

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 FISH Polygons

1.2. Summary description of the data:

This data set contains sensitive biological resource data for marine, estuarine, and select freshwater species Southwest Florida. Vector polygons in this data set represent distribution, concentration areas, spawning areas, and nursery areas for species of economic and ecological importance. 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, 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:

ESI Program Manager

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:

orr.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 fish distribution and seasonality for this data layer include: 1) expert knowledge; 2) survey datasets; and 3) published documents.

Process Steps:

- 2017-02-01 00:00:00 - Charlotte Harbor and the Ten Thousand Islands comprise the only known available nursery habitat for smalltooth sawfish. These areas are delineated by the species critical habitat polygons, which were included in the ESI as nursery areas. In addition to mapped nursery areas, higher concentration areas for both juvenile and adults were defined by Florida Fish and Wildlife Conservation Commission (FFWCC), NOAA staff, and published literature based on observation data, and are represented in the ESI as concentration areas with a concentration of high. In addition, the general distribution of sawfish was mapped based on the observation database maintained by NOAA Fisheries in both inshore and offshore waters. Please note, the life-history stages for elasmobranchs (sharks and sawfish) do not match the standard ESI life-history categories; months noted as 'spawning' in the ESI correspond to pupping and 'larvae' represent neonate presence. Charlotte Harbor and the Ten Thousand Islands are recognized as important nursery areas for several species of shark. Nursery areas were identified based on published literature (e.g. Hueter and Tyminski 2007, Steiner et al., 2007). Additional species and seasonality information were added to these polygons where they were available, including in the Ten Thousand Islands.

- 2017-02-01 00:00:00 - Offshore species were mapped to polygons corresponding to bathymetry breaks. Many of these species aggregate around hardbottom habitat; however these habitats are not well surveyed, so fish distributions in the Gulf of Mexico are represented as broad, general distribution polygons. The following polygons were created: 0-10m, 10-30m, 30-200m, and >200m. Data sources used to populate these polygons include: 1) SEAMAP trawl and reef fish survey database - observations from 2005-present were mapped and species of interest were assigned to the polygon(s) within which most of the observations fell; 2) Essential Fish Habitat polygons - used as a guidance to assign highly migratory species to appropriate areas; and 3) published sources, including fishery management council documents were used to assign remaining species and seasonality information to the appropriate polygons. Select riverine species were mapped based on published documents to the Myakka and Peace Rivers upstream of the FIM sampling database. Fishery independent monitoring (FIM) data were provided by Florida Fish and Wildlife Conservation Commission (FFWCC) to map common estuarine and inshore species. Monthly and overall estimates of catch per unit effort (CPUE) and probability of capture from 2005-present were generated for each species by gear type by geographic zone and habitat strata. Economically important species were retained in the dataset if they occurred in more than 5% of the samples in a given

zone across the entire dataset. The life-history stage most commonly captured by each gear type was assigned based on expert knowledge. Select species of ecological importance were retained in the dataset if they occurred in more than 10% of the samples. CPUEs of all species that met the inclusion criteria were divided into quartiles and assigned a categorical value of high, medium or low if a record was in the top quartile, middle two quartiles, or lowest quartile, respectively.

- 2017-02-01 00:00:00 - Polygons were created to represent the zone/strata/estuary combinations provided by FFWCC. Habitat strata mapped include: shoreline (represented by a 50 m buffer of the ESI shoreline), shallow vegetated areas (based on seagrass data collected for this project), shallow nonvegetated areas, and deep area (>1.8m). Not all strata are mapped in each geographic zone, due to differences in occurrence of the habitat types. Where a species was caught by multiple gear types within a zone/strata, the higher concentration value was assigned. Monthly presence was generated for the identified life-history stages by considering a species present if they were found in more than 5% of the samples in a given month. Seasonalities generated using this method were altered to create contiguous seasonalities if possible, for use in populating the life-history months in the ESI database. Where no clear seasonality was present or could not be discerned, species were marked as present year round. Only juveniles and adults were present in this dataset. Additional life-history information on spawning, egg and larval distribution was added to these polygons for the economically valuable species based on expert knowledge and published literature. South of Estero Bay, inshore fish species were mapped using a combination of ELMR data and trawl survey data provided by Rookery Bay National Estuarine Research Reserve (RBNERR). Information from the ELMR database (species, concentrations, and seasonalities) were reviewed, and additional species of interest were added based on the trawl data. Trawl data coverage was limited to four bays, and the results were extended to nearby areas per the instruction of RBNERR staff. The above digital and/or hardcopy sources were compiled by the project biologist to create the FISH 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 FISH 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/54797>

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?

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:

(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)

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.