

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:

Benthic surveys along a water quality gradient in Aua, American Samoa:
comprehensive assessment of coral demography (adult and juvenile corals) from belt transect surveys in 2022

1.2. Summary description of the data:

This metadata record describes the coral demographic data of Aua Reef, American Samoa, generated from observations by divers of the Ecosystem Sciences Division (ESD) of the NOAA Pacific Islands Fisheries Science Center (PIFSC). Benthic coral demographic surveys were conducted within belt transects of specified length and width for two life stages (juveniles and adults) in Aua, American Samoa in September 2022. Surveys were conducted at 18 randomly-selected sites and provide information on adult coral colony counts, morphology, size, partial mortality (old and recent dead), presence of disease and other compromised health conditions, including bleaching. Juvenile colony surveys include morphology and size. Taxonomic identification of adult colonies is to the species level (where possible) and genus level for juveniles. The survey design and site selection of stratified-random sites (StRS) follows protocols established by the National Coral Reef Monitoring Program (NCRMP).

Data from benthic surveys of Aua Reef establishes a comprehensive biological baseline for land-based sources of pollution impacts on benthic composition and coral demography. These efforts feed into the higher-level CRCP objectives by establishing an in-situ tracking system to assess the effects of management and mitigation strategies and activities in the target watersheds to reduce land-based sources of pollution impacts on coral reefs.

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:

2022-09-12 to 2022-09-22

1.5. Actual or planned geographic coverage of the data:

W: -170.669, E: -170.665, N: -14.2717, S: -14.2881

September 2022 fly-in mission to American Samoa (MP2206), location and date range of Rapid Ecological Assessment (REA) surveys at stratified-random Sites (StRS) on Aua reef.

1.6. Type(s) of data:

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

Lori H Luers

2.2. Title:

Metadata Contact

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

lori.luers@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:

Bernardo Vargas-Angel

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:

The data described here were collected via belt transect surveys of coral demography (adult and juvenile corals) by the NOAA Coral Reef Ecosystem Program (CREP) following the same protocol to that established by the NOAA National Coral Reef Monitoring Program (NCRMP).

Process Steps:

- Biological surveys implemented a modified stratified random sampling design to assess the survey domain which encompassed the hard-bottom reef habitat of Aua from 0 to 6 m in depth, and between the Aua stream mouth to the Onesosopo Park. Based on the nature and scientific questions addressed in this study, the survey domain was divided into three categorical LBSP impact sectors (15-20 Ha each) based on their distance from the source of disturbance as follows: High Impact, Medium Impact, and Low impact. Subsequently a digital map of the survey domain was overlaid with a 50 m x 50 m (2500 m² in area) GIS layer, and grid cells containing hard-bottom reef habitat were designated as the sampling units, hereafter referred to as survey sites. Depending on the number of 50 m x 50 m grid cells fitting within, four to eight randomly selected survey sites were allocated within each categorical impact sectors. One, haphazardly laid, 30-m transect was the focal point of the coral demographic survey. Coral demographic surveys were conducted within four segments of specified length (2.5 m) and width (1 m) at four specified points on the transect line, for two life stages (juveniles and adults) in Aua, American Samoa in September 2022. Surveys were conducted at 18 randomly-selected sites and provide information on adult coral colony counts, morphology, size, partial mortality (old and recent dead), presence of disease and other compromised health conditions, including bleaching. Juvenile colony surveys include morphology and size. Taxonomic identification of adult colonies is to the species level (where possible) and genus level for juveniles. The survey design and site selection of stratified-random sites (StRS) follows protocols established by the National Coral Reef Monitoring Program (NCRMP). (Citation: Ecosystem Sciences Division Standard Operating Procedures: Data Collection for Rapid Ecological Assessment Benthic Surveys, 2019 Update)

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):

The quality control occurred at two major stages - 1) data entry and 2) data management. Data entry quality control included both review and manual error correction steps. Data management quality control included several standard error queries followed by correction prior to ingestion into Oracle database.

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)

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/67995>

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:

National Centers for Environmental Information - Silver Spring, Maryland (NCEI-MD)

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

7.2.2. URL of data access service, if known:

<https://www.ncei.noaa.gov/archive/accession/0277490>

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7.3. Data access methods or services offered:

Data can be accessed online via the NOAA National Centers for Environmental Information (NCEI) Ocean Archive.

7.4. Approximate delay between data collection and dissemination:

Unknown

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_MD

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):

Pacific Islands Fisheries Science Center - Honolulu, HI

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

Unknown

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

NOAA IRC and NOAA Fisheries ITS resources and assets.

9. Additional Line Office or Staff Office Questions

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