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:**AFSC/RACE/MACE: Results of 2014 Pollock Acoustic-Trawl Survey Bering Sea- DY1407

### 1.2. Summary description of the data:

Eastern Bering Sea shelf walleye pollock (Gadus chalcogrammus) midwater abundance and distribution were assessed from Bristol Bay in the United States, to Cape Navarin, Russia, between 12 June and 13 August 2014 using acoustic-trawl survey methods aboard the NOAA ship Oscar Dyson. Water column temperatures were warm in 2014 compared with the cold temperatures of the past several survey years (2006-2012). Most walleye pollock biomass was distributed relatively evenly across the shelf from a region north of Unimak Island to Navarin Canyon, between roughly the 50 m and 1,000 m isobaths. Estimated pollock biomass in midwater (between 16 m from the sea surface and 3 m off bottom) in the U.S. EEZ portion of the Bering Sea shelf was 3.439 million metric tons (t), nearly twice the 2012 estimate (1.843 million t) and the highest that has been observed since 2002. Pollock biomass east of 170° W was 1.425 million t (40% of the total shelf-wide), with 2-year-old pollock (26 cm modal fork length (FL)) comprising 55% of that biomass. Pollock biomass in U.S. waters west of 170° W was 2.013 million t (57% of total shelf-wide biomass), consisting primarily of pollock aged 1, 2, and 4-6 years (15, 26, and 38 cm dominant modal FL, respectively). Two-year-old pollock were more abundant east than west of 170° W and contributed to an eastward shift in distribution of U.S. pollock biomass compared with recent years. Estimated numbers of 2-year-old pollock also surpassed the numbers estimated for the strong 2008 year class in 2010, although the 2008 year class was still evident in the population. In Russia (104 thousand t, 3% of total biomass), primarily 4-year-old fish (38 cm modal FL), were observed, with proportionally fewer 1- and 2-year-olds than observed west of 170° W in the United States. The preliminary spatial distribution of euphausiid backscatter is presented, but analyses are still in progress

# **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:

2014-05 to 2014-09

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

Bering Sea: http://www.marineregions.org/gazetteer.php?p=details&id=4310

### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) Simrad RAW file format

## 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:

Abigail McCarthy

#### 2.2. Title:

Metadata Contact

### 2.3. Affiliation or facility:

### 2.4. E-mail address:

abigail.mccarthy@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:

Rick Towler

# **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:

Acoustic data were recorded at the five split-beam frequencies using ER60 software and, as a backup, acoustic telegram data were logged with Myriax EchoLog 500 software. Acoustic measurements were collected from 16 m below the sea surface to within 0.5 m of the sounder-detected bottom or a maximum of 1,000 m in deep water. Data were analyzed using Myriax Echoview post-processing software. See National Marine Fisheries Service (NMFS) 2013. NOAA protocols for fisheries acoustics surveys and related sampling (Alaska Fisheries Science Center), 23 p. Prepared by Midwater Assessment and Conservation Engineering Program, Alaska Fish. Sci. Center, Natl. Mar. Fish. Serv., NOAA. Available online:

 $http://www.afsc.noaa.gov/RACE/midwater/AFSC\%20AT\%20Survey\%20Protocols\_Feb\%202013.pdf$ 

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):

These data were collected in accordance NOAA protocols for fisheries acoustics surveys and related sampling (Alaska Fisheries Science Center), 23 p. Prepared by Midwater Assessment and Conservation Engineering Program, Alaska Fish. Sci. Center, Natl. Mar. Fish. Serv., NOAA. Available online:

http://www.afsc.noaa.gov/RACE/midwater/AFSC%20AT%20Survey%20Protocols\_Feb%202013.pdf

### 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)
- 7.2.1. 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/28313

### 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:

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

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

http://doi.org/10.7289/V58S4MVP https://www.ngdc.noaa.gov/mgg/wcd/

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

Go to https://www.ngdc.noaa.gov/mgg/wcd/ or email Anderson, Charles (charles.anderson@noaa.gov)

# 7.4. Approximate delay between data collection and dissemination:

180

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\_CO

- 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):

Alaska Fisheries Science Center - Seattle, WA

- 8.3. Approximate delay between data collection and submission to an archive facility: 180
- 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

"IT Security and Contingency Plan for the system establishes procedures and applies to the functions, operations, and resources necessary to recover and restore data as hosted in the Western Regional Support Center in Seattle, Washington, following a disruption."

## 9. Additional Line Office or Staff Office Questions

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