

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:

NCCOS Project: Mapping Habitat Change in Saipan Lagoon, CNMI

### 1.2. Summary description of the data:

In 2004, shallow-water benthic habitats were mapped in Saipan Lagoon, Commonwealth of the Northern Mariana Islands. Since then, habitats in the lagoon have likely changed because of coral bleaching events and recent typhoons. Local resource managers requested an updated map to help better understand these habitat changes and to help inform their monitoring and management decisions. In response, we created an updated benthic habitat map for areas shallower than 30-meters inside the lagoon.

### 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:

2015-12 to 2017-03

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

W: 145.684723941, E: 145.794770192, N: 15.2742160669, S: 15.1209203637

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

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

NCCOS Scientific Data Coordinator

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:****2.4. E-mail address:**

NCCOS.data@noaa.gov

**2.5. Phone number:****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:**

NCCOS Scientific Data Coordinator

**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?**

No

**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):*

Process Steps:

- We used multispectral imagery to produce an updated, shallow-water benthic habitat map for Saipan Lagoon. A new satellite image of the lagoon was collected in

February 2016. This remote sensing data was used to develop a new habitat map. The resulting habitat map depicts the distribution of key biological and geomorphological habitats using a classification scheme comparable to Houk and van Woesik, 2008. We collected underwater photos and videos in partnership with local experts in CNMI. These photos and videos were used to improve the quality of the habitat map. A separate accuracy assessment was conducted to independently assess the thematic accuracy of the resulting habitat map. Local experts from the jurisdictional community evaluated the habitat map products before they were finalized. The final habitat map and associated products are publicly available for download and for viewing online. (Citation: Kendall, M.S., B. Costa, S. McKagan, L. Johnston, and D. Okano. 2017. Benthic habitat maps of Saipan Lagoon. NOAA Technical Memorandum NOS NCCOS 229. Silver Spring, MD. 77 pp. <https://doi.org/10.7289/V5/TM-NOS-NCCOS-229>)

**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):**

For details of data quality control methods, see Kendall et al. (2017). All users should independently analyze the dataset according to their own needs and standards to determine data usability.

## **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)
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate

**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/52924>

#### 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?

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:

##### 7.2.1. If data hosting service is needed, please indicate:

##### 7.2.2. URL of data access service, if known:

<https://doi.org/10.7289/V5NV9GB9>

[https://gis.ngdc.noaa.gov/arcgis/rest/services/nccos/BenthicMapping\\_Saipan\\_Dynamic/MapServer](https://gis.ngdc.noaa.gov/arcgis/rest/services/nccos/BenthicMapping_Saipan_Dynamic/MapServer)

<https://maps.coastalscience.noaa.gov/biomapper/biomapper.html?id=Saipan>

[https://nccos-coastalscience-products-web.azurewebsites.net/biomapper\\_explorer/index.php?path=C](https://nccos-coastalscience-products-web.azurewebsites.net/biomapper_explorer/index.php?path=C)

[https://nccos-coastalscience-products-web.azurewebsites.net/biomapper\\_explorer/index.php?path=F](https://nccos-coastalscience-products-web.azurewebsites.net/biomapper_explorer/index.php?path=F)

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

Download from website

##### 7.4. Approximate delay between data collection and dissemination:

Two months

##### 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

Not Applicable

## 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\_MS

#### 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):

National Centers for Coastal Ocean Science - Silver Spring, MD

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

Two months

### 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*

NCCOS IT Policy

## 9. Additional Line Office or Staff Office Questions

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