

**Guam Reef Flat Monitoring Program (RFMP)**  
**Data Management Plan for Line Intercept Transect Observations**

**1. General Description of Data to be Managed**

- Name of the Data Collection
  - **Guam Reef Flat Monitoring Program (RFMP) Line Intercept Transect Observations**
- Keywords that characterize the data
  - **Benthic composition**
  - **Coral cover**
- Summary description of the data to be generated (abstract)
  - **Composition of benthos within reef flat communities, including both biotic and abiotic components**
- Anticipated temporal coverage of the data
  - **2005 - present**
- Anticipated geographic coverage of the data
  - **Guam (6 sites)**
- What data types will you be creating or capturing?
  - **Alpha-numeric data**
  - **Photographs**
- How will you capture or create the data?
  - **Diver visual observations**
  - **Photographs captured by diver**

**2. Points of Contact**

- Who is the overall point of contact for the data collection?
  - **Dr. Laurie Raymundo, ljrayment@gmail.com**
- Who is responsible for verifying the quality of the data?
  - **Dr. Laurie Raymundo, ljrayment@gmail.com**
- Who is responsible for answering questions about the data collection?
  - **Dr. Laurie Raymundo, ljrayment@gmail.com**
- Who is responsible for data documentation and metadata activities?
  - **Dr. Laurie Raymundo, ljrayment@gmail.com**
- Who is responsible for the data storage and data disaster recovery activities?
  - **Dr. Laurie Raymundo, ljrayment@gmail.com**

**3. Data Stewardship**

- What quality control procedures will be employed, or are employed?
  - **Data is entered into spreadsheet and checked for accuracy**
  - **The data must be confirmed against the physical data sheet**
  - **The observation data is validated against the photographs**
- What is the overall lifecycle of the data from collection or acquisition to making it available to customer?
  - **Diver visual observations from three permanent 20m transects at a given site are written on under-water paper**
  - **Photoquad imagery is captured from each of the three permanent 20m transects at a given site (NOTE: There are limited**

photographic records as shallow depth prevents photoquad images from being captured)

- **A student transcribes the diver visual observation data to an Excel spreadsheet that resides on Dropbox**
- **Photographs are downloaded from the camera to a computer**
- **The data is backed up to an external hard drive at regularly defined intervals**
- **The data is not archived**

#### 4. Data Documentation

- Which metadata repository will be used to document this data collection?
  - **At the moment, metadata records have not been created for the data collection. Part of the FY15 CRCP Further Expansion of the Guam Data Management Initiative proposal is to create a metadata record for this data collection that will be submitted to the NOAA Coral Reef Information System (CoRIS).**
- In addition to discovery-level metadata, what additional metadata or other documentation is necessary to fully describe the data and ensure its long-term usefulness? How will that metadata be collected and updated? Is there a requirement to document this data collection in other metadata repositories?
  - **There is no additional metadata**
  - **Updates to any existing metadata record will be supplied to CoRIS and serve to replace the existing metadata record**
- What standards will be used to represent data and metadata elements in this data collection?
  - **The metadata record will be formatted to comply with ISO-19115 in accordance with the NOAA-standard**

#### 5. Data Sharing

- Will the data be made available to the public? If so, what is the expected date of first availability? Is this a one-time data collection, or an ongoing series of measurements? Will there be a Principal Investigator hold or other delay between data collection and publication, and if so for how long?
  - **At the moment, the data are not available to the public.**
  - **In the future, the data should be available once the data has been entered, and the QC process has been completed.**
- Will users be subject to any access conditions or restrictions, such as submission of non-disclosure statements, special authorization, or acceptance of a licensing agreement?
  - **Users will be subject to a data sharing agreement**
- What data access protocols will be used to enable data sharing? The use of open standard, interoperable, non-proprietary web services is recommended (for example, OPeNDAP, or Open Geospatial Consortium (OGC) web services).
  - **Data will be downloaded as a comma-delimited file (csv) with corresponding XML metadata records**

## 6. Initial Data Storage and Protection

- Where and how will the data be stored initially?
  - **Physical data sheets**
  - **Scanned data sheets**
  - **Excel spreadsheets on Dropbox**
  - **Photographs (with standard folder / file naming conventions)**
- How will the data be protected from accidental or malicious modification or deletion? Discuss data back-up, disaster recovery/contingency planning, and off-site storage relevant to the data collection.
  - **The data is backed up to an external hard drive at regularly defined intervals**
- If there will be limitations to data access, how will these data be protected from unauthorized access? How will access permissions be managed? What process is to be followed in the event of unauthorized access?
  - **No restrictions to data access**

## 7. Long-Term Archiving and Preservation

- Will the data be archived and preserved with a NOAA Data Center (NODC, NCDC, NGDC)?
  - **At the moment, there are no plans to archive the data at a NOAA Data Center. Data archival is listed as a FY17 milestone in the FY15 CRCP Further Expansion of the Guam Data Management Initiative proposal.**