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:

American Samoa: coral reef monitoring interactive map and information layers primarily from 2010 surveys

1.2. Summary description of the data:

This interactive map displays American Samoa data collected by the NOAA Coral Reef Ecosystem Division (CRED) during the Pacific Reef Assessment and Monitoring Program (RAMP) cruises. The information presented is a combination of standard CRED monitoring summary data and more specific layers generated by request from resource managers and scientists in American Samoa. The fish and benthos data were collected either by rapid ecological assessment (REA) surveys conducted during 2010, or by towed-diver surveys conducted during 2008 and 2010. The map is accompanied by the summary data used to generate the data layers (as excel attachments) and is available in the form of an interactive pdf with layers to make it usable by those without GIS access.

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:

2008-02-18 to 2010-03-21

1.5. Actual or planned geographic coverage of the data:

W: -171.094, E: -168.137, N: -11.045, S: -14.911

Survey sites randomly located in shallow (< 30 meters) coral reef habitats around the islands and atolls of American Samoa including Tutuila, Ofu and Olosega, Ta'u, Swains, and Rose, as well as South Bank located ~70 km south of Tutuila.

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) map and spreadsheet

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:

Jacob M Asher

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):

Process Steps:

- 2011-12-16 00:00:00 - Unless specified as towed survey data, all data presented were collected by rapid ecological assessments during the NOAA CRED cruise to American Samoa in 2010. Using CRED habitat and bathymetric maps, survey sites (< 30m in depth) on hard-bottomed habitat were selected using a random, depth stratified design. At each site, the fish assemblage was surveyed using a stationary point count (SPC) method. Details of the method are available (see Ault et al. 2006, Williams et al. 2011, Ayotte et al. 2011 [http://www.pifsc.noaa.gov/library/pubs/ admin/PIFSC_Admin_Rep_11-08.pdf]), but in brief, for each survey a pair of divers record the number, size and species of all fishes observed within adjacent visually estimated 15m-diameter cylinders. Fish abundance and size data were used to calculate fish biomass using species-specific length-weight conversion factors. Those factors and the formula used to generate weight estimates are available in Heenan et al. 2014 (http://www.pifsc.noaa.gov/library/pubs/DR-14-003.pdf). At each site, a photo-transect was collected spanning the diameters of the adjacent SPC cylinder (30 photos at each site). These photos were then used to estimate planar percentage cover of benthic substrates using the point count method in Coral Point Count (CPCe [http://www.nova.edu/ocean/cpce/], a freely available tool, Kohler et al. 2006). Towed diver surveys involve a small boat towing two SCUBA divers. The divers work as a benthic and fish pair, with the fish diver recording the species, number, size and time in the survey, when large-bodied (>50 cm total length) reef fish are observed. The tow-track, together with a layback algorithm, and the time of observation are then used to estimate the geographic coordinates of sightings. This method supplements the SPC surveys by allowing for coverage of large areas of habitat that are necessary to adequately sample the generally rare and or clumped large-bodied reef fish species that are not well captured by small-scale comprehensive surveys (Richards et al. 2011). The fish data presented here were collected during towed surveys conducted during the NOAA-CRED 2010 cruise. Finally, towed benthic data collected during the 2008 cruise is also presented, as that was deemed the best information CRED has on the location of large coral colonies (> 2 m in diameter), which were noted by the towed-benthic divers during that cruise.

- 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)
- 5.2. Quality control procedures employed
- 7.3. Data access methods or services offered

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/25467

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:

NOAA Coral Reef Conservation Program (CRCP)

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

7.2.2. URL of data access service, if known:

https://data.nodc.noaa.gov/coris/data/NOAA/nmfs/pifsc/cred/american_samoa_map/American_Samoa

7.3. Data access methods or services offered:

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) OTHER

- 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

IRC

- 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

n/a

9. Additional Line Office or Staff Office Questions

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