

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:

Pacific Reef Assessment and Monitoring Program: Belt Transect Surveys of Corals at U.S. Pacific Reefs from 2002 to 2007 (uneven size-class bins)

1.2. Summary description of the data:

The coral demographic data described here result from belt transect surveys conducted by the Pacific Islands Fisheries Science Center (PIFSC), Ecosystem Sciences Division (ESD) --formerly the Coral Reef Ecosystem Division--from 2002 to 2007 at coral reef sites in the Hawaiian and Mariana Archipelagos, American Samoa, and the Pacific Remote Island Areas as part of NOAA's Pacific Reef Assessment and Monitoring Program (Pacific RAMP) with funding from the NOAA Coral Reef Conservation Program (CRCP).

Surveys were conducted at fixed sites at depths ranging between 10 m and 15 m. Sites were surveyed using belt transects to collect coral colony metrics. At each site, the surveyor listed and identified to the genus or species level, all coral colonies occurring within 0.5 sq. meters of each side of two, 25-m transect lines; and recorded the visually estimated size class to which the maximum diameter of each colony belonged (0-5 cm; > 5-10 cm; >10-20 cm; >20-40 cm; >40-80 cm; >80-160 cm; or >160 cm). In geographic regions such as the Northwestern Hawaiian Islands where coral richness and abundance are reduced relative to lower latitude regions with higher species richness, the protocol was amended to include all corals occurring within 1 m of each side of the transect lines. These coral demographic data provide information on coral abundance (density, proportion occurrence, and total colony abundance), size distribution, and taxonomic richness.

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:

2005-10-03 to 2005-10-08, 2007-05-12 to 2007-05-22, 2002-02-09 to 2002-02-14, 2004-02-04 to 2004-02-25, 2006-02-11 to 2006-03-08, 2002-09-10 to 2002-10-04, 2003-07-14 to 2003-08-08, 2005-02-25 to 2005-03-05, 2005-07-14 to 2005-08-05, 2005-09-17 to 2005-10-04, 2004-09-16 to 2004-10-11, 2006-07-27 to 2006-08-19, 2006-09-03 to 2006-10-01, 2004-01-12 to 2004-

01-24, 2004-03-26 to 2004-04-04, 2005-10-18 to 2005-10-22, 2006-01-18 to 2006-02-01, 2006-03-20 to 2006-04-03, 2007-04-30 to 2007-05-03

1.5. Actual or planned geographic coverage of the data:

W: 144.42387, E: 145.81442, N: 15.27353, S: 12.8113

Mariana Archipelago, including Santa Rosa, Guam, Rota, Aguijan, Tinian, and Saipan.

W: -171.0919, E: -168.13982, N: -11.04588, S: -14.55932

American Samoa, including Tutuila, Ofu & Olosega, Tau, Rose, and Swains.

W: -160.54522, E: -154.8178, N: 22.2306, S: 18.92203

Main Hawaiian Islands, including Hawaii, Lehua, Maui, Lanai, Molokai, Oahu, Kauai, Niihau, and Kaula.

W: -178.37858, E: -164.69, N: 28.45365, S: 23.57333

Northwestern Hawaiian Islands, including Necker, French Frigate Shoals, Gardner, Maro, Laysan, Lisianski, Pearl and Hermes, Midway, and Kure.

W: 166.59378, E: -159.9731, N: 19.3254, S: -0.3825

Pacific Remote Island Areas, including Wake, Johnston, Kingman, Palmyra, Howland, Baker, and Jarvis.

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:

Annette M DesRochers

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

annette.desrochers@noaa.gov

2.5. Phone number:

(808)725-5461

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:

Belt transect survey method for corals, version A: uneven size-class bins, employed by the Ecosystem Sciences Division from 2002 to 2007.

Process Steps:

- At each site, benthic Rapid Ecological Assessment (REA) surveys of corals were conducted along dedicated transects lines deployed following a specific isobath. At each site, the surveyor listed and identified to the genus or species level, all coral colonies occurring within 0.5-1.0 m of each side of the transect lines; and recorded the visually estimated size class to which the maximum diameter of each colony belonged (0-5 cm; >5-10 cm; >10-20 cm; >20-40 cm; >40-80 cm; >80-160 cm; or >160 cm). The number of transects deployed and total belt survey area varied between sites depending on specific project objectives and weather conditions

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):

Quality control of the data occurred at a few stages from data entry to data ingestion into the Oracle database. Observations, including species identification, were periodically checked during expeditions for consistency between and among divers, as well as verified against pictorial guides. Data entry was usually conducted on the same day as the surveys in a standardized spreadsheet. The data is quality controlled against the physical data sheets following data entry. Given the size of the data set, there remains some possibility of typographical or other errors.

Data was later migrated from spreadsheets into an MS Access database (~2006), and was eventually migrated to the PIFSC 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/10512>

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://accession.nodc.noaa.gov/0189729>

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

The data is captured in several locations: physical data sheets, MS Access cruise databases, and the PIFSC Oracle database. The physical data sheets are housed at PIFSC. The MS Access cruise databases were regularly backed up by the cruise data manager while at sea. The PIFSC Oracle database is regularly backed up by PIFSC ITS.

9. Additional Line Office or Staff Office Questions

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