

*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:**

Towed Optical Assessment Device (TOAD) Data to Support Benthic Habitat Mapping since 2001

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

Optical validation data were collected using a Tethered Optical Assessment Device (TOAD), an underwater sled equipped with an underwater digital video camera and lights.

FROM OLDER RECORD:

CRED TOAD Optical Validation Data in the Pacific Ocean

Optical validation data were collected using a Towed Optical Assessment Device (TOAD), an underwater sled equipped with an underwater digital video camera and lights, in the Pacific coral reef ecosystems where is deeper than the approximately 30 meters depth . These data are used to provide ground-truth validation for benthic habitat maps based on multibeam echosounder surveys. Data were collected around the islands/banks of the Main Hawaiian Islands, the Northwest Hawaiian Islands, American Samoa, the Commonwealth of Northern Mariana Islands (CNMI) and Guam, and the Pacific Remote Island Areas (PRIAs) to support Benthic Habitat Mapping efforts during NOAA Ship cruises.

Camera sled deployments were conducted at night, usually between 1800 and midnight, to avoid interfering with daytime small boat and diver operations. The duration of each tow varied but averaged about 40 minutes of bottom time at a given location. The TOAD was originally deployed from a pot hauler mounted on the starboard side of the fantail on NOAA Ship Townsend Cromwell. On the NOAA Ships O.E. Sette and Hi`ialakai various iterations of TOADs were deployed off the portside J-frame amidships or the starboard side J-frame respectively. In all cases the sleds were lowered slowly to the bottom by the deck crew with the use of a capstan. The TOAD operator monitored a live video feed from the camera and began recording data on two video tape recorders. When the camera reached bottom the deck crew was notified by radio to stop lowering, and the ship moved off along a predetermined course, towing the TOAD astern for the

first TOAD, or by drifting with subsequent camera sleds.

Video data are recorded on a mini DV video tape recorder. Each tow video is given a name consisting of a 3-letter designator for the island area followed by two-digit year and three-digit tow number. For example, FFS08001 means the first tow video at French Frigate Shoals in calendar year 2008.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

Ongoing series of measurements

**1.4. Actual or planned temporal coverage of the data:**

2001-09-13 to Present

**1.5. Actual or planned geographic coverage of the data:**

W: 144.44, E: -156.6797, N: 28.47207, S: -14.37157

**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: Towed Optical Assessment Device (TOAD)

Platform: NOAA Ships Townsend Cromwell, Oscar Elton Sette, and Hi'ialakai, and R/V AHI (Acoustic Habitat Investigator)

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:**

Michael W Akridge

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

Pacific Islands Fisheries Science Center

**2.4. E-mail address:**

michael.akridge@noaa.gov

**2.5. Phone number:**

(808)725-5483

### 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:

Rhonda Suka

#### 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:

Fixed points are assigned to the benthic imagery collected by the towed optical assessment device (TOAD) and each point is classified into one of several benthic classifications. The data is entered into an MS Access database.

#### 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):

REQUIRED

### 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://inport.nmfs.noaa.gov/inport/item/12608>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: <https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.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:**

Pacific Islands Fisheries Science Center

**7.2.1. If data hosting service is needed, please indicate:****7.2.2. URL of data access service, if known:**

<http://www.soest.hawaii.edu/pibhmc>

**7.3. Data access methods or services offered:**

Send email to nmfs.pic.credinfo@noaa.gov

**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.*