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:

Akule and 'Opelu Larval Data from Plankton Tows Conducted off the Kona Coast in West Hawai'i between 1997 and 2018

# 1.2. Summary description of the data:

The data described here includes the analysis of plankton samples for the presence and size of akule and 'opelu larvae, as well as the tow metadata of samples including tow type, mesh size, and distance from shore. This data was collected as a part of Pacific Island Fisheries Science Center (PIFSC) Ecosystem Sciences Division (ESD)'s West Hawai' i Ichthyoplankton Time Series Project. This project targeted the biosampling of commercially important species including billfish and tuna, but included all available ichthyoplankton; from 2016-2018 the focus shifted to plankton community structure around the island and in/out of oceanographic features. This data was produced by analysis of plankton samples collected off the Kona Coast of Hawai'i from 1997 throughout 2018 by NOAA ships and small boats. Ichthyoplankton samples were collected by 6 ft. Isaacs-Kidd Midwater Trawls and 1m ring-nets towing aside the ships/ boats. Neuston and vertical tows were conducted from 2016-2018 to better assess the vertical distribution of larvae in the top 10m.

# **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:

1997-04-12 to 2018-07-19

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

W: -156.739, E: -155.539, N: 20.13833, S: 18.78045 Extent of samples collected off West Hawai'i from 1997-2018

### 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:

Lori H Luers

### 2.2. Title:

Metadata Contact

# 2.3. Affiliation or facility:

### 2.4. E-mail address:

lori.luers@noaa.gov

### 2.5. Phone number:

## 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:

Jonathan L Whitney

### 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:

The West Hawai'i Ichthyoplankton Time Series began in 1997, when ichthyoplankton was collected by neuston tows off West Hawai'i to assess the spatial and temporal variability in larval distribution and abundance. Samples were analyzed under microscope and larvae were identified, counted and measured for length. Distance from shore and mean bottom depth metrics were also utilized in the analysis of akule and opelu larval ecology. Environmental metadata helps us monitor seasonal occurrence, vertical distribution, habitat and temperature associations, and cross-shore distribution of larvae. The response of larvae to oceanographic conditions can provide insight into how the environment may modulate recruitment.

# 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):

Tows with missing metadata (eg. length of tow, volume filtered, latitude/longitude) were excluded from analysis. Whole plankton samples were occasionally dried out or for some other reason unable to be processed, and these tows were also removed from this data set.

#### 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)

### 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/69138

### 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?

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 (PIFSC)

# 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/0277846 http://accession.nodc.noaa.gov/0277846

### 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.