

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:

Maine and New Hampshire 2016 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 Maine and New Hampshire. 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 below) designed to be used in conjunction with this spatial data layer. This data set is a portion of the ESI data for Maine and New Hampshire. 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: -71.0981, E: -66.8576, N: 45.1917, S: 42.8061

This reflects the extent of all land and water features included in the overall Maine and New Hampshire 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:

- 2016-01-01 00:00:00 - All of the digital polygon source data received from New Hampshire (NH) and Maine for birds were edited as needed to match the NOAA ESI Shoreline layer included in this atlas. Major sources for bird concentration areas and seasonality depicted in this data include the Maine Department of Inland Fisheries and Wildlife (MDIFW) and New Hampshire Audubon. Pamela Hunt, Senior Biologist with New Hampshire Audubon, and NH Important Bird Area (IBA) Coordinator, provided specific locations of nesting sites, concentration areas, and general distribution notes for 96 species of birds. NH Important Bird Areas within this atlas include Great Bay, Hampton/Seabrook Estuary, Isles of Shoals, and Pease Grasslands. Dr. Adrienne Kovach, UNH, provided additional nesting information on the Salt Marsh Sparrow (*Ammodramus caudacutus*) and Nelson's Sparrow (*Ammodramus nelsoni*). Dr. James Coyer, UNH provided additional information on bird concentrations on the Isles of Shoals. Piping Plover (*Charadrius melodus*) and Least Tern (*Sterna antillarum*) nesting, feeding, and brood-rearing areas, as well as Roseate Tern (*Sterna dougallii*) nesting areas, are identified and mapped as Essential Habitat by the Maine Department of Inland Fisheries and Wildlife (MDIFW). These data are provided by the MDIFW solely for individual use or the use of a company or agency for the purpose stated. Boundaries may change as additional survey data become available. The designation of essential habitats is an ongoing process, where sites may be added, deleted and/or revised following public rulemaking. As a result, information and maps will be periodically updated. To be certain the most current essential habitat maps and documents are consulted, users are advised to carefully monitor update notices and version dates. Landowners, project planners, municipalities or state agencies considering a project in or near an Essential Habitat should immediately contact an MDIFW Regional Wildlife. (Citation: BIRD LOCATIONS IN NEW HAMPSHIRE)

- 2016-01-01 00:00:00 - This data includes "High Value Habitat Areas for Harlequin Ducks in Maine" from MDIFW's "Endangered, Threatened, & Special Concern" (ETSC) observations database. Because this is a state listed Threatened Species and there are less than 2,000 Harlequins wintering in Maine, the Harlequin Dataset includes all sites where Harlequins were documented during the coast wide survey conducted in 2008 and the most recent survey of the core wintering area (outer Penobscot and Jericho Bays) conducted in March 2012. Intended use is to protect these habitats from degradation from oil spill, development projects and impacts from associated human activities. (Citation: HARLEQUINDUCKS2015 (HIGH VALUE HABITAT AREAS FOR HARLEQUIN DUCKS IN MAINE))

- 2016-01-01 00:00:00 - This data also includes the "NRPA-Protected Inland Waterfowl/Wading Bird Habitats" layer representing Inland Waterfowl/Wading bird Habitat (IWWH), a Significant Wildlife Habitat defined under Maine's Natural

Resources Protection Act (NRPA; <http://www.maine.gov/dep/blwq/docstand/nrpapage.htm>). IWWHs with a high or moderate rating meet the Significant Wildlife Habitat definition and are protected under NRPA. Low-rated IWWHs are NOT included in this layer because they do not meet the definition and are not protected under NRPA. Boundaries and attributes of polygons in organized townships were updated in 2008 by MDIFW staff using recent (2001-2007), high-resolution (≤ 1 m), color orthoimagery. For most polygons, multiple images from different years and seasons were used. Polygons in unorganized townships were mapped by MDIFW regional staff in the 1990s from lower-resolution orthoimagery, various wetland data sets, and field visits or via an automated process developed by Heather Rustigian and William Krohn (USGS Biological Resources Division) using statewide digital NWI (National Wetlands Inventory) data, aerial imagery, and hydrology data. Each IWWH boundary includes a 250-foot upland zone around the wetland perimeter. Upland zones were edited to exclude areas of intensive development, slivers crossing major roads into non-wetland habitat, and shorelines >250 feet from a vegetated, non-forested wetland on Great Pond. Changes to polygon boundaries and IWWH ratings are occasionally made based on a field visit by an MDIFW regional biologist. The last such modification was made 2012-08-22. (Citation: IWWH (NRPA-PROTECTED INLAND WATERFOWL / WADING BIRD HABITATS))

- 2016-01-01 00:00:00 - Also included are MDIFW's "High Value Habitat Areas for Purple Sandpipers in Maine" data which is based on a subset of habitat areas for Purple Sandpipers (*Calidris maritima*) from MDIFW's "Endangered, Threatened, & Special Concern" (ETSC) data. This dataset represents a subset of Purple Sandpiper wintering areas documented during a coast wide systematic survey effort conducted between 2001 and 2007. Areas selected for this dataset represents all sites with documented use by flocks of 100 or more Purple Sandpipers. This dataset does not include areas with documented use of less than 100 Purple Sandpipers. This subset represents 124 Purple Sandpiper areas out of a total of 380 areas with documented use by Purple Sandpipers. (Citation: PURPLESANDPIPERS2015 (HIGH VALUE HABITAT AREAS FOR PURPLE SANDPIPERS IN MAINE))

- 2016-01-01 00:00:00 - Also included are MDIFW's "NPRA - Significant Shorebird Wildlife Habitat" data which includes surveyed species for mapping Significant Wildlife Habitat under the Maine Natural Resources Protection Act. Polygons have been modified by MDIFW to better align habitat boundaries with natural features based on high resolution, low tide imagery from Maine DMR. (Citation: SHOREBIRD_2015 (NPRA - SIGNIFICANT SHOREBIRD WILDLIFE HABITAT))

- 2016-01-01 00:00:00 - Also included is the MDIFW's 2015 "NPRA - Significant Wading Bird Colony Habitat" data which represent wading bird colonies that have been active in recent years (2009-2013). These wading bird colonies contain nesting pairs of one or more of the following species: great blue heron (*Ardea Herodias*), black-crowned night-heron (*Nycticorax nycticorax*), snowy egret (*Egretta thula*), great egret (*Ardea alba*), little blue heron (*Egretta caerulea*), and glossy ibis (*Plegadis falcinellus*). The layer was created from aerial survey or ground survey

data. The polygons primarily include the island on which the birds are nesting. The one exception is Seven-hundred Acre Island in Islesboro, which was created by only capturing the colony and the two nearby coves and corresponding shoreline. (Citation: WADINGBIRDCOLONIES2015 (NRPA - SIGNIFICANT WADING BIRD COLONY HABITAT))

- 2016-01-01 00:00:00 - Also included is the MDIFW's 2015 "High Concentration Areas of Winter Waterfowl" layer which is based on annual mid-winter waterfowl inventory data from 2003-2013 to determine areas along the Maine coast that support high concentrations of wintering waterfowl. Mid-winter survey sub-sections (minus land area) were used as area units. Point data from the mid-winter inventory was spatially joined to the survey sub-section polygons (minus the land area) and the number of ducks per unit area was calculated. The resulting polygons were converted to a raster format, using the "DucksPerSquareMile" attribute as the raster value. A separate raster layer was completed for each year from 2003-2013. The "Raster Calculator" tool in ArcGIS was then used to get the average ducks per unit area for the 10 year period. The raster was then classified using "natural breaks" and the two highest categories were subsequently reclassified into a new raster layer. This final layer represents areas that had an average of between 149-421 ducks per square mile from 2003-2013. (Citation: WINTERWATERFOWL2015 (HIGH CONCENTRATION AREAS OF WINTER WATERFOWL))

- 2016-01-01 00:00:00 - Also included is the MDIFW's "Rafting Bird Concentration Areas" data which are based on data collected by MDIFW staff in cooperation with the U.S. Fish and Wildlife Service (USFWS). The data are from aerial surveys of coastal waterbirds conducted over several seasons from 2000 through 2004. Winter data were obtained from coastal mid-winter waterfowl surveys of 2004. Bird counts were combined with vulnerability rankings to calculate a density number in order to pinpoint the most important rafting bird habitat areas. Density contours were plotted, and areas with numbers indicating concentrations of 200 or more individuals are shown on the maps. (Citation: RAFTINGBIRDS (RAFTING BIRD CONCENTRATION AREAS))

- 2016-01-01 00:00:00 - Also included are MDIFW's Bald eagle (*Haliaeetus leucocephalus*, Maine Species of Special Concern) nest sites in Maine which are mapped as Essential Habitat by the MDIFW. The 2005 data set consists of polygons representing quarter mile circular buffer around bald eagle nests. (Citation: ETSC (ENDANGERED, THREATENED, OR SPECIES OF CONCERN))

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/40368>

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.