

*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:**

2016 Coastal Connecticut MLLW ADS80 4-Band 16 Bit Imagery

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

Project: NOAA 2016 Multispectral Coastal Imagery Project - Connecticut Shoreline Orthoimagery

Contract No. EA133C11CQ0010

Reference No. NCNP0000-16-01163

Woolpert Order No. 76783

CONTRACTOR: Woolpert, Inc.

This project represents the collection of high resolution 4-band (RGB-IR) orthoimagery covering approximately 876 square miles at a 6" (0.5-foot) ground sample distance (GSD).

The 4-band (RGB-IR) digital orthophotos will be delivered as 16-bit red, green, blue and infrared bands in uncompressed GeoTIFF format. The area of interest (AOI) was flown between July 26, 2016 and August 24, 2016 (specifically July 26, 2016; July 27, 2016; July 30, 2016; August 3, 2016, August 4, 2016; August 5, 2016, August 6, 2017; August 8, 2016; August 9, 2016; August 24, 2016). This area includes: all land areas within one-thousand (1,000) feet of Mean High Water (MHW) and within one-thousand (1,000) feet of state-regulated tidal wetlands; offshore areas at least two-thousand (2,000) feet waterward of either the mainland or island land masses in order to clearly depict the interface between the shore and coastal waters; all offshore islands within the borders of the State of Connecticut including: Goose Island and Falkner Island (offshore of Branford); Calf Islands and Great Captain Island (offshore of Greenwich); Norwalk Islands (offshore of Norwalk); Thimble Islands (offshore of Branford); Sandy Point (offshore of Stonington); all islands in the Connecticut part of Fishers Island Sound; and the Connecticut River from Long Island Sound to the Connecticut/Massachusetts state line.

Original contact information:

Contact Name: Kevin P. O'Brien

Contact Org: Land & Water Resources Division - Coastal Resources Section  
Bureau of Water Protection and Land Reuse  
Connecticut Department of Energy and Environmental Protection  
Phone: 860.424.3432

**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:**

2016-08-08

**1.5. Actual or planned geographic coverage of the data:**

W: -73.689, E: -71.771, N: 42.072, S: 40.953

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

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

Image (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?**

**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:

- 2016-07-26 00:00:00 - The Leica ADS80-SH81/82 Airborne Digital Sensor is a push-broom geometry sensor, collecting 12-bit data with 12,000 pixel swath coverage with up to a 5-centimeter spatial resolution. The sensor is capable of collecting multiple spectral bands and angles simultaneously. Leica's ADS80 collects seven bands of imagery simultaneously: three panchromatic CCD lines capture information in the forward, nadir and backward views from the aircraft, while four multispectral lines capture data in the red, green, blue, and near color infrared band. The imagery for this task order was acquired using the Leica ADS80-SH81/82 multispectral scanner. The ADS80-SH81/82 utilizes the Leica's IPAS20 direct positioning and orientation system that is based on airborne GPS and inertial measurement unit (IMU) technology. The IPAS20 data were reduced using Leica's IPAS Pro v1.3 software package. All of the source imagery was processed using the Leica XPRO (V5.2) software package. This package provides the capability to perform digital image processing, aerial triangulation, and image rectification. The strips of imagery were ortho rectified to client provided lidar digital elevation model (DEM) data. The individual rectified strips of ortho rectified imagery were then mosaicked together to form a seamless imagery database over the entire task order area using the OrthoVista software (V4.5) by Inpho GmbH. The final digital orthophoto imagery (DOI) were extracted using OrthoVista.

**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
- 7.3. Data access methods or services offered
- 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/48409>

**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-](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/dataregistry/>

<https://coast.noaa.gov/dataviewer/#/imagery/search/where:ID=6346>

[https://coastalimagery.blob.core.windows.net/digitalcoast/CoastalCT\\_2016\\_6346/index.html](https://coastalimagery.blob.core.windows.net/digitalcoast/CoastalCT_2016_6346/index.html)

### 7.3. Data access methods or services offered:

### 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.*