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:

GL_StClair_Detroit_River 2019 ESI SOCECON Polygons, Lines, Points

1.2. Summary description of the data:

These feature classes reside within the SOCECON Feature Data Set of the Great Lakes - St. Clair / Detroit River System 2019 ESI geodatabase. They contain vector polygons, lines and points representing Socioeconomic human-use resource data for the St. Clair / Detroit River System in southeastern Michigan.

The study area includes a small portion of southern Lake Huron at its outlet, the St. Clair River (which flows out of Lake Huron), Lake St. Clair, the Detroit River (which flows into Lake Erie), a small portion of western Lake Erie, and adjacent lands and waters.

These data sets contain information about the following resources: POINTS- abandoned vessels, airports, archaeological sites, campgrounds, epa facilities, heliports, historical sites, and renewable energy sites; POLYGONS- beaches and campgrounds; POLYLINES- pipelines, railroads, and roads.

Object specific Type and Source information are stored in the related data tables, SOC_DAT and SOURCES (described below). These are stand-alone tables within the Geodatabase, designed to be used in conjunction with these spatial data layers.

This data set is a portion of the ESI data for the St. Clair / Detroit River System. As a whole, the ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil, and 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:

2018 to 2019

1.5. Actual or planned geographic coverage of the data:

W: -83.576664, E: -82.276293, N: 43.124996, S: 41.7296012

Bounding box for the St. Clair - Detroit River System area of interest in southeastern Michigan.

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 and Process Steps cited below in this metadata record include those used for two distinct areas of the Great Lakes: the Straits of Mackinac in northern Michigan, and the St. Clair / Detroit River System in southeastern Michigan. This is because these two study areas were initially combined into a single ArcGIS geodatabase, before being separated for publication. As a final procedural step to prepare the geodatabases for publication, the spatial data data corresponding to each respective area were clipped in ArcGIS according to the two distinct geographic study areas.

Process Steps:

- 2019-09-23 00:00:00 - Information on socioeconomic features within the GL_Mackinac_StClair_Detroit_River 2019 ESI study region were acquired from multiple sources. Socioeconomic features represented as polylines include: pipelines (PL), railroads (RR), and roads (R). Features represented as points include: abandoned vessels (AV), airports (A), archaeological sites (AS), campgrounds (C), epa facilities (EPAF), heliports (HP), historical sites (HS), and renewable energy sites (RE). Features represented as polygons include beaches (B) and campgrounds (C).
- 2019-09-23 00:00:00 - These data were developed as SOCECON_POINTS, SOCECON_LINES, and SOCECON_POLYGONS feature classes within the GL_Mackinac_StClair_Detroit_River 2019 ESI, following ESI Guidelines. Additional data are contained in the joined table SOC_DAT using HUNUM as a unique ID, and in SOURCES using SOURCE_ID as a unique ID. 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 1:50,000 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 SOCECON_POINT, SOCECON_LINE, or SOCECON_POLY data layers are made based on the recommendations of the resource experts, and final hardcopy maps and digital data

are created.
- 2019-09-23 00:00:00 - The main data sources that were used to depict human-use resources for the SOCECON_LINE data layer were: 1) the Michigan Geographic Framework (MGF), the U.S. Energy Information Administration (USEIA), and 2) data digitization by Research Planning, Inc. using Environmental Systems Research Institute (ESRI) Basemap Imagery from 2019. MGF and USEIA provided digital vector polyline datasets.
- 2019-09-23 00:00:00 - The main data sources that were used to depict human-use resources for the SOCECON_POINT data layer were: 1) personal interviews with resource experts from the Macomb County, Michigan Land and Water Resources organization and also the Michigan Department of Natural Resources (MIDNR) 2) NOAA ERD and OCS 3) U.S. Department of Transportation (USDOT) Bureau of Transportation Statistics (BTS) and 4) The American Wind Energy Association (AWEA). All data provided were digital vector point datasets.
- 2019-09-23 00:00:00 - Two digital vector polygon datasets were used to depict human-use resources for the SOCECON_POLY data layer, both originating from Michigan Department of Natural Resources (MIDNR). The datasets represented beaches (2019) and campgrounds (2018).
- 2020-09-30 00:00:00 - Sources and Process Steps cited above in this metadata record include those used for two distinct areas of the Great Lakes: the Straits of Mackinac in northern Michigan, and the St. Clair / Detroit River System in southeastern Michigan. This is because these two study areas were initially combined into a single ArcGIS geodatabase, before being separated for publication. As a final procedural step to prepare the geodatabases for publication, the spatial data data corresponding to each respective area were clipped in ArcGIS according to the two distinct geographic study areas.

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/58455

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_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.