

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:

Louisiana and Lower Mississippi River 2014 ESI FISH Polygons

### 1.2. Summary description of the data:

This data set contains sensitive biological resource data for marine, estuarine, anadromous, and freshwater fish species in coastal Louisiana and the lower Mississippi River. Vector polygons in this data set represent fish distribution, concentration areas and nursery 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 Louisiana. 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:

2012 to 2014

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

W: -94, E: -88.0002, N: 31.1273, S: 25.6169

This geographic extent includes the entire coastal Louisiana and Lower Mississippi River ESI study area. The spatial extent of individual layers or feature classes may vary.

### 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:

Process Step 1 refers to the ESI FISH data developed for Coastal Louisiana. Process Step 2 refers to the ESI FISH data developed for the Lower Mississippi River.

Process Steps:

- 2013-12-01 00:00:00 - This process step refers to the ESI data developed for Coastal Louisiana. The mapping extent was dependent upon information availability and location of mapped coastal habitats and shorelines. Sources of data used to depict fish distribution and seasonality for this data layer include Louisiana Department of Wildlife and Fisheries (LDWF) fishery independent monitoring data, published information, digital data from Louisiana Natural Heritage Program (LNHP), National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), and University of Miami Cooperative Institute for Marine and Atmospheric Science (UM-CIMAS) and anecdotal information from resource experts from LDWF and NMFS. Polygons representing gulf sturgeon distribution were derived from the USFWS/NMFS critical habitat shapefiles and divided into seasonal concentration areas based on published literature. Polygons representing pallid sturgeon distribution were provided by LNHP. Nursery areas for lemon sharks are depicted in the Chandeleur Islands. Polygons representing marine and estuarine fish distribution were based on sub-basin boundaries provided by LDWF. These polygons are clipped to waters connected to the Gulf of Mexico and adjacent wetlands. This was done to reduce the spatial complexity of the dataset. Species concentration and abundances are based on 2003-2012 fishery independent monitoring datasets provided by LDWF. Some species were grouped for the purpose of the ESI, including anchovies, bream (bream and sunfishes), buffalo (smallmouth and black buffalo), herrings and sardines (Clupeid spp.), crappie (black and white crappie), croakers (Atlantic croaker and spot), forage fish (butterfishes, harvestfish, leatherjacket, lookdown), kingfishes (southern and Gulf kingfish), killifish and white trout (sand and sliver seatrout). For these resources, monthly catch per unit effort (CPUE) was calculated for each sub-basin and used to derive concentration values. Seasonality was created by considering a species present in all months with higher than 10 percent occurrence in an area. Life history information was added based on expert knowledge and published literature. All information was reviewed by LDWF staff and adjusted as needed. Other species were added to sub-basins based on published information, NFMS EFH shapefiles and anecdotal information. Please note, the life history stages for sharks do not match the standard ESI life history stages for fish and should be interpreted as follows: spawning = parturition and larvae = neonates. The LDWF-LNHP provided information for some of the federally and state listed species and species of conservation concern for display in the ESI atlas and accompanying digital data in 2013. The available LNHP data sets are to be used for oil spill response and spill response planning only. These data represent existing information known to the LNHP at the time of the request and should never be substituted for consultation with the LNHP.

- 2014-05-01 00:00:00 - This process step refers to the data developed for the Lower

Mississippi River study area. Sources of data used to depict fish distribution and seasonality for this data layer include Louisiana Department of Wildlife and Fisheries (LDWF) fishery independent monitoring data, published information, and anecdotal information from resource experts at LDWF, the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS). Water bodies were grouped by LDWF into areas with similar species assemblages. A combination of fishery independent monitoring data and expert opinion was used to derive species concentration and seasonality information for each defined water body. Additional information on Gulf sturgeon was included based on published literature.

- 2014-05-01 00:00:00 - 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/55908>

**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?**

**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\\_download](https://response.restoration.noaa.gov/esi_download)

**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.*