

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 Oregon Department of Geology and Mineral Industries (DOGAMI) Lidar: Lake Billy Chinook, Oregon

1.2. Summary description of the data:

The Oregon Department of Geology & Mineral Industries (DOGAMI) contracted with Watershed Sciences, Inc. to collect high

resolution topographic LiDAR data for Lake Billy Chinook (from the reservoir edge to the surrounding canyon rim). The

total area of this collection, including a 50 meter project buffer, is approximately 46 square miles (29,228 acres).

This LiDAR data set was collected on August 14th and 15th, 2008 and encompasses a portion of Jefferson County. This data

set consists of bare earth, water and unclassified points. There are approximately 7.8 points per square meter over terrestrial surfaces.

In some areas of heavy vegetation or forest cover, there may be relatively few ground points in the LiDAR data. Elevation values for

open water surfaces are not valid elevation values because few LiDAR points are returned from water surfaces. LiDAR intensity values

were also collected.

Original contact information:

Contact Name: Ian Madin

Contact Org: DOGAMI

Phone: 971-673-1542

Email: ian.madin@dogami.state.or.us

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:

2008-08-14 to 2008-08-15

1.5. Actual or planned geographic coverage of the data:

W: -121.487644, E: -121.214928, N: 44.73608, S: 44.484069

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:

- 2008-01-01 00:00:00 - Resolve kinematic corrections for aircraft position data using kinematic aircraft GPS and static ground GPS data. Software: Waypoint GPS v.7.60
- 2008-01-01 00:00:00 - Develop a smoothed best estimate of trajectory (SBET) file that blends post-processed aircraft position with attitude data (sensor heading, position, and attitude are calculated throughout the survey). Software: IPAS v.1.4
- 2008-01-01 00:00:00 - Calculate laser point position by associating SBET position to each laser point return time, scan angle, intensity, etc. Create raw laser point cloud data for the entire survey in *.las (ASPRS v1.1) format. Software: ALS Post Processing Software
- 2008-01-01 00:00:00 - Import raw laser points into subset bins (less than 500 MB, to accommodate file size constraints in processing software). Perform manual relative accuracy calibration and filter for pits/birds. Classify ground points for individual flight lines (to be used for relative accuracy testing and calibration). Software: TerraScan v.7.012
- 2008-01-01 00:00:00 - Test relative accuracy using ground classified points per each flight line. Perform automated line-to-line calibrations for system attitude parameters (pitch, roll, heading), mirror flex (scale) and GPS/IMU drift. Perform calibrations on ground classified points from paired flight lines. Every flight line is used for relative accuracy calibration. Software: TerraMatch v.7.004
- 2008-01-01 00:00:00 - Import position and attitude data. Classify ground and non-ground points. Assess statistical absolute accuracy via direct comparisons of ground classified points to ground RTK survey data. Convert data to orthometric elevations (NAVD88) by applying a Geoid03 correction. Create ground model as a triangulated surface and export as ArcInfo ASCII grids at the specified pixel resolution. Software: TerraScan v.7.012, ArcMap v9.2
- 2013-08-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files in las format. The files contained LiDAR elevation and intensity measurements.

The data were in Oregon State Plane North (NAD83), International Feet coordinates and NAVD88 (Geoid03) vertical datum. OCM performed the following processing to the data to make it available within the Digital Coast: 1. The data were converted from Oregon State Plane North (NAD83), International Feet coordinates to geographic coordinates. 2. The data were converted from NAVD88 (orthometric) heights to GRS80 (ellipsoid) heights using Geoid03. 3. The vertical units of the data were converted from International 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:

- 1.6. 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/49902>

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=2543>

<https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/2543/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=2543>

;

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.