

*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: Rapid Ecological Assessments of Fish Large-Area Stationary Point Count Surveys (SPC) at Coral Reef Sites across the Pacific Ocean from 2000 to 2007

### **1.2. Summary description of the data:**

The large-area stationary point count (SPC) method is used to conduct reef fish surveys 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). The SPC method catalogs the diversity (species richness), abundance (numeric density) and biomass (fish mass per unit area) of diurnally active reef fish assemblages in shallow-water (typically 10-15m, always < 30m) hard-bottom habitats.

Stationary Point Counts (SPC) is one of non-invasive underwater-survey methods to enumerate the diverse components of diurnally active shallow-water reef fish assemblages. At each REA survey sites, SPC fish surveys are conducted at 4 stations in conjunction with, but at least 10 m away from 3 consecutively-placed, 25m transect lines to quantify relatively larger (>25 cm Total Length [TL]) and more vagile fish species. All fishes >25 cm TL are recorded to species-level that enter a 20 m diameter cylinder (area ~314 m<sup>2</sup>) during a timed 5 minute count. Individuals or groups are estimated to the nearest 5 cm TL size-class bin. Four replicate, 5 minute cylinder counts are conducted at each station. Care is taken to avoid over-counting large transient or schooling species. Transects lines and stations are typically set at depths of 10-15 m. Reef ledges and holes are visually searched. Stations are completed on all sides of the island/atoll, weather and sea conditions permitting. Raw survey data included species level abundance estimates.

Reef fish and benthic estimate data collected during SPC surveys can be accessed online via the NOAA National Centers for Environmental Information (NCEI) Ocean Archive.

### **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:**

2004-02-04 to 2004-02-25, 2006-02-11 to 2006-03-08, 2005-02-24 to 2005-03-05, 2005-07-14 to 2005-08-05, 2006-07-27 to 2006-08-19, 2000-09-09 to 2000-10-05, 2001-09-13 to 2001-09-24, 2002-09-10 to 2002-10-04, 2003-07-14 to 2003-08-08, 2004-09-16 to 2004-10-11, 2006-09-03 to 2006-10-01, 2003-08-22 to 2003-09-28, 2005-09-04 to 2005-09-30, 2005-10-03 to 2005-10-08, 2007-05-25 to 2007-06-08, 2007-05-12 to 2007-05-22, 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: -171.0919, E: -168.13982, N: -11.04588, S: -14.559317

American Samoa

W: -160.545217, E: -154.8178, N: 22.2306, S: 18.922033

Main Hawaiian Islands

W: -178.378433, E: -161.92992, N: 28.45365, S: 23.055

Northwestern Hawaiian Islands

W: 142.43847, E: 145.85292, N: 20.5532, S: 12.8113

Mariana Archipelago

W: -176.623989, E: -159.9731, N: 16.78817, S: -0.3825

Pacific Remote Island Areas (excluding Wake Atoll)

W: 166.59378, E: 166.65736, N: 19.3254, S: 19.27116

Wake Atoll

**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.)*

Instrument: Not applicable

Platform: Not applicable

Physical Collection / Fishing Gear: Not applicable

**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:**

Paula M Ayotte

**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:

REQUIRED

**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):**

Observations, including species identification and sizing, are periodically checked

during expeditions for consistency between divers. Data entry is usually conducted on the same day as the surveys. Following a mission, the data is then run through rigorous quality control checks by the data management team before the data are migrated to the Oracle database. Given the size of the data set, there remains some possibility of typographical or other errors.

## 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?

Yes

#### 6.1.1. If metadata are non-existent or non-compliant, please explain:

### 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/5566>

### 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:**

Ocean Biogeographic Information System (OBIS)

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

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

<http://accession.nodc.noaa.gov/0162466>

<https://mapper.obis.org/?datasetid=36693923-2abf-4237-8154-8016f32844a0>

**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.*