

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 SWFWMD Lidar DEM: Hillsborough County, FL

### 1.2. Summary description of the data:

Dewberry collected 1200 square miles of lidar data in Hillsborough County, Florida. The nominal pulse spacing for this project was 1 point every 0.25 meters or a nominal pulse density of 16 points per square meter. Dewberry used proprietary procedures to classify the LAS according to project specifications: 1-Unclassified, 2-Ground, 6-Building Rooftops, 7-Low Noise, 9-Water, 17- Bridge Decks, 18-High Noise. Geometrically unreliable points, ground points within 2 feet of breaklines, and ground points within 3 feet of building rooftops have been identified with the Withheld Flag. Overage points have been identified with the Overlap Flag. The lidar data were combined with 3D breaklines compiled by Dewberry to create hydro-enforced bare-earth DEMs. The data were tiled according to the Florida Statewide Lidar Index tiling scheme with each tile covering an area of 5,000 feet by 5,000 ft.

### 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:

2017-01-31 to 2017-03-04

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

W: -82.655501, E: -82.049932, N: 28.185092, S: 27.633443

### 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?****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):*

**Lineage Statement:**

The NOAA Office for Coastal Management (OCM) downloaded the DEM .img file from the Southwest Florida Water Management District (SWFWMD).

**Process Steps:**

- 2019-04-01 00:00:00 - Class 2, ground, lidar points are exported from the LAS files into an Arc Geodatabase (GDB) in multipoint format. The 3D breaklines, water bodies, hydrographic features, and islands are imported into the same GDB. 2D building footprints are buffered by 3 feet and the highest ground elevation within the buffered footprint is applied to the entire footprint. The 3D building footprints are then imported into the same GDB as the multipoints and other 3D breaklines. An ESRI Terrain is generated from these inputs. The surface type of each input is as follows: Ground Multipoint: Masspoints Water bodies: Hard Replace Hydrographic feature : Hard Line Islands : Hard Line Building Footprint: Hard Replace The ESRI Terrain is converted to a raster. The raster is created using linear interpolation with a 2.5 foot cell size. The DEM is reviewed with hillshades in both ArcGIS and Global Mapper. Hillshades allow the analyst to view the DEMs in 3D and to more efficiently locate and identify potential issues. Analysts review the DEM for missed lidar classification issues, incorrect breakline elevations, incorrect hydro-flattening or hydro-enforcement, and artifacts that are introduced during the raster creation process. The corrected and final DEM is clipped to individual tiles. Dewberry uses a proprietary tool that clips the DEM to each tile located within the final Tile Grid, names the clipped DEM to the Tile Grid Cell name, and verifies that final extents are correct. All individual tiles are loaded into Global Mapper for the last review. During this last review, an analyst checks to ensure full, complete coverage, no issues along tile boundaries, tiles seamlessly edge-match, and that there are no remaining processing artifacts in the dataset.
- The NOAA Office for Coastal Management (OCM) downloaded 1 raster DEM file in .img format from the Southwest Florida Water Management District (SWFWMD). The data were in Florida State Plane West NAD83(2011), US survey feet coordinates and NAVD88 (Geoid12B) elevations in feet. The bare earth raster file was at a 2.5 feet grid spacing. OCM performed the following processing on the data for Digital Coast storage and provisioning purposes: 1. Used internal script to assign the EPSG codes (Horizontal EPSG: 6443 and Vertical EPSG: 6360) and convert the .img file to GeoTiff format. 2. Copied the file 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/66859>

**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://chs.coast.noaa.gov/htdata/raster5/elevation/FL\\_Hills\\_DEM\\_2017\\_9457](https://chs.coast.noaa.gov/htdata/raster5/elevation/FL_Hills_DEM_2017_9457)

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=9457/details/9457>

**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.*