pass, LA tide gauge (8768094) in the west and -0.10 meters (mean seal level) for the Amerada Pass, LA tide gauge (8764227). Meteorological: Acquisition did not occur after passage of a moderate to strong high-pressure system generating northerly winds in excess of five (5) knots. In addition, it is noted switching of winds from WNW to ENE is a tipping point for switching from wind driven marsh drainage to marsh flooding. Ground Conditions: Within the extreme eastern AOI (swamp and fresh to intermediate marsh occurring northeast of Marsh Island and bordering East Cote Blanche Bay) Lidar was not acquired when the Lower Atchafalaya River stage was less than 4 feet as determined by the latest measurements taken at gauge (USGS 07381605) at Morgan City.

Lidar was not acquired when regional precipitation driven flooding occurred in local rivers with significant impact to wetland impoundments located throughout the entire Chenier Plain west of Cote Blanch Bay. The following local rivers shall be monitored for flood conditions; Vermillion, Mermentau, Calcasieu, and Sabine rivers. In order to post process the lidar data to meet task order specifications and meet ASPRS vertical accuracy guidelines, Woolpert established a total of 68 ground control points that were used to calibrate the lidar to known ground locations established throughout the project area. Additional independent accuracy checkpoints were collected (94 NVA points and 75 VVA points) and used to assess the vertical accuracy of the data. These checkpoints were not used to calibrate or post process the data.

The NOAA Office for Coastal Management (OCM) downloaded the LA\_Chenier\_Plain\_2017 Digital Elevation Model (DEM) files from this USGS site: <ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/Elevation/OPR/> and processed the data to the Data Access Viewer (DAV) and <https://>

In addition to these bare earth Digital Elevation Model (DEM) data, the lidar point data that these DEMs were created from, are also available. These data are available for custom download at the link provided in the URL section of this metadata record.

Hydro breaklines are also available. These data are available for download at the link provided in the URL section of this metadata record. Please note that these products 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:**

2017-01-08 to 2017-03-03

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

W: -93.911758, E: -91.36852, N: 30.127569, S: 29.461987

**1.6. Type(s) of data:**

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

**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:

- 2017-01-08 00:00:00 - Hydro Flattened Raster DEM Process: Class 2 (ground) lidar points in conjunction with the hydro breaklines as well bridge breaklines were used to create a 1-meter hydro-flattened Raster DEM. Using automated scripting routines within ArcMap, an Geotiff file was created for each tile. Each surface is reviewed using Global Mapper to check for any surface anomalies or incorrect elevations found within the surface.
- 2018-09-12 00:00:00 - The NOAA Office for Coastal Management (OCM) downloaded 3817 LA\_ChenierPlain\_2017 Digital Elevation Model (DEM) files from this USGS site: <ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/Elevation/OPR/>. The data were in UTM Zone 15 North coordinates and NAVD88 (Geoid12B) elevations in meters. This information however, was not present in the file georeferencing. NOAA OCM added the projection georeferencing information. The bare earth raster files were at a 1 meter grid spacing. OCM performed the following processing on the data for Digital Coast storage and provisioning purposes: 1. Used gdal translate to add the projection georeferencing information to the files. 2. Copied the files to https

**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/53702>

**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?**

**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=8598>

[https://noaa-nos-coastal-lidar-pds.s3.us-east-1.amazonaws.com/dem/LA\\_Chenier\\_DEM\\_2017\\_8598/in](https://noaa-nos-coastal-lidar-pds.s3.us-east-1.amazonaws.com/dem/LA_Chenier_DEM_2017_8598/in)

**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)*

**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.*