

*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:**

NOAA Office for Coastal Management Sea Level Rise Data: Mapping Confidence

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

These data were created as part of the National Oceanic and Atmospheric Administration Office for Coastal Management's efforts to create an online mapping

viewer depicting potential sea level rise and its associated impacts on the nation's coastal areas. The purpose of the mapping viewer is to provide

coastal managers and scientists with a preliminary look at sea level rise (slr) and coastal flooding impacts. The viewer is a screening-level tool

that uses nationally consistent data sets and analyses. Data and maps provided can be used at several scales to help gauge trends and prioritize

actions for different scenarios. The Sea Level Rise and Coastal Flooding Impacts Viewer may be accessed at: <https://www.coast.noaa.gov/slr>

These data depict the mapping confidence of the associated Sea Level Rise inundation data, for the sea level rise amount specified. Areas that

have a low degree of confidence, or high uncertainty, represent locations that may be mapped correctly (either as inundated or dry) less than 8

out of 10 times. Areas that have a high degree of confidence, or low uncertainty, represent locations that will be correctly mapped (either as

inundated or dry) more than 8 out of 10 times or that there is an 80 percent degree of confidence that these areas are correctly mapped.

Areas mapped as dry (no inundation) with a high confidence or low uncertainty are coded as 0.

Areas mapped as dry or wet with a low confidence or high uncertainty are coded as 1.

Areas mapped as wet (inundation) with a high confidence or low uncertainty are coded as 2.

The NOAA Office for Coastal Management has tentatively adopted an 80 percent rank (as either inundated or not inundated) as the zone of relative confidence.

The use of 80 percent has no special significance but is a commonly used rule of thumb measure to describe economic systems (Epstein and Axtell, 1996).

In short, the method includes the uncertainty in the lidar derived elevation data (root mean square error, or RMSE) and the uncertainty in the

modeled tidal surface from the NOAA VDATUM model (RMSE). This uncertainty is combined and mapped to show that the inundation depicted in this data

is not really a hard line, but rather a zone with greater and lesser chances of getting wet.

For a detailed description of the confidence level and its computation, please see the Mapping Inundation Uncertainty document available at:

<https://coast.noaa.gov/data/digitalcoast/pdf/mapping-inundation-uncertainty.pdf>

**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

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

W: 144.5, E: -64.5, N: 49.276, S: -14.5

**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:

- 2016-01-01 00:00:00 - 1. NOAA OCM has created an ArcGIS model, based on the method described at <https://coast.noaa.gov/data/digitalcoast/pdf/mapping-inundation-uncertainty.pdf>, that uses the uncertainty values from NOAA VDATUM and the uncertainty of the elevation data to create depth rasters and z-score rasters for each sea level rise inundation level. 2. Each z-score raster is reclassified to areas of low and high confidence. Areas mapped as dry (no inundation) with a high confidence or low uncertainty are classified as 0. Areas mapped as dry or wet with a low confidence or high uncertainty are classified as 1. Areas mapped as wet (inundation) with a high confidence or low uncertainty are classified as 2.

**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/48107>

**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](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:**

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

This data may be downloaded at: <https://www.coast.noaa.gov/slrdata>;

### 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.*