

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:

2007 Southwest Florida Water Management District (SWFWMD) LiDAR: Hernando County

1.2. Summary description of the data:

This dataset is one component of a digital terrain model (DTM) for the Southwest Florida Water Management Districts FY2006 Digital

Orthophoto (B089) and LiDAR Project (L776) encompassing approximately 462 square miles in Hernando County, Florida. This dataset is

comprised of 530 LiDAR files, based on the DISTRICT 5,000' by 5,000' sheet index system in the LAS version 1.1 file format. LiDAR

acquisition dates were January 11 through January 16, 2007. The raw data was collected at an average ground sample distance of

2.1 feet. Other components of the DTM include a personal geodatabase in accordance with the SWFWMD 2006 Topographic Database Design

containing: obscured vegetation polygons; road overpass polygons; road breaklines; soft feature breaklines; water body polygons;

coastal shorelines; hydrographic features breaklines; island polygons; and 1-foot contours. Final products include FEMA-compliant

LIDAR-derived DTM data and 1-foot contours (for cartographic visualization purposes only) meeting or exceeding National Map Accuracy

Standards for 2-foot contours.

Original contact information:

Contact Name: Mapping and GIS

Contact Org: Southwest Florida Water Management District

Phone: (352) 796-7211

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:

2007-01-11 to 2007-01-16

1.5. Actual or planned geographic coverage of the data:

W: -81.925929, E: -81.848175, N: 28.35011, S: 28.308789

1.6. Type(s) of data:

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

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:

- 2007-01-01 00:00:00 - The LiDAR data was acquired using a Leica ALS50 from an average altitude of 2,400-feet above ground level to provide an average ground sample distance of 2.1-feet. First and last return data was collected along with the signal return intensity. Two redundant airborne GPS bases stations were utilized during the data acquisition with maximum line-of-sight distance between the base station and aircraft of 20-km. The LiDAR data was reduced using Grafnav (Waypoint Consulting) for GPS post-processing, PosProc (Applanix Crop) for IMU processing, ALS50 Post Processor (LH Systems) to initial LiDAR processing, TerraScan (Terrasolid) for initial point classification, and proprietary Woolpert developed software for refining the point classification and QC. The LiDAR data was reviewed in 3D using a digital photogrammetric work station using ADS40 digital stereo imagery. During the production process, LiDAR data gaps between the flight lines were observed. These gaps between flight lines were corrected by adding photogrammetrically compiled mass points. These points are classified as class 10, in the LAS file. In the areas with the compiled mass points, it may be noted that the mass points are not as dense the areas with complete LiDAR coverage. The mass points were compiled at a sufficient density to define the surface to contract specifications. The LAS files contain 5 classifications: 1 = unclassified; 2 = ground; 9 = water; 10 = photogrammetric masspoints; and 11 = swamp and/or wetlands. The class 1 consists of all points not on the ground. Class 2 consists of bare earth points. Class 9 consists of points within water polygons. Class 11 consists of points within swamps and/or wetlands. Class 10 consists of supplementary mass points that were photogrammetrically compiled on point's features such as peaks or pits, and LiDAR data gaps. These points were created to maintain the accuracy of the DTM. 3D breaklines were collected at the digital photogrammetric workstation during the LiDAR data review. These breaklines were delineated to insure the DTM is

hydrologically correct. Hydrologically Enforced Elevation Data is defined as "Hydorenforced TINS, DEMS, or contours ensure that top surfaces of bridges and culverts are cut by stream breaklines so that computer models will accurately represent drainage flow" per FEMA's Appendix A A.4.10. The breaklines were collected for hydrologically significant features as appropriate to support the development of the generation of 2-foot contours meeting National Map Accuracy Standards. The following breakline features were classified and separated: Closed Water Body Features, Linear Hydrographic Features, Coastal Shorelines, Road Features, Soft Features, Obscured Vegetated Areas, Island Features, Overpasses, and Bridges. Per contract specifications, culverts were not collected as part of this project. Therefore continuity of hydrographic features may not be consistent. During final data production and analysis, the occurrence of mound type features in the data set was noted. These areas were checked, and verified to be above ground septic systems. For a complete description of survey methods, processing methods, software, system parameters, and accuracy analysis, see the Florida MTS Report of Specific Purpose Survey, SWFWMD MTS Report of DOI Survey, FY2007 Digital Orthophoto and LiDAR (B089 & L776 (dated 4/31/2008))

- Dataset copied.

- Dataset copied.

- Dataset copied.

- 2008-04-24 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files in LAS format. The files contained Lidar intensity and elevation measurements. The data was in Florida State Plane Projection and NAVD88 vertical datum. OCM performed the following processing to the data to make it available within the Digital Coast: 1. The data were converted from Florida State Plane West coordinates to geographic coordinates. 2. The data were converted from NAVD88 (orthometric) heights to GRS80 (ellipsoid) heights using Geoid 03. 3. The LAS data were sorted by latitude and the headers were updated.

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:

- 1.6. Type(s) of data
- 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/50019>

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?

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=78>

https://coast.noaa.gov/htdata/lidar1_z/geoid18/data/78

7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL: <https://coast.noaa.gov/dataviewer/>;

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.