

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_ERIE_2022 ESI BIRDS Polygons, Points

1.2. Summary description of the data:

These feature classes reside within the BIOLOGY Feature Data Set of the Lake Erie - 2022 ESI Geodatabase. It contains vector polygons and points representing BIRDS data for Lake Erie.

The study area includes the United States portion of Lake Erie, covering the coastal portions of Ohio, Pennsylvania, and New York from the Michigan/Ohio border to the west to the New York/Canada border to the east. This data set contains sensitive biological resource data for wading birds, shorebirds, waterfowl, raptors, diving birds, passerine birds, and gulls and terns in Lake Erie. Vector polygons in this data set represent bird nesting, migratory staging, and wintering sites.

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 Erie.

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:

1974 to 2021

1.5. Actual or planned geographic coverage of the data:

W: -83.6941, E: -78.7257, N: 43.25001, S: 41.27321

Bounding box for the Great Lakes Lake Erie 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:

- 2022-08-01 00:00:00 - Two main sources of data were used to depict bird distribution and seasonality for the BIRDS and BIRDSPT data layers: 1) personal interviews with resource experts from the University of Minnesota, Ohio Department of Natural Resources (ODNR), New York State Department of Environmental Conservation (NYSDEC), Pennsylvania Natural Heritage Program (PNHP), U.S. Fish and Wildlife Service (USFWS), and Audubon Great Lakes and 2) numerous published and unpublished reports and datasets. Shorebirds, diving birds, gulls, terns, raptors, marsh birds, and waterfowl -- Survey data on locations of breeding, migrating, and/or wintering shorebirds, diving birds, gulls, terns, raptors, marsh birds, and waterfowl were provided by various agencies via shapefiles, spreadsheets, primary literature, and expert local knowledge, and was supplemented with information from eBird. In general, data from the various data sources were compiled and either mapped to habitat, park or refuge, or specific locations, per expert recommendations. Colonial waterbird nesting areas -- Numerous resource experts and agencies provided data sets and expert knowledge to facilitate mapping colonial nesting birds. The primary data set used was The Fourth Decadal U.S. Great Lakes Colonial Waterbird Survey (2007-2010) generated by Cuthbert and Wires from the University of Minnesota -- Twin Cities (2013). In addition, USFWS (Ottawa National Wildlife Refuge Complex) provided data from surveys conducted on West Sister Island National Wildlife Refuge (1991-2018). Additional data were provided by USFWS Division of Migratory Birds (2012 survey data) and ODNR (1991-2021). The majority of nesting colony locations were mapped as polygons. A few nest site points were included. Nesting concentrations were reported as maximum nest or nesting pair counts ("Up to XX nests" or "Up to XX pairs"). Species mapped using colonial waterbird datasets included: black-crowned night-heron, cattle egret, common tern, double-crested cormorant, great blue heron, great egret, herring gull, little blue heron, and ring-billed gull. Federally listed birds -- Piping plover (FE, SE) were mapped using nest locations provided by the University of Minnesota and ODNR and critical habitat boundaries provided by USFWS. Red knot (FT) were mapped everywhere piping plover occurs, per expert knowledge. Note that locations of nesting, wintering, and/or migratory sites, species composition within polygons, and particularly concentration values, are based on a compilation of observations made over multi-year periods and are not meant to accurately reflect 'current' conditions in the case of an event. Survey limitations and adjustments in protocols over the years, changes in shoreline

geomorphology, weather, and other ecological factors contribute to the condition of nesting colonies and migratory or other bird concentrations at any given time. Also, note that bird concentrations vary throughout the multi-month nesting, migratory, and wintering periods listed in the seasonality table. Please contact local resource experts in the event of a spill or if data are to be used for any reason other than spill planning or response. BIRDSPT - Ohio sandhill crane pairs and common tern nesting were provided by ODNR. Colonial gull nesting sites were provided by the University of Minnesota. New York bald eagle nest sites were provided by NYSDEC. Contact these agencies for more information concerning these databases.

- 2022-08-01 00:00:00 - Depending on the type of source data, three general approaches are used for compiling these data layers: 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 BIRDS and BIRDSPT 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/67685>

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.