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:

2010 Oregon Department of Geology and Mineral Industries (DOGAMI) Lidar: Newberry Study Area

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 multiple areas within the State of Oregon. The areas for LiDAR collection have been designed

as part of a collaborative effort of state, federal, and local agencies in order to meet a wide range of project goals.

This LiDAR data set was collected over three deliveries from May 28 - July 27, 2010 and encompasses portions of Deschutes,

Klamath, and Lake counties in Oregon. This data set consists of bare earth and unclassified points. The average pulse density is 8.51 pulses

per square meter over terrestrial surfaces. The area of interest (AOI) totals 500 square miles (320,041 acres) and the total area

flown (TAF) covers 506 square miles (324,020 acres). The TAF acreage is greater than the original AOI acreage due to buffering

and flight planning optimization. This metadata record reflects all the data and cumulative statistics for the overall lidar survey.

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.

Dates of acquisition for the six deliveries that make up this data set.

Delivery Area	Acquisition Dates	AOI Acres	TAF Acres
1	May 28 - June 1, 2010	31,380	32,225
2	May 28 - July 27, 2010	159,215	160,744
3	May 28 - July 27, 2010	129,446	131,051

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:
2010-05-28 to 2010-07-27

1.5. Actual or planned geographic coverage of the data:
W: -121.487609, E: -121.066009, N: 44.122525, S: 43.537725

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:
- 2010-01-01 00:00:00 - No metadata for the lidar point data was provided to NOAA OCM with this data set. The following process step contains information derived from the metadata of other Watershed Sciences, Inc. data sets and from the Newberry Study area lidar report. This lidar report may be accessed at: https://coast.noaa.gov/htdata/lidar1_z/geoid18/data/1452/supplemental/OLC_Newberry_Area3.pdf Acquisition 1. Lidar data acquisition began May 28, 2010 and was completed July 27, 2010. 2. The survey used both a Leica ALS50 Phase II and a Leica ALS60 laser system mounted in a Cessna Caravan 208B. 3. Near nadir scan angles were used to increase penetration of vegetation to ground surfaces. 4. Ground level GPS and aircraft IMU were collected during the flight. Processing 1. Flight lines and data were reviewed to ensure complete coverage of the study area and positional accuracy of the laser points. 2. Laser point return coordinates were computed using

ALS Post Processor software and IPAS Pro GPS/INS software, based on independent data from the LiDAR system, IMU, and aircraft. 3. The raw LiDAR file was assembled into flight lines per return with each point having an associated x, y, and z coordinate. 4. Visual inspection of swath to swath laser point consistencies within the study area were used to perform manual refinements of system alignment. 5. Custom algorithms were designed to evaluate points between adjacent flight lines. Automated system alignment was computed based upon randomly selected swath to swath accuracy measurements that consider elevation, slope, and intensities. Specifically, refinement in the combination of system pitch, roll and yaw offset parameters optimize internal consistency. 6. Noise (e.g., pits and birds) was filtered using ALS postprocessing software, based on known elevation ranges and included the removal of any cycle slips. 7. Using TerraScan and Microstation, ground classifications utilized custom settings appropriate to the study area. 8. The corrected and filtered return points were compared to the RTK ground survey points collected to verify the vertical and horizontal accuracies. 9. Points were output as laser points, TINed and GRIDed surfaces
- 2013-01-01 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 OGIC HARN, Oregon Statewide Lambert Conformal Conic Projection (NAD83/HARN), NAVD88 (Geoid03) vertical datum and International Feet. OCM performed the following processing for data storage and Digital Coast provisioning purposes: 1. The data were converted from OGIC HARN, Oregon Statewide Lambert Conformal Conic Projection (NAD83/HARN) to geographic coordinates. 2. The data were converted from NAVD88 (orthometric) heights to GRS80 (ellipsoid) heights using Geoid03. 3. The data were converted from International Feet to meters. 4. The data were sorted by time and zipped to laz format.

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/49915

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=1452
https://coast.noaa.gov/htdata/lidar1_z/geoid18/data/1452

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=1452

This 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.