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:
Southwest Peninsular Florida 2016 ESI INVERTEBRATE Polygons

1.2. Summary description of the data:
This data set contains sensitive biological resource data for marine and estuarine invertebrate species in Southwest Florida. Vector polygons in this data set represent invertebrate distribution and concentration areas. Species specific abundance, seasonality, status, life history, and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer.

This data set comprises a portion of the ESI data for Southwest Florida. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

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 to 2016

1.5. Actual or planned geographic coverage of the data:
W: -84.0099, E: -80.721, N: 27.2699, S: 24.5018
This reflects the extent of all land and water features included in the overall Southwest Peninsular Florida ESI study region. The bounding box for this particular feature class may vary depending on occurrences identified and mapped.

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (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,
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:
ESI Program Manager

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
or.r.esi@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:
ESI Program Manager

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?

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "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:

Sources of data used to depict invertebrate distribution and seasonality for this data layer include: 1) expert knowledge of Florida Fish and Wildlife Conservation Commission (FFWCC) and local agencies, and 2) digital datasets.

Process Steps:

- 2017-02-01 00:00:00 - Information on the presence of oysters was derived from digital datasets. Polygons were buffered by 5 meters to meet the minimum mapping unit and reduce the presence of gaps between the shoreline of the source data and the ESI shoreline. Horseshoe crab spawning beaches were mapped based on a database of public observations provided by FFWCC. Observations from 2008 to present were considered. Geographic areas which had reports of more than 50 crabs spawning in multiple years of the dataset were identified and digitized based on these reports. The inherent bias in the dataset likely underrepresents the extent of spawning in southwest Florida; available habitat is plentiful. Horseshoe crab spawning occurs year round but peaks in April and September/October. Pink shrimp, blue crab and stone crab were mapped in the Charlotte Harbor region using densities and seasonalities derived from fishery independent monitoring (FIM) data. Abundances based on habitat strata were derived as described in the fish section. For the invertebrate layers, data from the FIM program were condensed into two strata - shallow (shoreline, shallow vegetated and shallow nonvegetated polygons) and deep (>1.8 m in depth). Records in the Ten Thousand Islands were generated based on NOAA’s Estuarine living marine resources (ELMR) database and reviewed by FFWCC (Florida Fish and Wildlife Conservation Commission) staff. These species, along with spiny lobster, were mapped to broad distribution polygons in the Gulf of Mexico based on expert knowledge of FFWCC. Quahog and scallops were mapped to the FIM 'shallow' polygons in which they are likely to occur. Actual distribution of bay scallops in this region is variable from year to year, and is most commonly found in association with seagrasses. Two species of quahog occur in the area, and are most commonly found in association with unvegetated bottom. Aquaculture leases are present in Marco Island and Pine Island Sound. The above digital and/or hardcopy sources were compiled by the project biologist to create the INVERT data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: 1) information gathered during initial interviews and from hardcopy sources are compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles and digitized; 2) hardcopy maps are digitized at their source scale; 3) digital data layers are evaluated and used "as is" or integrated with the hardcopy data sources. See the Lineage section for additional information on the type of source data for this data layer. The ESI, biology, and human-use data are compiled into the standard ESI digital data format. A second set of interviews with participating resource experts are conducted to review the compiled data. If necessary, edits to the INVERT data layer are made based on the
recommendations of the resource experts, and final hardcopy maps and digital data are created.

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):

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)
  - 4.1. Have resources for management of these data been identified?
  - 4.2. Approximate percentage of the budget for these data devoted to data management
  - 5.2. Quality control procedures employed
  - 7.1. Do these data comply with the Data Access directive?
  - 7.1.1. If data are not available or has limitations, has a Waiver been filed?
  - 7.1.2. If there are limitations to data access, describe how data are protected
  - 7.4. Approximate delay between data collection and dissemination
  - 8.1. Actual or planned long-term data archive location
  - 8.3. Approximate delay between data collection and submission to an archive facility
  - 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

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/54799

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
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?

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:
Office of Response and Restoration (ORR)

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

7.2.2. URL of data access service, if known:
https://response.restoration.noaa.gov/esi

7.3. Data access methods or services offered:
Data can be accessed by downloading the zipped ArcGIS geodatabase from the Download URL (see Distribution Information). Questions can be directed to the ESI Program Manager (Point Of Contact).

7.4. Approximate delay between data collection and dissemination:

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:
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):
Office of Response and Restoration - Seattle, WA

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

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

9. Additional Line Office or Staff Office Questions
Line and Staff Offices may extend this template by inserting additional questions in this section.