

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:

2008 Suwannee River Water Management District (SRWMD) Lidar: Live Oak (FL)

1.2. Summary description of the data:

This data is for planning purposes only and should not be used for legal or cadastral purposes. Regional Evacuation Studies are currently being updated.

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:

2008-01

1.5. Actual or planned geographic coverage of the data:

W: -83.022181, E: -82.957987, N: 30.325291, S: 30.269593

1.6. Type(s) of data:

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

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 Secondary Network Stations were used to support the measurement of both LiDAR and OrthoPhoto checkpoint sites. They were set up at 15 kilometer spacing per the 2 centimeter requirements for Secondary Control. Two Secondary Control networks were created due to the geometry of the mapping tiles requirements. The first Secondary Network consisted of 3 secondary stations in the Okaloosa County area. The second Secondary Control network consisted of all remaining mapping areas in the Florida Panhandle. The Secondary Control

networks included a total of 80 control points, including 16 recovered NSRS monuments, 2 recovered DNR monuments, and 62 new monuments set for this network. These GPS ground surveys were executed between May and September 2007. Full details are documented in 3DS's "Final Report of Geodetic Control Survey for LiDAR and Photogrammetry, Northwest Florida," dated March 13, 2008.

- 2007-01-01 00:00:00 - The Secondary GPS data was gathered using Trimble & Leica Dual Frequency GPS receivers. Receivers logged data simultaneously in what is commonly referred to as a "static session." A typical session occupation consisted of a minimum of 60 minutes of GPS data with four or more satellites in view, and was documented on an NGS Static GPS Logging Form.

- 2007-01-01 00:00:00 - Third Order differential leveling techniques were used to establish elevations on Secondary Network stations in specific areas where published vertical stations could not be occupied directly with GPS. The leveling measurements were reduced using the 3WIRE.EXE program developed by Dr. Ray Hintz. Curvature and refraction corrections were applied. The level measurements were adjusted with Least Squares technique using the LEVEL.EXE program developed by Dr. Ray Hintz. All adjustments were referenced to the NAVD88.

- 2007-01-01 00:00:00 - The GPS static measurements were reduced using Trimble Total Control version 2.73 software. Geolab software version 2001.9.20.0 by Microsearch was used for all Least Squares adjustments. The Secondary Networks were adjusted holding NAD83 values from the Primary Network Adjustment. The final horizontal values were converted to State Plane Florida North Zone using the U.S. Army Corps of Engineers program CORPSCON version 6.0.1. The vertical values are referenced to the NAVD88. Orthometric heights from the Primary Network adjustment and additional vertical control stations were held. The NGS GEOID03 (g2003u07.bin) model for the Southeastern United States was used. A centering error of 3.0 millimeters was used for station setup weighting for all adjustments.

- 2007-01-01 00:00:00 - A minimally constrained (free) Least Squares adjustment was run to verify the internal accuracy of the Secondary networks. After evaluating and removing any outliers, a final free adjustment was generated. This final free adjustment consisted of 254 independent vectors. The input error estimates were scaled by a factor of 6.234, which resulted in a properly weighted adjustment with a variance factor of 1.000; there were no flagged residuals. A constrained (fixed) 3-D horizontal adjustment was run using the same input error estimates as were used in the free adjustment; the variance factor was 1.6339 and there were six flagged residuals. A constrained (fixed) 1-D vertical adjustment was run using the same input error estimates as were used in the free adjustment; Station BE3991 was fixed in latitude, longitude and orthometric height; the variance factor was 1.2136 and there were no flagged residuals.

- 2007-01-01 00:00:00 - The LiDAR checkpoints were surveyed in groups consisting of the four ground cover categories together with a photo-identifiable point for orthophotography checking. These points were tied to the Secondary Network Stations. These ties were made using Rapid-Static Global Positioning Surveys and conventional level runs where the checkpoints were in close proximity to control

points. Conventional surveys were then used to tie the groups together to obtain coordinates and elevation on the remaining points. This is particularly needed for the checkpoints that are located under tree cover.

- 2007-01-01 00:00:00 - Each check point site control pair was measured with GPS using static methods from at least two or more geodetic control stations. The remaining checkpoints were measured using conventional surveying methods from the checkpoint site control station pairs. Redundant measurements were made to each check point from two different setups one on each check point site control station. This minimized the chances of setup, sighting, and rod height blunders from going undetected by allowing independent comparisons to be made.

- 2007-01-01 00:00:00 - The GPS static measurements were reduced using Leica Geo Office Version 5.0 and StarNet Version 6.0 software. StarNet Version 6.0 was also used for the Least Squares network adjustments. The checkpoint site control stations were adjusted using least squares method. The conventional measurements were reduced by using StarNet Version 6.0. The conventional measurements were constrained to the static GPS horizontal and orthometric heights established on the check point site control stations. The check points were reduced to NAD83 (HARN). Elevations were reduced to NAVD88. Any significant discrepancies between the conventional measurements and the control values from the static GPS measurements were investigated and resolved.

- 2008-01-01 00:00:00 - PDS interpolated the bare-earth LiDAR DTM to provide the z-value for each of the checkpoints. PDS then computed the associated z-value differences between the interpolated z-value from the LiDAR data and the ground truth survey checkpoints and computed the FVA, CVA and SVA values using procedures in References D and E. The data were analyzed by PDS to assess the accuracy of the data. The review process examined the various accuracy parameters as defined by FDEM guidelines. Also, the overall descriptive statistics of each dataset were computed to assess any trends or anomalies.

- 2015-06-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files in las format from SRWMD. The files contained lidar elevation and intensity measurements. The data were in State Plane 903, NAVD88 (orthometric) heights in feet. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were converted from State Plane coordinates to geographic coordinates. 2. The data were converted from NAVD88 (orthometric) heights in feet to GRS80 (ellipsoid) heights in meters using Geoid 03. 3. The LAS data were sorted by latitude and the headers were updated. 4. Duplicate points and erroneous elevations were removed.

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/49694>

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=4894>

<https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/4894/index.html>

7.3. Data access methods or services offered:

This data can be obtained on-line at the following URL:

<https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=4894>

The data set is dynamically generated based on user-specified parameters.;

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.