

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:

Georgia 2015 ESI BIRD Polygons, Points

### 1.2. Summary description of the data:

This feature class resides within the BIOLOGY Feature Data Set of the Georgia - 2015 ESI Geodatabase. It contains sensitive biological resource data for wading birds, shorebirds, waterfowl, raptors, diving birds, seabirds, passerine birds, and gulls and terns in Georgia. Vector polygons in this data set represent bird nesting, migratory staging, and wintering sites. Vector points in this data set represent wading bird and wood stork (federally threatened, state endangered) colonies. Species specific abundance, seasonality, status, life history, and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the ESI data for Georgia. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data 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:

2014 to 2015

### 1.5. Actual or planned geographic coverage of the data:

W: -81.8341, E: -80.62, N: 32.3516, S: 30.66

This reflects the extent of all land and water features included in the overall Georgia 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):*

Lineage Statement:

Three main sources of data were used to depict bird distribution and seasonality for these data layers (BIRDS and BIRDSPT): 1) personal interviews with resource experts from Georgia Department of Natural Resources, Wildlife Resources Division (GADNR WRD) and U.S. Fish and Wildlife Service (USFWS); 2) published and unpublished reports; and 3) digital/tabular datasets provided by GADNR and USFWS.

Process Steps:

- 2015-06-01 00:00:00 - Breeding shorebirds, diving birds, gulls and terns: Locations of breeding shorebirds, diving birds, and terns were provided by GADNR from survey data and expert knowledge for the following species: brown pelican, black skimmer, gull-billed tern (state threatened), laughing gull, least tern (provided by the National Park Service for Cumberland Island only), royal tern, sandwich tern, American oystercatcher, black-necked stilt, willet, and Wilson's plover (state threatened). Point data was converted to polygons by associating points to sections of the coast (i.e., shell rakes, beaches, and small coastal islands) and creating a 50m onshore/offshore buffer, which in some areas was extended to include ESI polygons 7 and 9A per expert instruction.

- 2015-06-01 00:00:00 - Migrating, roosting, and wintering shorebirds, diving birds, wading birds, gulls, and terns: Sources used to map migrating, roosting, and wintering shorebirds, diving birds, and terns were provided by USFWS Integrated Waterbird Monitoring and Management (IWMM) project surveys and expert knowledge from GADNR WRD. IWMM surveys provided simple counts for impoundments from 2010 to 2012. GADNR WRD Nongame Conservation provided mid-winter shorebird surveys, non-breeding American oystercatcher observations from 2010, and extensive expert knowledge. Survey areas were compiled with expert knowledge to represent different sections of the coast (i.e., shell rakes, beaches, and small coastal islands) with a 50m onshore/offshore buffer, which in some areas was extended to include ESI polygons 7 and 9A per expert instruction. The maximum count across all survey years was used as an initial filter for the inclusion of species and concentrations from the IWMM data and GADNR 2012-2015 mid-winter shorebird surveys into a given RAR. Species counts less than 100 were combined into a more general grouping (e.g. shorebirds, gulls, terns, etc.), while those equal to or greater than 100 have been listed by species. Counts were binned into 10s, 100s, 1,000s, or 10,000s. Federal and state listed threatened and endangered species and state listed rare species from these data are qualified as having a "vulnerable occurrence" in all areas where they occur in low numbers and "concentration area" in areas where numbers were highest. Roseate spoonbill nesting and roosting occurrences have been mapped based on expert knowledge from GADNR WRD Nongame Conservation. These occurrences are described by the

mapping qualifiers "NESTING" and "ROOSTING" as appropriate.

- 2015-06-01 00:00:00 - Wetland associated waterfowl: Waterfowl data were mapped from USFWS 2010-2014 mid-winter waterfowl surveys and expert knowledge from GADNR WRD. Survey blocks were divided into two zones: 1) lower rivers and sounds and 2) saltwater and brackish creeks. The delineation between the two zones was based off the shapefile of the Ecological Monitoring Trawl Survey (EMTS) zones, which were defined by GADNR Coastal Resources Division biologists through field knowledge, tidal nodes, and historical classification. A third set of zones was added based on observations from GADNR WRD Game Management and 2010-2012 IWMM survey data and represents important freshwater and saltwater impoundments for waterfowl. For reporting species and concentrations, species counts less than 100 were combined into a more general grouping (e.g., dabbling ducks, diving ducks, etc.), while those with counts equal to or greater than 100 have been listed by species. Counts were binned into 10s, 100s, 1,000s, or 10,000s. Species were assigned to a specific zone and concentrations of species or species groups were adjusted per expert opinion. Nesting distributions of waterfowl were determined using species' presence recorded from USFWS mid-winter waterfowl surveys and GADNR expert knowledge.

- 2015-06-01 00:00:00 - Atlantic Ocean seabirds: Distributions of nearshore and offshore pelagic birds, gulls, terns, diving birds, and alcids in the Atlantic Ocean were acquired from discussions with resource experts, reports, and survey data. Alcids, diving birds, gulls, terns (except black tern), and northern gannet were mapped based on compiled survey data from USFWS that included USFWS Atlantic Coast Wintering Sea Duck Surveys (ACWSD; preliminary survey in 2008, full surveys 2009-11) and USFWS Atlantic Marine Assessment Program for Protected Species (AMAPPS) seabird surveys (preliminary survey in 2010, full-coast surveys in summer 2011, spring and fall 2012, winter 2014). Based on expert advice, data were first grouped into two offshore polygons (0-8 nautical miles [nm] from shore and 0-12 nm offshore). Species and species groups were placed into respective polygons based on their frequency of occurrence in these areas. Rafting scoters, scaup, and canvasback locations represent a compilation of observations from ACWSD and AMAPPS surveys and expert knowledge from GADNR WRD Game Management. Nearshore species and species groups were mapped within 1 nm from the shore based on USFWS 2005-2014 mid-winter waterfowl surveys and expert knowledge from GADNR WRD Game Management. Pelagic birds (except northern gannet), black tern, and phalaropes were mapped based on information from Wigh (2007) and Beaton et al. (2003).

- 2015-06-01 00:00:00 - Bald eagle: Bald eagle (state threatened) nest locations were mapped based on 2010-2015 nesting survey data provided by GADNR WRD, Nongame Conservation. To mask the exact location, a randomized geographic shift was applied to nesting points within 50-100m of the original nest location. Shifted points were given a 250m polygonal buffer, which were then mapped. Overlapping buffers were merged to represent a single nest site per expert instruction. The display of this data does not imply that areas reflect current nest locations, but

rather are to be used as a guide to what has been observed over recent years (2010-2015).

- 2015-06-01 00:00:00 - Secretive marsh birds: Distributions of clapper rail, king rail, least bittern, and seaside sparrow were provided by GADNR WRD Nongame Conservation. Nesting areas for clapper rail and seaside sparrow were based on preliminary model results showing areas of higher presence for these species ( Elizabeth A. Hunter, M.S. thesis [in preparation]).

- 2015-06-01 00:00:00 - Wading birds and wood stork colonies (BIRDSPT): This process step was used to create the BIRDSPT (Birds Points) data layer. Two main sources were used to map wading bird and wood stork (federally threatened, state endangered) colonies, provided by Georgia Department of Natural Resources, Wildlife Resources Division (GADNR WRD) Nongame Conservation. Locations of wood stork (federally threatened, state endangered) colonies were mapped as points based on aerial surveys from 2004-2014. Wood stork nest counts reflect the maximum number of nests observed in the survey period. Wading bird colony locations represent those locations tracked by GADNR in 2013. The display of these data does not imply that points reflect current nest locations or counts, but rather points are best used as a guide to what species could be present and what counts have been observed at colonies over recent years (2004-2014). Wading bird and diving bird species that may be present at these locations include: doubled-crested cormorant, anhinga, great blue heron, snowy egret, little blue heron, tri-colored heron, cattle egret, black-crowned night heron, and white ibis. Wood stork and wading bird nest sites with the same site name were interpreted as a single location and have been shown as a single point. (Citation: WOOD STORK BREEDING SURVEYS)

- 2015-06-01 00:00:00 - The above digital and/or hardcopy sources and process steps were used by the project biologist to create the BIRDS (Birds Polygons) and BIRDSPT (Birds Points) 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 1:24,000 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/55537>

**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-](https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf)

[Data\\_Documentation\\_v1.pdf](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](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.*