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 Islands, Tutuila, American Samoa, IKONOS data, 2002

1.2. Summary description of the data:

IKONOS imagery was purchased to support the Pacific Islands Geographic Information System (GIS) project and National Ocean Service's (NOS) coral mapping activities. One-meter panchromatic and four-meter multi-spectral data were purchased for each study area.

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:

2001-09-15 to 2002-09-30

1.5. Actual or planned geographic coverage of the data:

W: -170.856, E: -170.529, N: -14.225, S: -14.378

1.6. Type(s) of data:

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

NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:

coastal.info@noaa.gov

2.5. Phone number:

(843) 740-1202

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:

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:

- 2001-01-01 00:00:00 - Data Import and Color Merge: IKONOS Carterra Geo data can be purchased in Geotiff and NITF formats. The horizontal error for Geotiff imagery

is @ 50 meters, while NITF imagery has an error of @ 20 meters if the user has the software to read the Rational Polynomial Coefficients (RPCs) from the NITF header. Socetset, PCI geomatica, and ERDAS Orthobase Pro are currently the only commercially available image processing software packages that can read the RPCs. The IKONOS images were processed using the PCI Geomatica Orthoengine module. Projects were set up in Orthoengine using the Satellite Orbital Modeling Math Modeling Method with the General High Resolution Option. Separate projects were created for the panchromatic and multispectral images. IKONOS NITF formatted images were imported into PCI, then ground control points (GCPs) were identified and selected. The number of GCPs varies by image. Image to image tie points (5-10 points per overlap area) were selected in areas of overlap. USGS 10 meter DEMs were imported into Orthoengine and checked for spatial accuracy. In some cases the DEMs needed to be adjusted to fit the IKONOS imagery. In addition, the DEMs were converted from a Mean Sea Level datum to an ellipsoid. Elevations in areas over water were adjusted upward to match the shoreline values in the ellipsoid DEMs. The images were orthorectified to the adjusted DEMs. After orthorectification, the images are color balanced if necessary then and mosaicked. An error analysis was performed on each mosaic by comparing the map coordinates of the ground control points in the orthorectified mosaic to the original GCPs. A circular error (at a 90% confidence level) was determined and is reported in the accuracy section. Ancillary data sets: USGS 10 meter DEM, Ground control points were provided by the NOAA National Geodetic Survey and the American Samoa Government. Known Problems: The USGS DEM for Tinian had to be adjusted in the X and Y directions to match the IKONOS imagery.

- 2001-01-01 00:00:00 - IKONOS images were received from the vendor in UTM coordinates (zone 2S or 55N), in the WGS84 datum. This data set is in UTM Zone 02S WGS84 datum.

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?
 - **6.1.1.** If metadata are non-existent or non-compliant, please explain: Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 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
- 7.3. Data access methods or services offered
- 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/49592

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:

NOAA Office for Coastal Management (NOAA/OCM)

- 7.2.1. If data hosting service is needed, please indicate:
- 7.2.2. URL of data access service, if known:
- 7.3. Data access methods or services offered:
- 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):**Office for Coastal Management Charleston, SC
- 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.