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 USFS Lidar: Rogue River - Siskiyou National Forest - Ashland, OR

#### 1.2. Summary description of the data:

Watershed Sciences, Inc. (WS) collected Light Detection and Ranging (LiDAR) data of the Ashland study area in the Rogue River-Siskiyou National Forest on July 1st-4th, 2006 ( Julian Days 182-185). The survey area encompassed the city of Ashland as well as the Ashland Creek Watershed, resulting in a delivered LiDAR area of 46,253 acres.

Laser points were collected over the study area using an Optech ALTM 3100 LiDAR system. Full overlap (i.e. 50% sidelap) ensured complete coverage and

minimized laser shadows created by buildings and tree canopies. A real-time kinematic ( RTK) survey was conducted throughout the study area for quality assurance purposes.

No metadata record for this data set was provided to the NOAA Office for Coastal Management (OCM). This record was created with information from the data report. A link to the data report is provided in the URL section of this metadata record.

## **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:** 2006-07-01 to 2006-07-04
- **1.5. Actual or planned geographic coverage of the data:** W: -122.82078, E: -122.614675, N: 42.219622, S: 42.06215

#### 1.6. Type(s) of data:

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

#### **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?

Yes

# 4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

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):

Lineage Statement:

Watershed Sciences, Inc. (WS) collected Light Detection and Ranging (LiDAR) data of the Ashland study area for the United States Forest Service (USFS) in the Rogue River-Siskiyou National Forest from July 1st to July 4th, 2006. NOAA OCM received the data and ingested it into the Digital Coast Data Access Viewer for distribution.

#### **Process Steps:**

Applications and work flow overview: 1. POSGPS: Monument static GPS data are processed with aircraft GPS data to resolve kinematic corrections. 2. POSProc: Aircraft attitude data are incorporated with post processed aircraft kinematic GPS data. 3. REALM: Laser point data are calculated for the entire survey in \*.las format.
4. TerraScan: Data are imported, manually calibrated and filtered for pits/birds. 5. TerraMatch: Internal consistencies derived from GPS and IMU drift are measured and corrected. 6. TerraScan: Develop ground models, statistical accuracy assessments, Geoid03 application, projection changes and transformations.

Aircraft Kinematic GPS and IMU Data LiDAR survey datasets are referenced to 1Hz static ground GPS that are set up prior to the LiDAR aircraft survey flight. While surveying, the aircraft collects 2Hz kinematic GPS data. The onboard inertial measurement unit (IMU) collects 200 Hz aircraft attitude data. POSGPS v. 4.2 is used to process the kinematic corrects for the aircraft. The static and kinematic GPS data are then post-processed after the survey to obtain accurate GPS solution and aircraft positions during times of the survey. POSProc v. 4.2 is used to develop a trajectory file that includes corrected aircraft position and attitude information. The trajectory data for the entire flight survey session is incorporated into a final trajectory file that contains accurate and continuous aircraft positions and attitudes. - 2023-05-09 00:00:00 - The NOAA Office for Coastal Management (OCM) received lidar point cloud files in laz format from the U.S. Forest Service. The files contained lidar elevation and intensity measurements. The data were in UTM 10N coordinates and NAVD88 (Geoid03) elevations, with all units in meters. The data were classified as: 1-Unclassified, 2-Ground. OCM converted the data from orthometric (NAVD88) elevations to ellipsoid elevations using the Geoid 03 model and converted from UTM 10N NAD83 coordinates in meters, to geographic coordinates. Geokeys were also assigned. These conversions were done to ingest the data into the Digital Coast Data Access Viewer. (Citation: processed lidar data)

# 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
- 5.2. Quality control procedures employed
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.4. Approximate delay between data collection and dissemination

- 8.3. Approximate delay between data collection and submission to an archive facility

**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/69875

#### 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?

Yes

#### 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=9829 https://noaa-nos-coastal-lidar-pds.s3.amazonaws.com/laz/geoid18/9829/index.html

7.3. Data access methods or services offered: Data is available online for bulk and custom downloads.

#### 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) NCEI\_CO

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 Data is backed up to tape and to cloud storage.

#### 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.