

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:**

2006 Federal Emergency Management Agency (FEMA) Topographic Lidar: Bristol and Plymouth Counties, Massachusetts

1.2. Summary description of the data:

FEMA Contract No. EME-2003-CO-0340

FEMA Task Order T018

Sanborn Map Company furnished the collection and processing, and development of Lidar and contours using photogrammetry to support the FEMA mapping

requirements for a total of 142 square miles in coastal areas in Plymouth and Bristol Counties in Massachusetts. The 142 square miles includes the

communities of Westport, Dartmouth, New Bedford, Fairhaven, Mattapoisett, Marion, and Wareham. The project area was defined using a buffered shapefile

with limits along the coastline. The project area included a portion of both counties. All lidar data was acquired during November 2006 by Sanborn.

Orthophotography used to create 2D breaklines was produced in 2005 by MassGIS as part of its statewide orthophoto program. All lidar data that

was acquired was produced in accordance with FEMA specifications (Source: FEMA Guidelines and Specifications, Appendix N, Section N.1.2).

Lidar Acquisition Parameters:

Average Altitude: 1,200 Meters AGL

Airspeed: ~120 Knots

Scan Frequency: 36 Hertz

Scan Width Half Angle: 16 Degrees

Pulse Rate: 50000 Hertz

The data being distributed through the NOAA Digital Coast are Gridded Bare-Earth LAS files.

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:

2006-11-10 to 2006-11-26

1.5. Actual or planned geographic coverage of the data:

W: -71.136354, E: -70.588933, N: 41.795113, S: 41.47402

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:

- 2006-12-31 00:00:00 - Using an Optech Light Detection and Ranging (LiDAR) system, flight lines were planned for standard density 1.4 meter GSD. The Flight plan for the project includes the following specifications to fully meet the project requirements - single pass density of approximately 2.0 square meters per sample * Swath width 728 meters * Flight altitude 1000 meters * flight line spacing -589 meters with 125 meters overlap *Scan Frequency- 35 Hz *Scan Angle- 20 degrees * Aircraft ground speed -- 140 knots * System Calibration pre and post mission * Two GPS base stations within 30 KM. Multiple returns were recorded for each laser pulse along with an intensity value for each return. The data are calibrated for geographic referencing. Points are further processed, using TerraSolid software, to classify return values. The first and last return data is filtered to remove the vegetation and above ground manmade features to yield a ground surface. The bare earth elevation data was draped over the existing orthophotos. Breaklines for hydrographic features, bridges, culverts and major roadways were captured in 2D. Elevations were associated to the breaklines by draping onto the Lidar data. The DTM was then used to produce a TIN. The TIN was used to generate 2-ft contours.
- 2013-11-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received topographic files in ASCII format. The files contained lidar elevation measurements. The data were received in Massachusetts State Plane Mainland (Zone 2001), NAD83 coordinates and were vertically referenced to NAVD88 using the Geoid03 model. The vertical units of the data were feet. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The ASCII files were converted to LAS V1.2 using LASTools' txt2las. 2. The topographic las file '8002645'

was found to be corrupt and removed from the data set. 3. All points in the topographic las files were converted to Class 2 (Ground) using LASTools' las2las. 4. The topographic las files were found to contain noise, those points were manually reclassified to Class 7 (Noise) using Merrick MARS7. 5. All additional VLRs in the topographic las files' header used by MARS7 were removed using LASTools' las2las. 6. The topographic las files were converted from orthometric (NAVD88) heights to ellipsoidal heights using Geoid03. 7. The topographic las files were converted from a Projected Coordinate System (MA SP 2001) to a Geographic Coordinate System (NAD83). 8. The topographic las files' horizontal units were converted from feet to decimal degrees. 9. The topographic las files' vertical units were converted from feet to meters.

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/49770>

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=2602>

<https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/2602/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=2602>

;

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.