

*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:**

Bottomfish Fishery-Independent Survey in Hawaii (BFISH) - Camera Surveys

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

Accurate and precise stock assessments are predicated on accurate and precise estimates of life history parameters, abundance, and catch across the range of the stock. In its continued efforts to improve the data used in stock assessments, the NOAA Pacific islands Fisheries Science Center (PIFSC) implemented a Bottomfish Fishery-Independent Survey in Hawaii (BFISH) in 2016. The BFISH survey utilizes two gear types, Cooperative Research hook-and-line fishing operations (CRF) and the Modular Optical Underwater Survey System (MOUSS). Survey sampling is conducted annually, typically in the fall, surrounding the Main Hawaiian Islands (MHI), in accordance with a stratified-random sampling design. Under this design, the waters surrounding the MHI are gridded at 500 meter resolution. Each grid is given attributes of depth, slope, and seafloor hardness. Depth categories are Shallow (75-200 meters), Medium (200-300 meters) and Deep (300-400 meters). Slope categories are Low slope (0-10 degrees) and High (10-90 degrees). Seafloor categories are Hardbottom and Softbottom. Annual survey data are processed to produce relative and absolute abundance and biomass estimates for the Stock Assessment for the Main Hawaiian Islands Deep 7 Bottomfish Complex.

MOUSS operations are conducted by researchers at the NOAA PIFSC. Two MOUSS units are deployed within each survey grid. Each MOUSS is left on the seafloor for a minimum of 15 minutes. Once recovered and returned to the lab, MOUSS videos are analysed using the MaxN method to produce species-specific, size-structured abundance estimates for Deep7 species.

### **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:**

2016 to Present

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

W: -160.25, E: -154.8, N: 22.25, S: 18.89

Main Hawaiian Islands

**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.)*

**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:**

Benjamin L Richards

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

**2.4. E-mail address:**

benjamin.richards@noaa.gov

**2.5. Phone number:**

(808)725-5320

**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:**

Benjamin L Richards

**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?**

No

**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:

Data was collected in the field by PIFSC staff and contractors. Data was processed by PIFSC staff.

**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):**

Data is reviewed by multiple analysts. Multiple fish measurements are taken. Measurement error must be below acceptance threshold. Database QA/QC limits are in place.

**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)
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate

**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/20970>

#### **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:**

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

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

[https://oceanwatch.pifsc.noaa.gov/xfer/PIFSC\\_PIRO\\_bulk\\_data\\_download\\_InPort\\_20970.tgz](https://oceanwatch.pifsc.noaa.gov/xfer/PIFSC_PIRO_bulk_data_download_InPort_20970.tgz)

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

Send written request to PIFSC and requires approval by the PIFSC data owner.

##### **7.4. Approximate delay between data collection and dissemination:**

1 year

**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:**

1 year

**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*

Data reside on PIFSC network storage as well as within PIFSC Oracle database

**9. Additional Line Office or Staff Office Questions**

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