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:

2012 Oregon Department of Geology and Mineral Industries (DOGAMI) Oregon Lidar: Tillamook Yamhill

1.2. Summary description of the data:

WSI has collected Light Detection and Ranging (LiDAR) data of the Oregon Tillamook-Yamhill Study Area for the Oregon Department of Geology and Mineral Industries (DOGAMI). The Oregon LiDAR Consortium's Tillamook- Yamhill project area encompasses approximately 200,000 acres in Tillamook and Yamhill County in northwestern Oregon. The area was flown between September 23rd and October 5th, 2012,The collection of high resolution geographic data is part of an ongoing pursuit to amass a library of information accessible to government agencies as well as the general public.

The LiDAR survey utilized Leica ALS50 and ALS60 sensors mounted in either Cessna Caravan 208B or Partenavia P.68 aircrafts. Depending on the pairing of sensor and aircraft, the systems were programmed to emit laser pulses at a rate between 96-105 kHz, and flown at 900 meters above ground level (AGL), capturing a scan angle of plus or minus 30 degrees from nadir. These settings are developed to yield points with an average native density of greater than eight points per square meter over terrestrial surfaces.

Final products created include LiDAR point cloud data, 1 meter digital elevation models of bare earth ground model and highest-hit returns, intensity rasters, study area vector shapes, and corresponding statistical data. Final deliverables were projected in Oregon Statewide Lambert Conformal Conic. Lidar point clouds were projected back to geographic coordinates with ellipsoid heights for storage in the Digital Coast Data Access Viewer.

Original contact information:

Contact Name: Jacob Edwards

Contact Org: DOGAMI

Phone: 971-673-1557

Email: jacob.edwards@oregon.gov

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:
2012-09-23 to 2012-10-05

1.5. Actual or planned geographic coverage of the data:
W: -123.72237, E: -123.28599, N: 45.53984, S: 45.07351

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:

- 2012-01-01 00:00:00 - The LiDAR survey occurred between September 23rd and October 5th, 2012, utilizing Leica ALS60 and ALS50 sensors mounted in either a Cessna Caravan 208B or a Partenavia P.68 aircraft. The systems were programmed to emit single pulses at around 100 kHz and flown at 900 m AGL, capturing a scan angle of 30 degrees from nadir. These settings were developed to yield points with an average native density of greater than eight pulses per square meter over terrestrial surfaces. The study area was surveyed with opposing flight line side-lap of greater than 60% with at least 100% overlap to reduce laser shadowing and increase surface laser painting. The system allows up to four range measurements per pulse, and all discernible laser returns were processed for the output dataset. To solve for laser point position, it is vital to have an ac- The LiDAR survey utilized Leica ALS50 and ALS60 sensors mounted in either Cessna Caravan 208B or Partenavia P.68 aircrafts. Depending on the pairing of sensor and aircraft, the systems were programmed to emit laser pulses Airborne Survey Project Flightlines curate description of aircraft position and attitude. Aircraft position is described as x, y and z and measured twice per second (2 Hz) by an onboard differential GPS unit. Aircraft attitude is measured 200 times per second (200 Hz) as pitch, roll and yaw (heading) from an onboard inertial measurement unit (IMU).
- 2017-06-01 00:00:00 - The NOAA Office for Coastal Management (OCM) received the files in laz format. The files contained Lidar elevation and intensity measurements. The data were in Oregon Lambert (NAD83 2011 Epoch 2010.0), International Feet coordinates and NAVD88 (Geoid12a) vertical feet. OCM performed the following processing to the data to make it available within the Digital Coast: 1. The data were

converted from Oregon Lambert (NAD83), International Feet coordinates to geographic coordinates. 2. The vertical units of the data were converted from International feet to meters. 3. The data were converted from NAVD88 (orthometric) heights to NAD83(2011) ellipsoid heights using Geoid12a grids. The data was received without a metadata record. This record was produced based on the data quality report.

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/49931

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=6327
https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/6327/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

;

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.