

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_LAKE_ONTARIO_2023 ESI FISH Polygons, Points

1.2. Summary description of the data:

These feature classes reside within the BIOLOGY Feature Data Set of the Lake Ontario 2023 ESI Geodatabase. It contains vector polygons and points representing FISH data for Lake Ontario.

The study area includes the United States portion of Lake Ontario, covering the islands in New York: Association Island, Bass Island, Calf Island, Carl Island, Cherry Island, Eagle Island, Fox Island, Galloo Islands, Grenadier Island, Horse Island, Hoveys Island, Six Point Town, and Stony Island. Major Lake Ontario bays mapped include: Black River Bay, Blind Sodus Bay, Braddock Bay, Chaumont Bay, Guffin Bay, Irondequoit Bay, Henderson Bay, Little Sodus Bay, Mexico Bay, Port Bay, Sawyer Bay, and Sodus Bay.

These data sets contain sensitive biological resource data for freshwater fish species in Lake Ontario. Vector polygons in this data set represent fish distribution, concentration areas, and spawning areas. Vector points in this data set represent fish spawning areas.

Species-specific abundance, seasonality, status, life history, and source information are stored in associated data tables (described in Entity Attribute Overview below) designed to be used in conjunction with this spatial data layer. This data set is a portion of the ESI data for Lake Ontario.

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:

2011 to 2023

1.5. Actual or planned geographic coverage of the data:

W: -79.125, E: -76, N: 44.125, S: 43.125

Bounding box for the Great Lakes Lake Ontario study region.

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):

Process Steps:

- 2023-08-15 00:00:00 - Three main sources of data were used to depict fish distribution and seasonality for the FISH data layer are as follows: 1) personal interviews with resource experts from the New York State Department of Environmental Conservation (NYSDEC), U.S. Geological Survey (USGS), U.S. Fish and Wildlife Service (USFWS), and State University of New York (SUNY); 2) digital data and hardcopy maps from NYSDEC, USGS, and SUNY; and 3) published literature on fish seasonalities. Fish species depicted in this atlas include species of conservation interest, or species of commercial, recreational, or ecological importance. General distributions: Fish general distributions were mapped using expert knowledge collected during workshops, coupled with statewide and lake-wide survey data. Species included were determined by the experts for Lake Ontario. For fish general distributions, Lake Ontario was divided into a western portion (waters west of the Bogus Point), a central portion (waters from Bogus Point to Stony Point), and an eastern portion (waters from Stony Point to the St. Lawrence River). This division follows natural differences in the fish community, and within each of these portions, fish were mapped according to bathymetry. Polygons were created for the following depth zones, based on expert guidance: 0-25 m, 25-75 m, and >75 m. These polygons were overlaid with data from the USGS and NYSDEC Lake Ontario adult lake trout gillnet survey to determine species within each polygon. Species from the USGS/NYSDEC data that also occurred on the expert-generated species list were mapped to each respective general distribution polygon. Following this analysis, the species found in the western, central, and eastern 25-75 m depth polygons were identical, so those polygons were merged to create a single 25-75 m depth polygon for the entire basin. Similarly, the species information for all three >75 m depth polygons was identical, so those polygons were merged to create a single >75 m depth polygon for the entire basin. Species assemblages and appropriate life history stages and seasonalities were mapped in each zone. Expert knowledge and data for mapping of fish general distributions were supplemented with information from NYNHP and publications. Concentration areas and tributaries and bays: Concentration areas of various species were mapped using expert knowledge collected in workshops. Experts were asked to identify concentration areas for any

of the mapped species, and the species were mapped in polygons covering each of these areas. Experts also provided species lists and life history stages present in the tributaries and bays of Lake Ontario, which were supplemented for each tributary/bay using data from the NYSDEC Statewide Fishery Database, a dataset of fish species caught in bays of Lake Ontario, and conservation priority species data from NYNHP. Spawning locations: Spawning locations were included from expert knowledge collected in workshops and maps provided by NYSDEC.

- 2023-08-15 00:00:00 - Two main sources of data were used to depict fish point distribution and seasonality for the FISHPT data layer are as follows: 1) digital datasets from Great Lakes Aquatic Habitat Framework (GLAHF) and State University of New York (SUNY); and 2) published literature on fish seasonalities. Spawning locations: Point locations of spawning sites were provided by GLAHF. Additional spawning locations were included from digital data provided by SUNY. Seasonalities used were from Smith CL. 1985. The inland fishes of New York State. NYSDEC, Albany, NY. 522 pp.

- 2023-08-15 00:00:00 - The above digital and/or hardcopy sources were compiled by the project biologist to create the FISH & FISHPT data layers. 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 1:42,000 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 & FISHPT data layers 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/70477>

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.