

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:

North Carolina 2016 ESI BIRDS Polygons

1.2. Summary description of the data:

This data set contains sensitive biological resource data for wading birds, shorebirds, waterfowl, raptors, diving birds, seabirds, passerine birds, and gulls and terns in North Carolina. Vector polygons in this data set represent bird nesting, migratory staging, wintering sites, and general use areas. Species-specific abundance, seasonality, status, life history, and source information are stored in associated data tables (described below) designed to be used in conjunction with this spatial data layer. This data set is a portion of the ESI data for North Carolina. 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. See also the BIRDSPT (Bird Points) data layer for additional bird information.

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: -78.6308, E: -75.2142, N: 36.5819, S: 33.6182

This reflects the extent of all land and water features included in the overall North Carolina 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):

Process Steps:

- 2016-11-01 00:00:00 - Bird species in this feature class are included either because of their likelihood of direct or indirect impact by an oil spill or similar incident, their general rarity or imperilment, or their special protection status as threatened or endangered. Migratory or wintering concentration areas, nesting sites and colonies, and protected species are especially emphasized. Bird concentration areas depicted in this atlas are described for various groups of birds below.
- 2016-11-01 00:00:00 - Colonial waterbirds, shorebirds, and wading birds: Nesting locations for terns, gulls, shorebirds, egrets, and herons were mapped using digital polygon data obtained from North Carolina Natural Heritage Program (NC NHP) and North Carolina Wildlife Resources Commission (NC WRC). Concentration values were generalized when presented for a range of dates (10-25, or 100s, 1000s, etc.) or left blank when not available. Migratory and overwintering hotspot locations of terns and shorebirds (specifically piping plover - federally and state endangered, and red knots - federally threatened, and Wilson's plover - state conservation concern) were mapped using survey data provided by NC Audubon, NC NHP, NC WRC, U.S. Fish and Wildlife Service (USFWS), and expert opinion. Concentration values, when presented, represent ranges or generalized values.
- 2016-11-01 00:00:00 - Marsh obligate species: Salt and freshwater marshes are ranked as highly sensitive to oiling due to their biological productivity and the tendency for oil to persist based on low relative exposure to wind/wave energy and the difficulties associated with human cleanup activities. Marshes are extremely valuable for a suite of bird species in the region including rails, bitterns, and marsh obligate passerines, and should be prioritized for protection wherever they exist. Due to the difficulties of surveying in these areas, and in an effort to highlight specific known nesting occurrences, we only mapped nesting locations from NC NHP and NC WRC nesting survey data. General distributions based on habitat associations were not mapped as they have been in the past. Therefore, an absence of a polygon in a region does not mean a species will not be present in the event of a spill.
- 2016-11-01 00:00:00 - Waterfowl: The large bays, estuaries and fringing wetland habitat that characterize coastal North Carolina support large numbers of wintering and migrating waterfowl. Similar to most states along the Atlantic Flyway, North Carolina collects yearly aerial survey data in mid-winter to identify the habitats needed to support these large influxes of waterfowl. Mid-winter aerial survey data from 2011-2015 was provided by NC WRC and used in this update. Based on consultation with resource experts, winter waterfowl distributions were mapped to the predefined unit boundaries themselves rather than interpolating species/unit counts to suitable habitat within each unit. In an effort to reduce complexity and place an emphasis on the overall number of individuals utilizing a

particular region, we chose to only map species that contained 100 or more individuals per survey area. Counts of species that did not meet this threshold within a surveyed area were aggregated together and displayed as wintering "waterfowl". This method reduces clutter on the map while still placing an emphasis on the regions providing critical over-wintering waterfowl habitat. Concentration values, when populated, indicate a generalized maximum yearly count for that species and unit (100s, 1,000s, 10,000s, etc.). Additional areas providing critical foraging habitat and refuge areas for migrating and wintering waterfowl were mapped using data from the Atlantic Coast Joint Venture - Waterfowl Implementation Plan, North Carolina Gameland designations, and expert knowledge. Generalized nesting locations for resident waterfowl species were obtained from expert knowledge. Similar to other marsh obligate nesting birds, the difficult nature of surveying in marsh habitat resulted in nesting waterfowl distributions in the area to be underrepresented. Resident populations of waterfowl depend heavily on salt and freshwater marshes (American black duck, blue-winged teal and gadwall) and freshwater swamps and surrounding upland forests (wood duck) for breeding and therefore could be present within this habitat during the spring and summer breeding months. For the purposes of this feature class, typical nesting habitat within survey units expected to hold the largest aggregations of nesting waterfowl were selected and mapped as "GENERAL DISTRIBUTION" polygons with the breeding months indicated in the seasonal presence attributes.

- 2016-11-01 00:00:00 - Raptors: Nesting locations for bald eagles (state threatened), osprey, and northern harriers were mapped using data from the NC NHP. Wintering locations and migratory stopover concentrations for the aforementioned species as well as peregrine falcons and short-eared owls were also mapped using data from NC NHP.
- 2016-11-01 00:00:00 - Seabirds: No pelagic seabirds nest within the AOI but certain species use the offshore region depicted within the atlas. The Gulf Stream waters travel close to the coast of North Carolina off the tip of Cape Hatteras. As stated in the North Carolina Important Bird Area (NC IBA) report, this area "has the greatest diversity of seabirds and marine mammals in the southeastern United States." In addition to the diversity supported in the offshore regions of North Carolina, the NC IBA report also stresses that this region may support a globally significant proportion of black-capped and Bermuda petrels. High use seabird areas depicted in this atlas were mapped primarily using data from these NC IBA designations. Although a few areas are depicted as having higher than average densities of seabirds, all offshore waters in North Carolina will support some level of seabirds and sea ducks in all months of the year and should be considered highly sensitive to oil spills.
- 2016-11-01 00:00:00 - Rare, threatened and endangered passerines: Nesting location of rare, threatened or endangered passerines were included as polygons even when hydrographically removed from large waterbodies in an effort to make this regional update more usable in an all-hazards context. These data were obtained from the NC NHP database. These species are not generally thought of as

at risk from an oil spill itself but their listing status should be taken into consideration when conducting cleanup operations in the vicinity of known nesting locations.

- 2016-11-01 00:00:00 - 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 data layer are made based on the recommendations of the resource experts 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
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 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/40425>

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:

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.