

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 Assessment: Underwater Video and Photographs for Ground Validation and Accuracy Assessment of Benthic Habitat Maps of Saipan Lagoon, Commonwealth of the Northern Mariana Islands, 2016-07-28 to 2016-08-09

1.2. Summary description of the data:

Underwater video and photographs were acquired between 28 July 2016 and 9 August 2016 at nearly 600 sites throughout the lagoon to document the presence and percent-cover of benthic substrate and cover types. Two sets of independent data were collected, one for Ground Validation (n = 292) and the other for Accuracy Assessment (n = 273). Abundances for five substrate and seven cover types were estimated to the nearest 10% in real time. These presence/absence data were used to create and evaluate the accuracy of the habitat predictions and map in Saipan Lagoon.

For complete descriptions of these datasets and the methods used to generate them, please see: Kendall et al. (2017).

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:

2016-07-28 to 2016-08-09

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.)

Video (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?**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:

- Locations of the GV sites were selected manually to include the full range of habitats, depths, and environmental settings found in the lagoon. AA sites were chosen by randomly scattering points in nine habitat types. The process for collecting both the GV and AA data was identical at each field site. Sites were typically accessed via small boat, kayak, or wading. At each site, two Go Pro HERO4 Black cameras were deployed on an aluminum pole for sites <9 m deep and on a rope with a rotating camera system for deeper sites. On both deployment systems, a downward facing camera was fixed at 1 meter above the bottom to standardize the field of view to encompass ~ 1 m² of seafloor, and an oblique facing camera captured surrounding habitats. Once the cameras were deployed, our precise location was recorded every five seconds using a GPS receiver. Abundances for the five substrate and seven cover types were estimated to the nearest 10% in real time. GPS data were post-processed and differentially corrected. Average positions were calculated for each site, and all underwater videos and photos were reviewed for quality control. Substrate and cover abundances were converted to presences (1) and absences (0). For complete descriptions of these datasets and the methods used to generate them, please see: Kendall et al. (2017). (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):

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)
- 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/52923>

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:

National Centers for Coastal Ocean Science (NCCOS)

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

https://nccos-coastalscience-products-web.azurewebsites.net/biomapper_explorer/index.php?path=N

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:

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):**

National Centers for Coastal Ocean Science - Silver Spring, MD

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.