

South Carolina: ANNO (Annotation Points)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: ANNO (Annotation Points)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains vector points representing the location of annotation text produced as part of the Environmental Sensitivity Index (ESI) for South Carolina. This data set comprises a portion of the ESI data for South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Currentness_Reference:

The data were compiled during 2015. The currentness date for this data is 2015 and is documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Annotation

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations)

provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent point annotation for the South Carolina ESI atlas.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The ANNO data set was developed from pre-existing digital data and reflects the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. GEOLOGICAL SURVEY (USGS) NATIONAL GEOSPATIAL PROGRAM

Publication_Date: 2015

Title: USGS TNM GEOGRAPHIC NAMES INFORMATION SYSTEM (GNIS)

Geospatial_Data_Presentation_Form: SPREADSHEET

Online_Linkage: <http://viewer.nationalmap.gov/viewer/>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2015

Ending_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ANNO INFORMATION

Process_Step:

Process_Description:

The annotation points were generated from a subset of USGS GNIS data describing Geographic, Hydrographic, and Human-use features for the ESI study area. 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 ANNO data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity point

Point_and_Vector_Object_Count: 2186

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, relational attribute or data tables are used to store information in the ESI data structure. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure. This particular geographic data layer (ANNO) does not link to other ESI tables.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: ANNO

Entity_Type_Definition:

The ANNO table contains attribute information for the vector points representing the location of GNIS derived annotation.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TYPE

Attribute_Definition: Type of annotation feature.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GEOG

Enumerated_Domain_Value_Definition: Geography annotation (e.g. islands or points).

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HYDRO

Enumerated_Domain_Value_Definition:

Hydrography annotation (e.g. inlets, rivers, ponds, lakes, bays, oceans, & coves).

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOC

Enumerated_Domain_Value_Definition:

Human-use annotation (e.g. beaches, wildlife reserves & preserves, state

& country, marine sanctuaries, cities, & parks).
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NAME
Attribute_Definition: Name of the annotated feature.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508
Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: AOI (AOI Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: AOI (AOI Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains vector polygons representing the boundaries of all digital data produced as part of the Environmental Sensitivity Index (ESI) for South Carolina. This data set comprises a portion of the ESI data for South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness date for this data is 2014 and is documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute

accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent the digital data extent for all data produced as part of the South Carolina ESI atlas.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The AOI data set was developed from pre-existing digital data and reflects the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: RESEARCH PLANNING, INC. (RPI)

Publication_Date: 2014

Title: ESI SHORELINE BOUNDARY AND PRINTING INDEX

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Source_Scale_Denominator: 45000

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: AOI INFORMATION

Process_Step:

Process_Description:

An initial shoreline was created by pairing the National Oceanic and Atmospheric Administration (NOAA) Continually Updated Shoreline Product (CUSP) (2001-2013) with all adjacent salt marsh habitats from the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) dataset (1973-2007). The boundaries of the Area of Interest (AOI) were established by buffering approximately 5 miles inshore of this shoreline. The offshore extent of the AOI extends to the territorial waters boundary.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 1

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, relational attribute or data tables are used to store information in the ESI data structure. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure. This particular geographic data layer (AOI) does not link to other ESI tables.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: AOI

Entity_Type_Definition:

The AOI table contains attribute information for the vector polygons representing the boundaries of the maps and/or digital data boundaries used in the creation of the ESI atlas.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TILE_NUMBER

Attribute_Definition:

The TILE_NUMBER contains the map number according to the specified layout of the atlas.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 1

Attribute:

Attribute_Label: NAME

Attribute_Definition: USGS Quad name or a descriptive name of region covered.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: The map production scale denominator.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 24000
Enumerated_Domain_Value_Definition: Scale = 1:24,000
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: PAGESIZE

Attribute_Definition:

PAGESIZE contains the value of the width and height of the map in the final map product.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: VIEW_PDF

Attribute_Definition: Link to ESI PDFs on the NOAA server.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats

include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508
Metadata_Review_Date: 201508
Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager
Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: BIRDS (Bird Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: BIRDS (Bird Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for wading birds, shorebirds, waterfowl,

raptors, diving birds, seabirds, passerine birds, and gulls and terns in South Carolina. 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 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 South Carolina. 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. See also the BIRDSPT data layer, part of the larger South Carolina ESI database, for additional bird information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1993

Ending_Date: 2015

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1993 to 2015 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources
Theme_Keyword: Oil spill planning
Theme_Keyword: Coastal Zone Management
Theme_Keyword: Wildlife
Theme_Keyword: Bird

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge, available hardcopy documents, survey data, maps, and digital data on bird nesting, wintering, migratory staging and other spatial/temporal concentration areas. See also the BIRDSPT data layer, part of the larger South Carolina ESI database, for additional bird information. These data do not necessarily represent all bird occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 8, Double-crested cormorant, *Phalacrocorax auritus*; 11, Tundra swan, *Cygnus columbianus*; 12, Canada goose, *Branta canadensis*; 14, Greater white-fronted goose, *Anser albifrons*; 15, Snow goose, *Chen caerulescens*; 16, Mallard, *Anas platyrhynchos*; 17, Northern pintail, *Anas acuta*; 18, Green-winged teal, *Anas crecca*; 20, Northern shoveler, *Anas clypeata*; 21, Canvasback, *Aythya valisineria*; 23, Lesser scaup, *Aythya affinis*; 26, Bufflehead, *Bucephala albeola*; 33, Red-breasted merganser, *Mergus serrator*; 34, American coot, *Fulica americana*; 45, Common tern, *Sterna hirundo*; 60, Red knot, *Calidris canutus*; 76, Bald eagle, *Haliaeetus leucocephalus*; 86, Least tern, *Sterna antillarum*; 87, Little blue heron, *Egretta caerulea*; 88, Great egret, *Ardea alba*; 89, Snowy egret, *Egretta thula*; 115, White ibis, *Eudocimus albus*; 118, Brown pelican, *Pelecanus occidentalis*; 124, Redhead, *Aythya americana*; 125, Clapper rail, *Rallus longirostris*; 132, Wood stork, *Mycteria americana*; 133, Black skimmer, *Rynchops niger*; 134, Gull-billed tern, *Gelochelidon nilotica*; 135, Sandwich tern, *Thalasseus sandvicensis*; 137, Royal tern, *Thalasseus maximus*; 138, Forster's tern, *Sterna forsteri*; 148, Ruddy duck, *Oxyura jamaicensis*; 150, Black rail, *Laterallus jamaicensis*; 152, American oystercatcher, *Haematopus palliatus*; 153, Piping plover, *Charadrius melodus*; 154, Wilson's plover, *Charadrius wilsonia*; 155, Willet, *Tringa semipalmata*; 162, Gadwall, *Anas strepera*; 167, Northern gannet, *Morus bassanus*; 169, American wigeon, *Anas americana*; 178, Least bittern, *Ixobrychus exilis*; 179, Pied-billed grebe, *Podilymbus podiceps*; 180, Ring-necked duck, *Aythya collaris*; 184, King rail, *Rallus elegans*; 185, American bittern, *Botaurus lentiginosus*; 186, American black duck, *Anas rubripes*; 190, Blue-winged teal, *Anas discors*; 191, Wood duck, *Aix sponsa*; 192, Common

moorhen, Gallinula chloropus; 198, Hooded merganser, Lophodytes cucullatus; 210, Marbled godwit, Limosa fedoa; 211, Mottled duck, Anas fulvigula; 217, Mute swan, Cygnus olor; 266, Black-bellied whistling-duck, Dendrocygna autumnalis; 277, Seaside sparrow, Ammodramus maritimus; 278, Saltmarsh sparrow, Ammodramus caudacutus; 299, Scaup, Aythya spp.; 301, Mergansers, n/a; 302, Scoters, Melanitta spp.; 326, Jaegers, Stercorarius spp.; 396, Phalaropes, Phalaropus spp.; 462, Loons, Gavia spp.; 603, Black-capped petrel, Pterodroma hasitata; 734, Nelson's sparrow, Ammodramus nelsoni; 906, Common gallinule, Gallinula galeata; 1001, Gulls, n/a; 1002, Shorebirds, n/a; 1003, Waterfowl, n/a; 1004, Wading birds, n/a; 1006, Diving birds, n/a; 1008, Terns, n/a; 1009, Shearwaters, n/a; 1013, Dabbling ducks, n/a; 1014, Diving ducks, n/a; 1024, Alcids, n/a; 1041, Storm-petrels, n/a.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy, or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: CELY, J.E., D.P. FERRAL, AND B.A. GLOVER

Publication_Date: 1993

Title: MARSH BIRD SURVEY - FINAL REPORT

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details:

COOPERATIVE PUBLICATION OF U.S. FISH AND WILDLIFE SERVICE
AND SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1993

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: COASTAL CAROLINA UNIVERSITY - CHRIS HILL
Publication_Date: 2015
Title: SEASIDE SPARROW BREEDING AND WINTERING
Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: EBIRD
Publication_Date: 2015
Title:
EBIRD: AN ONLINE DATABASE OF BIRD DISTRIBUTION AND
ABUNDANCE [WEB APPLICATION]
Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: ACCESSED FEBRUARY 2, 2015
Online_Linkage: <http://www.ebird.org>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1995

Ending_Date: 2005

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

GEORGIA DEPARTMENT OF NATURAL RESOURCES (GADNR) - TIM
KEYES, WILDLIFE BIOLOGIST

Publication_Date: 2014

Title: SEABIRD NESTING COLONIES

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MADDOCK, SIDNEY , MELISSA BIMBI, AND WALKER GOLDER

Publication_Date: 2013

Title: SOUTH CAROLINA SHOREBIRD PROJECT: FINAL REPORT

Geospatial_Data_Presentation_Form: DOCUMENT

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: NATIONAL AUDUBON SOCIETY

Publication_Date: 2015

Title: THE CHRISTMAS BIRD COUNT HISTORICAL RESULTS [ONLINE]

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: ACCESSED JUNE 10, 2015

Online_Linkage: <http://www.christmasbirdcount.org>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2004

Ending_Date: 2015

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: POST, WILLIAM AND CAROL A. SEALS

Publication_Date: 2000

Title:

BREEDING BIOLOGY OF THE COMMON MOORHEN IN AN IMPOUNDED
CATTAIL MARSH

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details:

JOURNAL OF FIELD ORNITHOLOGY, VOL. 71, NO. 3 (SUMMER, 2000), PP.
437-442. ACCESSED MARCH 27, 2015

Online_Linkage: <http://www.jstor.org/stable/4514506>

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: ROBERT A. KENNAMER, SAVANNAH RIVER ECOLOGY
LABORATORY (SREL)

Publication_Date: 1997

Title:

HOODED MERGANSERS BREEDING IN THE UPPER COASTAL PLAIN OF
SOUTH CAROLINA

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: AIKEN, SOUTH CAROLINA

Publisher: SAVANNAH RIVER ECOLOGY LABORATORY

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1997

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: RUSS WIGH

Publication_Date: 2007

Title: A REVIEW OF BIRD SPECIES ON THE SOUTH ATLANTIC BIGHT

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2007

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR) ,
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES - CHRISTINE
HAND

Publication_Date: 2015

Title: WADING BIRD AND MARSH BIRD SEASONALITIES

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR) ,
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES - DEAN
HARRIGAL

Publication_Date: 2015

Title: WATERFOWL LOCATION AND SEASONALITIES FOR SOUTH
CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR) ,
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES - FELICIA
SANDERS

Publication_Date: 2014

Title: LOCATIONS AND SEASONALITIES OF SENSITIVE SHOREBIRD
SPECIES

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2003

Title: 2002 AMERICAN OYSTERCATCHER STATEWIDE WINTER SURVEYS

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2002
Ending_Date: 2003

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES
Publication_Date: 2008
Title: 2008 AMERICAN OYSTERCATCHER STATEWIDE BREEDING PAIRS
SURVEY
Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2008
Ending_Date: 2008

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES
Publication_Date: 2012
Title: 2012 WILSON'S PLOVERS BREEDING SURVEY
Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2009

Ending_Date: 2012

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2013

Title: 2011-2013 SEABIRD NESTING COLONY SURVEYS

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2014

Title: 2014 SOUTH CAROLINA BALD EAGLE SURVEY

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2013

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2014

Title: BALD EAGLE NEST LOCATIONS AND SEASONALITY

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2013

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2014

Title: SOUTH CAROLINA MID-WINTER SHOREBIRD SURVEYS

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2014

Title: WADING BIRD ROOKERY SURVEYS

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2014

Title: WOODSTORK ROOKERY SURVEYS

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
DIVISION OF WILDLIFE AND FRESHWATER FISHERIES

Publication_Date: 2015

Title: WADING BIRD AND RAIL SEASONALITIES

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. FISH AND WILDLIFE (USFWS), MIGRATORY BIRD PROGRAM,
ATLANTIC COAST JOINT VENTURE

Publication_Date: 2014

Title:

DATA COMPILATION FROM USFWS ATLANTIC COAST WINTERING
DUCK SURVEYS (2008-11), USFWS SEABIRD SURVEYS (2010-11,2014),

AND NOAA ATLANTIC MARINE ASSESSMENT PROGRAM FOR
PROTECTED SPECIES SURVEYS (2010-2014)
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2008
Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. FISH AND WILDLIFE SERVICE (USFWS) , ECOLOGICAL SERVICES -
MELISSA BIMBI

Publication_Date: 2014

Title: SEASONALITY AND LOCATIONS OF PIPING PLOVER IN SOUTH
CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. FISH AND WILDLIFE SERVICE (USFWS), DIVISION OF MIGRATORY
BIRD MANAGEMENT

Publication_Date: 2014

Title: GEORGIA AND SOUTH CAROLINA MID-WINTER WATERFOWL
SURVEYS

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2005

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. FISH AND WILDLIFE SERVICE (USFWS)- REGION 3, DIVISION OF
BIOLOGICAL RESOURCES

Publication_Date: 2012

Title: INTEGRATED WATERBIRD MANAGEMENT AND MONITORING
DATABASE

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2012

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Process_Step:

Process_Description:

Three main sources of data were used to depict bird distribution and seasonality for this data layer: 1) personal interviews with resource experts from South Carolina Department of Natural Resources (SCDNR) and U.S. Fish and Wildlife Service (USFWS); 2) published and unpublished reports; and 3) digital/tabular datasets provided by SCDNR and USFWS.

Breeding shorebirds, diving birds, gulls and terns – Survey data on locations of breeding shorebirds, diving birds, and terns were provided by SCDNR via shapefiles, spreadsheets, and expert local knowledge for the following species: American oystercatcher (state species of concern), black skimmer (state species of concern), brown pelican, gull-billed tern (state species of concern), least tern (state threatened), royal tern, sandwich tern, willet, and Wilson’s plover (state threatened). Point data were converted to polygons by associating points to sections of the coast (i.e., shell rakes, beaches, and small coastal islands) and creating a 50 m onshore/offshore buffer, which in some areas was extended to include ESI polygons 7 and 9A (exposed and sheltered tidal flats, respectively) per expert opinion. For American oystercatcher (surveyed in 2002) and Wilson’s plover (surveyed in 2012), concentration values represent the sum of all pairs from within a survey area. For seabird nesting colonies, concentration values are the maximum of nests from across survey years, 2010-2013. Migrating and wintering shorebirds, diving birds, wading birds, gulls and terns – Migrating and wintering shorebird, diving bird, and tern information was provided by USFWS Integrated Waterbird Monitoring and Management (IWMM), SCDNR shorebird project surveys, and SCDNR resource experts. IWMM surveys provided simple counts for impoundments from 2010 to 2012. SCDNR provided mid-winter shorebird surveys from 2014, non-breeding American oystercatcher observations from 2002, and expert knowledge. Red knot (federally and state threatened), piping plover (federally and state threatened), and marbled godwit were mapped based on the 2013 Shorebird Project Report published by USFWS. Survey areas were compiled to represent different sections of the coast (i.e., different beach habitats and small coastal islands). A 50 m onshore/offshore buffer was mapped along these coastal areas, and extended beyond the buffer to include ESI polygons 7 and 9A (exposed and sheltered tidal flats, respectively) per expert opinion. Based on the maximum count across survey years, shorebird counts were binned into 100s or 1,000s of birds. Federal and state threatened and endangered species and state species of special concern from IWMM data are qualified as having a “vulnerable occurrence”. Colonial wading and diving bird nesting and concentration areas – Three sources of data were used to map nesting colonial wading and diving birds. Locations of wading and diving bird nesting colonies and wood stork (federally threatened, state endangered) nesting colonies were mapped based on 2014 surveys. To mask the exact locations, a randomized geographic shift was applied to nesting points within 1-1.5 km of the original nest location. Shifted wading bird nest points were buffered by 2.5 km and wood stork nest points by 3.5 km to create a nesting polygon. Overlapping wading bird and wood stork buffers, respectively, were merged and clipped to a 50 m buffer of the shoreline. Counts were reported as the sum of wading bird or wood stork colonies that occurred within the polygon. Wading bird concentration areas reflect impoundments counted in 2010-2012 IWMM surveys. Federal and state threatened and endangered species and state species of special concern from these data are qualified as having a “vulnerable occurrence” where they occur, while other wading birds have been grouped as “wading birds”. Counts were binned into 10s, 100s, or 1,000s. Wetland associated waterfowl – Waterfowl data for South Carolina were mapped from USFWS 2010-2014 mid-winter waterfowl surveys, USFWS 2004-2015 Christmas Bird Count (CBC) data, USFWS IWMM data, and expert knowledge from SCDNR. Survey blocks were divided into three zones based on whether the habitat represented 1) lower rivers and sounds, 2) saltwater and brackish creeks and marshes, or 3) freshwater rivers, impoundments, and marshes. For reporting species and concentrations, species counts less than 10 were combined into a more general grouping (e.g. dabbling ducks, diving ducks, etc.), while those with counts equal to or greater than 10 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 during USFWS mid-winter waterfowl, IWMM, and CBC surveys alongside SCDNR expert knowledge. Nesting concentrations for waterfowl (i.e. "possible") reflect areas where species were detected during winter surveys and expert knowledge from SCDNR was used to determine nesting presence. Numbers from wintering surveys are likely underestimates, since surveys do not necessarily occur during each species' months of peak abundance. Atlantic Ocean seabirds – Distribution of nearshore and offshore pelagic birds, gulls, terns, diving birds, alcids, and waterfowl in the Atlantic Ocean, bays, and sounds were generated 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 grouped into two offshore polygons (0-5 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 and concentration values were determined through discussions with resource experts. Species in bays and sounds were mapped from SCDNR expert knowledge. Pelagic birds (except northern gannet), black tern, and phalaropes were mapped based on information from Wigh (2007) and Beaton et al. (2003). Bald eagles – Bald eagle (state threatened) nest locations were mapped based on 2013-2014 nesting survey data provided by SCDNR. The exact locations were masked with a 250 m buffer by SCDNR. The display of this data does not imply that areas mapped reflect current nest locations, but rather are to be used as a guide to what has been observed over recent years. Resource experts should be contacted in the event of a spill. Secretive marsh birds – Distributions of black rail, clapper rail, king rail, and least bittern, were provided by SCDNR. Distributions of seaside sparrow, saltmarsh sparrow, and Nelson's sparrow were based on discussions with resource experts.

The above digital and/or hardcopy sources were compiled by the project biologist to create the BIRDS data layer. 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 data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains
Point_and_Vector_Object_Count: 16251

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001
Longitude_Resolution: 0.000000001
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, BIRDS) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the [Browse_Graphic](#) section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational

database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the Detailed_Description of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIRDS

Entity_Type_Definition:

The BIRDS table contains attribute information for the vector polygons in this data set representing bird nesting, migratory staging, and wintering sites. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (1), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table. RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (1), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values, and may contain counts of individuals for each species present at a particular nesting or wintering site, or a term that describes relative abundance of birds at a particular site. The field may contain values from exact counts (e.g. XX BIRDS, XX PAIRS, or XX ADULTS), or binned counts (i.e. 10S, 100S, 1,000S, etc.). In cases where no quantitative data was available, the field may either be blank or contain descriptive terms such as "HIGH" or "POSSIBLE". Counts were derived from a variety of surveys, and may range in date (see lineage).

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING

Enumerated_Domain_Value_Definition: Calving

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY

Enumerated_Domain_Value_Definition: Colony

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA

Enumerated_Domain_Value_Definition: Concentration Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING

Enumerated_Domain_Value_Definition: Denning

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION

Enumerated_Domain_Value_Definition: General Distribution

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA

Enumerated_Domain_Value_Definition: Harvest Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT

Enumerated_Domain_Value_Definition: Haul Out

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD

Enumerated_Domain_Value_Definition: Hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE

Enumerated_Domain_Value_Definition: High Ecological Value

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION

Enumerated_Domain_Value_Definition: Migration

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING

Enumerated_Domain_Value_Definition: Nesting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA

Enumerated_Domain_Value_Definition: Nursery Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING

Enumerated_Domain_Value_Definition: Pupping

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING

Enumerated_Domain_Value_Definition: Rafting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING

Enumerated_Domain_Value_Definition: Roosting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA

Enumerated_Domain_Value_Definition: Spawning Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE

Enumerated_Domain_Value_Definition: Thermal Refuge

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE

Enumerated_Domain_Value_Definition: Vulnerable Occurrence

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING

Enumerated_Domain_Value_Definition: Wintering

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC
Enumerated_Domain_Value_Definition: Benthic
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g.

ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid
Enumerated_Domain_Value_Definition: Alcid
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian
Enumerated_Domain_Value_Definition: Amphibian
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve
Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern

Enumerated_Domain_Value_Definition: Gull or tern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert

Enumerated_Domain_Value_Definition: Invertebrate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic

Enumerated_Domain_Value_Definition: Marine benthic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic

Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee

Enumerated_Domain_Value_Definition: Manatee

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine

Enumerated_Domain_Value_Definition: Passerine bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic

Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant

Enumerated_Domain_Value_Definition: Plant

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor

Enumerated_Domain_Value_Definition: Raptor

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp

Enumerated_Domain_Value_Definition: Shrimp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake

Enumerated_Domain_Value_Definition: Snake

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC
Enumerated_Domain_Value_Definition: Benthic
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED
Entity_Type_Definition:
The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.
Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 12

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = interesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE

Attribute_Definition: Two-letter state abbreviation.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S

Attribute_Definition: State threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F

Attribute_Definition: Federal threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Experimental essential population
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM
Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM
Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: BIRDSPT (Bird Points)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: BIRDSPT (Bird Points)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for high concentrations of seaside sparrow nesting in South Carolina. Vector points in this data set represent known sites of high concentrations of nesting seaside sparrow. 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 South Carolina. 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. See also the BIRDS data layer, part of the larger South Carolina ESI database, for additional bird information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Currentness_Reference:

The data were compiled during 2015. The currentness date for this data is 2015 and is documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Bird

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical

consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge on known sites of high concentrations of nesting seaside sparrow. See also the BIRDS data layer, part of the larger South Carolina ESI database, for additional bird information. These data do not necessarily represent all bird points occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 277, Seaside sparrow, *Ammodramus maritimus*.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy, or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: COASTAL CAROLINA UNIVERSITY - CHRIS HILL
Publication_Date: 2015
Title: SEASIDE SPARROW BREEDING AND WINTERING
Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Process_Step:

Process_Description:

Data used to depict seaside sparrow nest sites were provided by Chris Hill, professor at Coastal Carolina University, and confirmed by Aaron Given, wildlife biologist of the Town of Kiawah Island. Seaside sparrow nesting sites with high concentrations of individuals were mapped based on expert knowledge.

The above digital and/or hardcopy sources were compiled by the project biologist to create the BIRDSPT data layer. 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 BIRDSPT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity point

Point_and_Vector_Object_Count: 4

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, BIRDSPT) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files

described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the Detailed_Description of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIRDSPT

Entity_Type_Definition:

The BIRDSPT table contains attribute information for the vector points in this data set representing known sites of high concentrations of nesting seaside sparrow. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (31), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table.

RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (31), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values and contains a term that describes relative abundance of birds at a particular site. Since no quantitative count data was available, the field may either be blank or contain descriptive terms, such as "HIGH."

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING
Enumerated_Domain_Value_Definition: Calving
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY
Enumerated_Domain_Value_Definition: Colony
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA
Enumerated_Domain_Value_Definition: Concentration Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING
Enumerated_Domain_Value_Definition: Denning
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION
Enumerated_Domain_Value_Definition: General Distribution
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA
Enumerated_Domain_Value_Definition: Harvest Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT
Enumerated_Domain_Value_Definition: Haul Out
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD
Enumerated_Domain_Value_Definition: Hazard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE
Enumerated_Domain_Value_Definition: High Ecological Value
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION
Enumerated_Domain_Value_Definition: Migration
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING
Enumerated_Domain_Value_Definition: Nesting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA
Enumerated_Domain_Value_Definition: Nursery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING
Enumerated_Domain_Value_Definition: Pupping
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING
Enumerated_Domain_Value_Definition: Rafting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING
Enumerated_Domain_Value_Definition: Roosting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA

Enumerated_Domain_Value_Definition: Spawning Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE

Enumerated_Domain_Value_Definition: Thermal Refuge

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE

Enumerated_Domain_Value_Definition: Vulnerable Occurrence

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING

Enumerated_Domain_Value_Definition: Wintering

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC
Enumerated_Domain_Value_Definition: Benthic
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC
Enumerated_Domain_Value_Definition: Benthic
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid
Enumerated_Domain_Value_Definition: Alcid
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian
Enumerated_Domain_Value_Definition: Amphibian
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve
Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert
Enumerated_Domain_Value_Definition: Invertebrate
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee
Enumerated_Domain_Value_Definition: Manatee
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine bird
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp

Enumerated_Domain_Value_Definition: Shrimp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake

Enumerated_Domain_Value_Definition: Snake

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the *Browse_Graphic* section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP

Attribute_Definition: September

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in September

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT

Attribute_Definition: October

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED

Entity_Type_Definition:

The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 12

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = internesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE

Attribute_Definition: Two-letter state abbreviation.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S

Attribute_Definition: State threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Experimental essential population
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F
Attribute_Definition: Federal threatened or endangered status.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on federal list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on federal list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C
Enumerated_Domain_Value_Definition: Species of Special Concern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: ESIL (Environmental Sensitivity Index Shoreline Types - Lines)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title:

South Carolina: ESIL (Environmental Sensitivity Index Shoreline Types - Lines)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains vector lines representing the ESI classified shoreline of South Carolina classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for South Carolina. 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. See also the ESIP data layer, part of the larger South Carolina ESI database, for additional ESI information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1973 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical

consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent coastal shorelines classified according to the Environmental Sensitivity Index (ESI) classification system. See also the ESIP data layer, part of the larger South Carolina ESI database, for additional ESI information.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The spatial location of the ESI shoreline was developed from pre-existing digital sources and reflects the positional accuracy of these original data. The minimum mapping unit (MMU) of the actual shoreline classification segments is estimated at 50 meters where mapping is conducted using 1:24,000 hardcopy fieldmaps. Field verification has shown that the absolute positional accuracy of breaks between shoreline ESI types with a 95-percent error bound is approximately 58 meters. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRIID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

Publication_Date: 2014

Title: ARCGIS BASEMAP WORLD IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: REDLANDS, CA

Publisher: ESRI

Online_Linkage: <http://www.esri.com/>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: GOOGLE EARTH

Publication_Date: 2014

Title: GOOGLE EARTH IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Online_Linkage: <http://www.google.com/earth/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING AERIAL IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010
Ending_Date: 2012

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: ESIL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING
Publication_Date: 2014
Title: BING BIRDSEYE
Geospatial_Data_Presentation_Form: OBLIQUE AERIAL PHOTOGRAPHY
Publication_Information:

Publication_Place: ROCHESTER, NY
Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010
Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: ESIL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S.
DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS),
NATIONAL GEODETIC SURVEY (NGS)

Publication_Date: 2013

Title:

CONTINUALLY UPDATED SHORELINE PRODUCT. SHORELINE MAPPING PROGRAM

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MARYLAND

Publisher: NOAA'S OCEAN SERVICE (NOS), NATIONAL GEODETIC SURVEY (NGS)

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2001

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2013

Title: NATIONAL WETLANDS INVENTORY (NWI) - WETLANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON D.C.

Publisher: U.S.FISH AND WILDLIFE SERVICE

Online_Linkage: <http://www.fws.gov/wetlands>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973

Ending_Date: 2007

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Process_Step:

Process_Description:

The intertidal shoreline habitats were classified based on 2010-2011 low-altitude oblique aerial photography from: BING Pictometry, 2010-2012 Bing aerial imagery, ArcGIS Basemap World Imagery, and 2012-2014 Google Earth aerial imagery. Shoreline features of 10 meters (m) or greater in length were classified. In addition, wetland polygon datasets originally created by the USFWS NWI were modified and updated to be used in conjunction with the ESI shoreline. Where necessary, multiple types were described for each shoreline segment.

The above digital and/or hardcopy sources were compiled to create the ESIL data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: 1) hardcopy maps are digitized at their source scale; 2) digital data layers are evaluated and used "as is" or integrated with the hardcopy data sources; and 3) overflight changes are digitized from the scanned and registered hardcopy field maps or aerial photography. After the initial shoreline classification, these data are edgematched and checked for logical consistency errors. Review maps are plotted at 1:24,000 scale for verification of polygonal and linear attributes. 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 ESIL data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: String

Point_and_Vector_Object_Count: 32010

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, one relational attribute or data table, SOURCES, is used to store the source data information in the ESI data structure. The geographic data layer containing resource information (in this case, ESIL) is linked to the SOURCES table using the SOURCE_ID. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: ESIL

Entity_Type_Definition:

The ESIL table contains attribute information for the vector lines representing linear shoreline features with ESI classification.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ESI

Attribute_Definition:

The item ESI contains values representing the ESI shoreline type. In many cases shorelines are ranked with multiple codes, such as "6B/3A" (listed landward to seaward from left to right). The first code, "6B", is the most landward shoreline type and the second code, "3A", is the shoreline type closest to the water. Singular shoreline types are listed below. No multiple codes are listed, but all multiple codes included in the data set can be assembled from the codes described. The ESI rankings progress from low to high susceptibility to oil spills. To determine the sensitivity of a particular intertidal shoreline habitat, the following factors are integrated: 1) Shoreline type (substrate, grain size, tidal elevation, origin); 2) Exposure to wave and tidal energy; 3) Biological productivity and sensitivity; 4) Ease

of cleanup. Prediction of the behavior and persistence of oil in intertidal habitats is based on an understanding of the dynamics of the coastal environments, not just the substrate type and grain size. The intensity of energy expended upon a shoreline by wave action, tidal currents, and river currents directly affects the persistence of stranded oil. The need for shoreline cleanup activities is determined, in part, by the slowness of natural processes in removal of oil stranded on the shoreline. The potential for biological injury, and ease of cleanup of spilled oil are also important factors in the ESI ranking. Generally speaking, areas exposed to high levels of physical energy, such as wave action and tidal currents, and low biological activity rank low on the scale, whereas sheltered areas with associated high biological activity have the highest ranking.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 1B

Enumerated_Domain_Value_Definition: Exposed, Solid Man-made Structures

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2A

Enumerated_Domain_Value_Definition: Exposed Wave-cut Platforms in Clay

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2B

Enumerated_Domain_Value_Definition: Exposed Scarps and Steep Slopes in Clay

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3A

Enumerated_Domain_Value_Definition: Fine- to Medium-grained Sand Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3B

Enumerated_Domain_Value_Definition: Scarps and Steep Slopes in Sand

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 4

Enumerated_Domain_Value_Definition: Coarse-grained Sand Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 5
Enumerated_Domain_Value_Definition: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6A
Enumerated_Domain_Value_Definition: Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6B
Enumerated_Domain_Value_Definition: Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7
Enumerated_Domain_Value_Definition: Exposed Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8A
Enumerated_Domain_Value_Definition: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8B
Enumerated_Domain_Value_Definition: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8C
Enumerated_Domain_Value_Definition: Sheltered Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9B
Enumerated_Domain_Value_Definition: Vegetated Low Banks
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B
Enumerated_Domain_Value_Definition: Freshwater Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C
Enumerated_Domain_Value_Definition: Swamps
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: LINE
Attribute_Definition: Type of geographic feature.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Shoreline
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ENVIR
Attribute_Definition: Type of regional environment.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Estuarine
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MOST_SENSITIVE
Attribute_Definition:
If multiple shoreline types appear in ESI classification, this field represents the highest value (most sensitive type); otherwise it is the same value as the ESI field.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 1B
Enumerated_Domain_Value_Definition: Exposed, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2A
Enumerated_Domain_Value_Definition: Exposed Wave-cut Platforms in Clay
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2B
Enumerated_Domain_Value_Definition: Exposed Scarps and Steep Slopes in Clay
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3A
Enumerated_Domain_Value_Definition: Fine- to Medium-grained Sand Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3B

Enumerated_Domain_Value_Definition: Scarps and Steep Slopes in Sand

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 4

Enumerated_Domain_Value_Definition: Coarse-grained Sand Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 5

Enumerated_Domain_Value_Definition: Mixed Sand and Gravel Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6A

Enumerated_Domain_Value_Definition: Gravel Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6B

Enumerated_Domain_Value_Definition: Riprap

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7

Enumerated_Domain_Value_Definition: Exposed Tidal Flats

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8A

Enumerated_Domain_Value_Definition: Sheltered Scarps in Clay or Mud

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8B
Enumerated_Domain_Value_Definition: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8C
Enumerated_Domain_Value_Definition: Sheltered Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9B
Enumerated_Domain_Value_Definition: Vegetated Low Banks
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B
Enumerated_Domain_Value_Definition: Freshwater Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C
Enumerated_Domain_Value_Definition: Swamps
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: LANDWARD_SHORETYPE

Attribute_Definition:

The numeric representation and physical description of the first (or only) ESI type found in the ESI field.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 1B: Exposed, Solid Man-made Structures

Enumerated_Domain_Value_Definition: Exposed, Solid Man-made Structures

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2A: Exposed Wave-cut Platforms in Clay

Enumerated_Domain_Value_Definition: Exposed Wave-cut Platforms in Clay

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2B: Exposed Scarps and Steep Slopes in Clay

Enumerated_Domain_Value_Definition: Exposed Scarps and Steep Slopes in Clay

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3A: Fine- to Medium-grained Sand Beaches

Enumerated_Domain_Value_Definition: Fine- to Medium-grained Sand Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3B: Scarps and Steep Slopes in Sand

Enumerated_Domain_Value_Definition: Scarps and Steep Slopes in Sand

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 4: Coarse-grained Sand Beaches

Enumerated_Domain_Value_Definition: Coarse-grained Sand Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 5: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6A: Gravel Beaches
Enumerated_Domain_Value_Definition: Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6B: Riprap
Enumerated_Domain_Value_Definition: Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7: Exposed Tidal Flats
Enumerated_Domain_Value_Definition: Exposed Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8A: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8B: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8C: Sheltered Riprap
Enumerated_Domain_Value_Definition: Sheltered Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9B: Vegetated Low Banks
Enumerated_Domain_Value_Definition: Vegetated Low Banks
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B: Freshwater Marshes
Enumerated_Domain_Value_Definition: Freshwater Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C: Swamps
Enumerated_Domain_Value_Definition: Swamps
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D: Scrub-shrub Wetlands
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEAWARD_SHORETYPE1

Attribute_Definition:

The numeric representation and physical description of the second ESI type in the ESI field (NULL if not applicable).

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 1B: Exposed, Solid Man-made Structures

Enumerated_Domain_Value_Definition: Exposed, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2A: Exposed Wave-cut Platforms in Clay
Enumerated_Domain_Value_Definition: Exposed Wave-cut Platforms in Clay
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2B: Exposed Scarps and Steep Slopes in Clay
Enumerated_Domain_Value_Definition: Exposed Scarps and Steep Slopes in Clay
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3A: Fine- to Medium-grained Sand Beaches
Enumerated_Domain_Value_Definition: Fine- to Medium-grained Sand Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3B: Scarps and Steep Slopes in Sand
Enumerated_Domain_Value_Definition: Scarps and Steep Slopes in Sand
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 4: Coarse-grained Sand Beaches
Enumerated_Domain_Value_Definition: Coarse-grained Sand Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 5: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6A: Gravel Beaches
Enumerated_Domain_Value_Definition: Gravel Beaches

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6B: Riprap
Enumerated_Domain_Value_Definition: Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7: Exposed Tidal Flats
Enumerated_Domain_Value_Definition: Exposed Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8A: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8B: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8C: Sheltered Riprap
Enumerated_Domain_Value_Definition: Sheltered Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9B: Vegetated Low Banks
Enumerated_Domain_Value_Definition: Vegetated Low Banks
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B: Freshwater Marshes
Enumerated_Domain_Value_Definition: Freshwater Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C: Swamps
Enumerated_Domain_Value_Definition: Swamps
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D: Scrub-shrub Wetlands
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEAWARD_SHORETYPE2

Attribute_Definition:

The numeric representation and physical description of the third ESI type in the ESI field (NULL if not applicable).

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 1B: Exposed, Solid Man-made Structures
Enumerated_Domain_Value_Definition: Exposed, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2A: Exposed Wave-cut Platforms in Clay
Enumerated_Domain_Value_Definition: Exposed Wave-cut Platforms in Clay
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2B: Exposed Scarps and Steep Slopes in Clay
Enumerated_Domain_Value_Definition: Exposed Scarps and Steep Slopes in Clay
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3A: Fine- to Medium-grained Sand Beaches
Enumerated_Domain_Value_Definition: Fine- to Medium-grained Sand Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3B: Scarps and Steep Slopes in Sand
Enumerated_Domain_Value_Definition: Scarps and Steep Slopes in Sand
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 4: Coarse-grained Sand Beaches
Enumerated_Domain_Value_Definition: Coarse-grained Sand Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 5: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition: Mixed Sand and Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6A: Gravel Beaches
Enumerated_Domain_Value_Definition: Gravel Beaches
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 6B: Riprap
Enumerated_Domain_Value_Definition: Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7: Exposed Tidal Flats
Enumerated_Domain_Value_Definition: Exposed Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8A: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition: Sheltered Scarps in Clay or Mud
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8B: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition: Sheltered, Solid Man-made Structures
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 8C: Sheltered Riprap
Enumerated_Domain_Value_Definition: Sheltered Riprap
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9B: Vegetated Low Banks
Enumerated_Domain_Value_Definition: Vegetated Low Banks
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B: Freshwater Marshes
Enumerated_Domain_Value_Definition: Freshwater Marshes

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C: Swamps

Enumerated_Domain_Value_Definition: Swamps

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D: Scrub-shrub Wetlands

Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GENERAL_SYMBOL

Attribute_Definition:

This field is used for symbolizing the ESI shoreline based on a generalized classification scheme; if multiple generalized types occur, this will reflect the highest value.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 5

Attribute:

Attribute_Label: GENERALIZED_ESI_TYPE

Attribute_Definition:

The numeric representation and physical description of the generalized ESI shoreline type. See the NOAA ESI Guidelines for the ESI to GENERALIZED_ESI_TYPE crosswalk.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 1: Armored

Enumerated_Domain_Value_Definition: Armored

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2: Rocky and Steep Shorelines
(Bedrock/Sand/Clay)

Enumerated_Domain_Value_Definition: Rocky and Steep Shorelines
(Bedrock/Sand/Clay)

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 3: Beaches (Sand/Gravel)

Enumerated_Domain_Value_Definition: Beaches (Sand/Gravel)

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 4: Flats (Mud/Sand)

Enumerated_Domain_Value_Definition: Flats (Mud/Sand)

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 5: Vegetated (Grass/Marsh/Mangroves/Scrub-Shrub)

Enumerated_Domain_Value_Definition: Vegetated
(Grass/Marsh/Mangroves/Scrub-Shrub)

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links to the SOURCES data table. This id indicates the source of a vector line segment.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ESI_SOURCE

Attribute_Definition:

Source identifier that links to the SOURCES data table. This id indicates the source of the ESI classification of a line segment. Vector features that were not surveyed or do not qualify for an ESI classification have a value of -1.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager
Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: ESIP (Environmental Sensitivity Index Shoreline Types - Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title:

South Carolina: ESIP (Environmental Sensitivity Index Shoreline Types - Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains vector polygons representing the coastal habitats of South Carolina classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for South Carolina. 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. See also the ESIL data layer, part of the larger South Carolina ESI database, for additional ESI information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1973 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical

consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent coastal habitats classified according to the Environmental Sensitivity Index (ESI) classification system. See also the ESIL data layer, part of the larger South Carolina ESI database, for additional ESI information.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The spatial location of the ESI shoreline was developed from pre-existing digital sources and reflects the positional accuracy of these original data. The horizontal positional accuracy of the 1:24,000 USGS topographic quads should conform to National Map Accuracy Standards at scales of 1:24,000. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

Publication_Date: 2014

Title: ARCGIS BASEMAP WORLD IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: REDLANDS, CA

Publisher: ESRI

Online_Linkage: <http://www.esri.com/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: GOOGLE EARTH

Publication_Date: 2014

Title: GOOGLE EARTH IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Online_Linkage: <http://www.google.com/earth/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING AERIAL IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2012

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING BIRDSEYE

Geospatial_Data_Presentation_Form: OBLIQUE AERIAL PHOTOGRAPHY

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S.
DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS),
NATIONAL GEODETIC SURVEY (NGS)

Publication_Date: 2013

Title:

CONTINUALLY UPDATED SHORELINE PRODUCT. SHORELINE MAPPING

PROGRAM
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: SILVER SPRING, MARYLAND
Publisher: NOAA'S OCEAN SERVICE (NOS), NATIONAL GEODETIC SURVEY (NGS)

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2001
Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: ESIP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)
Publication_Date: 2013
Title: NATIONAL WETLANDS INVENTORY (NWI) - WETLANDS
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: WASHINGTON D.C.
Publisher: U.S.FISH AND WILDLIFE SERVICE

Online_Linkage: <http://www.fws.gov/wetlands>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973
Ending_Date: 2007

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: ESIP INFORMATION

Process_Step:

Process_Description:

The intertidal shoreline habitats were classified based on 2010-2011 low-altitude oblique aerial photography from: BING Pictometry, 2010-2012 Bing aerial imagery, ArcGIS Basemap World Imagery, and 2012-2014 Google Earth aerial imagery. Shoreline features of 10 meters (m) or greater in length were classified. In addition, the wetland polygon datasets originally created by the USFWS NWI were modified and updated and included in the ESI polygon dataset.

The above digital and/or hardcopy sources were compiled to create the ESIP data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: 1) hardcopy maps are digitized at their source scale; 2) digital data layers are evaluated and used "as is" or integrated with the hardcopy data sources; and 3) overflight changes are digitized from the scanned and registered hardcopy field maps or aerial photography. After the initial shoreline classification, these data are edgematched and checked for logical consistency errors. Review maps are plotted at 1:24,000 scale for verification of polygonal and linear attributes. 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 ESIP data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 38987

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001
Longitude_Resolution: 0.000000001
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, one relational attribute or data table, SOURCES, is used to store the source data information in the ESI data structure. The geographic data layer containing resource information (in this case, ESIP) is linked to the SOURCES table using the SOURCE_ID. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: ESIP

Entity_Type_Definition:

The ESIP table contains attribute information for the vector polygons representing polygonal features with ESI classification.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ESI

Attribute_Definition: The item ESI contains values representing the ESI polygon type.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7

Enumerated_Domain_Value_Definition: Exposed Tidal Flats

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A

Enumerated_Domain_Value_Definition: Sheltered Tidal Flats
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B
Enumerated_Domain_Value_Definition: Freshwater Marshes
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C
Enumerated_Domain_Value_Definition: Swamps
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: WATER_CODE
Attribute_Definition: Specifies a polygon as either water or land.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: L
Enumerated_Domain_Value_Definition: Land
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: W
Enumerated_Domain_Value_Definition: Water
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ENVIR

Attribute_Definition: Type of regional environment.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Estuarine

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ESI_DESCRIPTION

Attribute_Definition:

The numeric representation and the physical description of the polygon's ESI type.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 7: Exposed Tidal Flats

Enumerated_Domain_Value_Definition: Exposed Tidal Flats

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 9A: Sheltered Tidal Flats

Enumerated_Domain_Value_Definition: Sheltered Tidal Flats

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10A: Salt- and Brackish-water Marshes

Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marshes

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10B: Freshwater Marshes

Enumerated_Domain_Value_Definition: Freshwater Marshes

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10C: Swamps

Enumerated_Domain_Value_Definition: Swamps

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 10D: Scrub-shrub Wetlands

Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links to the SOURCES data table. This id indicates the source of a vector line segment.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ESI_SOURCE

Attribute_Definition:

Source identifier that links to the SOURCES data table. This id indicates the source of the ESI classification of a polygon. Vector features that were not surveyed or do not qualify for an ESI classification have a value of -1.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR
Attribute_Definition: Author or developer of source material or data set.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:
Date of source material, publication, or date of personal communication with expert source.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM
Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE
Attribute_Definition: Title of source material or data.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT
Attribute_Definition: The format of the source material.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE
Attribute_Definition: Publication place.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER
Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508
Metadata_Review_Date: 201508
Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager
Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: FISH (Fish Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: FISH (Fish Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for marine, estuarine, anadromous, and

freshwater fish species in South Carolina. Vector polygons in this data set represent fish distribution, spawning and nursery areas, concentration areas, and anadromous fish runs. 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 South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1985

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1985 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Fish

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydro, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above *Attribute_Accuracy_Report*, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge, digital data, survey data, scientific articles, and state and federal agency reports on fish distribution, spawning and nursery areas, concentration areas, and anadromous fish runs. These data do not necessarily represent all fish occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 65, Bluefish, *Pomatomus saltatrix*; 81, Spiny dogfish, *Squalus acanthias*; 86, Blueback herring, *Alosa aestivalis*; 87, American shad, *Alosa sapidissima*; 98, American eel, *Anguilla rostrata*; 101, Shortnose sturgeon, *Acipenser brevirostrum*; 102, Atlantic sturgeon, *Acipenser oxyrinchus*; 104, Striped bass, *Morone saxatilis*; 105, Hickory shad, *Alosa mediocris*; 107, Spotted seatrout, *Cynoscion nebulosus*; 108, Summer flounder, *Paralichthys dentatus*; 109, Red drum, *Sciaenops ocellatus*; 110, Black sea bass, *Centropristis striata*; 111, Southern flounder, *Paralichthys lethostigma*; 114, Florida pompano, *Trachinotus carolinus*; 115, Atlantic menhaden, *Brevoortia tyrannus*; 116, Striped mullet, *Mugil cephalus*; 121, Spot, *Leiostomus xanthurus*; 122, Black drum, *Pogonias cromis*; 123, Atlantic croaker, *Micropogonias undulatus*; 124, Southern kingfish, *Menticirrhus americanus*; 126, King mackerel, *Scomberomorus cavalla*; 127, Spanish mackerel, *Scomberomorus maculatus*; 134, Cobia, *Rachycentron canadum*; 137, Sheepshead, *Archosargus probatocephalus*; 138, Weakfish, *Cynoscion regalis*; 140, Ladyfish, *Elops saurus*; 179, Largemouth bass, *Micropterus salmoides*; 182, Bluegill, *Lepomis macrochirus*; 200, Blue catfish, *Ictalurus furcatus*; 201, Channel catfish, *Ictalurus punctatus*; 204, Redear sunfish, *Lepomis microlophus*; 257, Flathead catfish, *Pylodictis olivaris*; 268, Silver seatrout, *Cynoscion nothus*; 273, Star drum, *Stellifer lanceolatus*; 294, Spotted hake, *Urophycis regia*; 306, Gray snapper, *Lutjanus griseus*; 310, Atlantic spadefish, *Chaetodipterus faber*; 315, Blacktip shark, *Carcharhinus limbatus*; 316, Spinner shark, *Carcharhinus brevipinna*; 317, Bull shark, *Carcharhinus leucas*; 318, Atlantic sharpnose shark, *Rhizoprionodon terraenovae*; 326, Bonnethead, *Sphyrna tiburo*; 332, Tiger shark, *Galeocerdo cuvier*; 334, Finetooth shark, *Carcharhinus isodon*; 376, Fringed flounder, *Etropus crossotus*; 438, Scalloped hammerhead, *Sphyrna lewini*; 598, Anchovies, *Anchoa spp.*; 761, Porgies, *Stenotomus spp.*; 886, Great hammerhead, *Sphyrna mokarran*; 967, Sandbar shark, *Carcharhinus plumbeus*; 985, Redbreast sunfish,

Lepomis auritus; 995, Giant manta, Manta birostris; 1087, White shark, Carcharodon carcharias; 1108, Smooth dogfish, Mustelus canis; 1160, Blacknose shark, Carcharhinus acronotus; 1217, Lemon shark, Negaprion brevirostris; 1231, Sunfish, Lepomis spp.; 1251, Robust redhorse, Moxostoma robustum; 1252, Catfish, Ictalurus spp..

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy, or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: ATLANTIC STATES MARINE FISHERIES COMMISSION (ASFMC)

Publication_Date: 2004

Title:

STOCK ASSESSMENT REPORT NO. 04-01 OF THE ATLANTIC STATES
MARINE FISHERIES COMMISSION ATLANTIC MENHADEN STOCK
ASSESSMENT REPORT FOR PEER REVIEW

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: ARLINGTON, VA

Publisher: ATLANTIC STATES MARINE FISHERIES COMMISSION

Online_Linkage:

<http://www.asafc.org/uploads/file/04MenhadenPeerReviewReport.pdf>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2004

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: ATLANTIC STATES MARINE FISHERIES COMMISSION (ASMFC)
Publication_Date: 2014
Title:
SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM -
SOUTH ATLANTIC LONGLINE SURVEYS
Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2007
Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: ATLANTIC STATES MARINE FISHERIES COMMISSION (ASMFC)
Publication_Date: 2015
Title:
SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM -
SOUTH ATLANTIC INNER STRATA SAMPLING DATA
Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2004
Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

GEORGIA DEPARTMENT OF NATURAL RESOURCES (GADNR) -
COASTAL RESOURCES DIVISION

Publication_Date: 2015

Title:

DISTRIBUTION AND ABUNDANCE OF FRESHWATER, ANADROMOUS,
AND MARINE FISH IN COASTAL GEORGIA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: GUT, J.A. AND M.C. CURRAN

Publication_Date: 2015

Title: SAVANNAH RIVER ESTUARY FISH SAMPLING DATA

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: JENNINGS, C.A. AND R.S. WEYERS

Publication_Date: 2002

Title:

TEMPORAL AND SPATIAL DISTRIBUTION OF ESTUARINE-DEPENDENT SPECIES IN THE SAVANNAH RIVER ESTUARY

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: SAVANNAH, GA

Publisher: GEORGIA COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT

Other_Citation_Details:

ANNUAL REPORT PREPARED FOR GEORGIA PORTS AUTHORITY (PROJECT NO: 10-21-RR251-148) BY THE GEORGIA COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT. 48 P.

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2000

Ending_Date: 2002

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE (NCCOS), CENTER FOR COASTAL MONITORING AND ASSESSMENT (CCMA), BIOGEOGRAPHY PROGRAM

Publication_Date: 2000

Title: NOAA'S ESTUARINE LIVING MARINE RESOURCES (ELMR) DATA BASE
- SOUTHEAST REGION

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher:

NOAA'S OCEAN SERVICE, NATIONAL CENTERS FOR COASTAL
OCEAN SCIENCE (NCCOS)

Other_Citation_Details: ELMR REP. NO. 9, 167 P.

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1985

Ending_Date: 2000

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: ROUMALLIT, W.S., S. TYREE AND G. REIKIRK

Publication_Date: 1997

Title:

SPAWNING TIMES AND LOCATIONS OF SPOTTED SEATROUT IN THE
CHARLESTON HARBOR ESTUARINE SYSTEM FROM ACOUSTIC
SURVEYS

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: CHARLESON, SC

Publisher: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1997

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SAUCIER, M.H., D.M. BALTZ AND W.A. ROUMALLIT

Publication_Date: 1992

Title:

HYDROPHONE IDENTIFICATION OF SPAWNING SITES OF SPOTTED SEATROUT, CYNOSCION NEBULOSUS, NEAR CHARLESTON, SOUTH CAROLINA

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: NORTHEAST GULF SCIENCE

Publisher: MARINE ENVIRONMENTAL SCIENCES CONSORTIUM OF ALABAMA

Other_Citation_Details: NORTHEAST GULF SCIENCE, 12(2), 141-145

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1992

Ending_Date: 1992

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)

Publication_Date: 2015

Title: FRESHWATER FISHERY RESOURCES OF SOUTH CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- DONALD L. HAMMON

Publication_Date: 2001

Title: STATUS OF THE SOUTH CAROLINA FISHERIES FOR COBIA

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: CHARLESTON, SC

Publisher: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Other_Citation_Details: TECHNICAL REPORT NUMBER 89

Online_Linkage: <http://mrl.cofc.edu/pdf/techreport89.pdf>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2001

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- JOHN ARCHAMBAULT

Publication_Date: 2015

Title:

NEARSHORE AND INSHORE FISH AND INVERTEBRATE LIFE HISTORY
AND DISTRIBUTION INFORMATION
Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- JOHN ARCHAMBAULT

Publication_Date: 2015

Title: SOUTH CAROLINA ELECTROFISHING DATA

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2004

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)

- JOHN ARCHAMBAULT
Publication_Date: 2015
Title: SOUTH CAROLINA TRAMMEL NET SAMPLING DATA
Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2004
Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- PEARSE WEBSTER
Publication_Date: 2015
Title: MARINE RESOURCES OF SOUTH CAROLINA
Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)-
BRYAN FRAZIER

Publication_Date: 2015

Title: SHARK DISTRIBUTION IN SOUTH CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)-
CHAD HOLBROOK

Publication_Date: 2015

Title: ANADROMOUS FISH DISTRIBUTION AND LIFE HISTORY

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DIVISION OF NATURAL RESOURCES (SCDNR) -
WILLIAM POST AND CHAD HOLBROOK

Publication_Date: 2015

Title: ANADROMOUS FISH DISTRIBUTIONS IN SOUTH CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Process_Step:

Process_Description:

Nearshore marine and estuarine distributions of fishes were mapped using data provided by South Carolina Department of Natural Resources (SCDNR) and the Southeast Area Monitoring and Assessment Program (SEAMAP) of the Atlantic States Marine Fisheries Commission (ASMFC). These data sets were supplemented with information from the Estuarine Living Marine Resources program (ELMR; Nelson et al. 1991) as well as Jennings and Weyers (2002) and Gut and Curran (2015).

Freshwater and anadromous fish were mapped using a combination of survey data, described above, and expert opinion. Populations of shortnose (Federally and state endangered) and Atlantic sturgeon (Federally endangered) are found in South Carolina waters. They inhabit most of the major river systems in South Carolina. Ongoing and recent telemetry work has led to the identification of seasonal concentration areas used by both species of sturgeon. The only documented shortnose sturgeon spawning site in the area of interest for the SC ESI is an area on the Cooper River, directly below Pinopolis Dam. No Atlantic sturgeon spawning areas are known to occur within the AOI of the SC ESI. Concentration areas for shortnose and Atlantic sturgeon have been identified on several of the large rivers in South Carolina, and are mapped in the ESI as polygons with a mapping qualifier of 'Concentration area' and a concentration of 'High'. Many of the concentration areas are quite large, in part due to the mobile nature of the species, but also to cover the potential for interannual range shifts caused by variable hydrologic conditions (i.e. freshwater inflow and salinity). Other anadromous species were mapped to their respective habitats based on anecdotal information provided by SC DNR, including: American eel, striped bass, blueback herring, and shad. Unlike populations found in more northern portions of their range, striped bass in South Carolina do not migrate into the ocean. Known striped bass spawning areas, along with their general distribution are represented in the atlas. Shad, herring and eels do not spawn in the area; habitats mapped in the atlas represent adult and juvenile migration corridors and general distributions. Robust redhorse were mapped to the Savannah river to match mapping from the Georgia ESI. Robust redhorse have been collected in the Savannah river; however, the polygon in the ESI represents the potential range of this species. Please note, eel life-histories do not match the standard ESI terminology, so for the ESI, 'juveniles' corresponds to immigrating glass eels and elvers, and 'adults' refers to yellow eels and emigrating silver eels. Two fishery-independent data sets were provided by SCDNR staff: 1) South Carolina

Trammel Net Sampling; and 2) South Carolina Electrofishing Sampling. Each dataset was summarized by SCDNR staff for the sampling years 2002-2014 to give total number of occurrences per sampling station. From this summary, the frequency of each species caught during each month for each sampling region was calculated. Polygonal sampling regions were created using geographic distribution of sampling stations and were vetted by SCDNR staff. Species that were found to occur with a 10% frequency or higher in a given month for a given sampling region were marked as present for that month and sampling region. The full 13 years of data was available for the following estuaries and rivers: St. Helena Sound, Edisto River, Combahee River, Charleston Harbor, Ashley River, Cooper River, Wando River, Bulls Bay and Muddy Bay, Winyah Bay, PeeDee River, and Waccamaw River. A number of other areas had more limited sampling data, often only a year or two, including: Port Royal Sound, Santee River, and the Stono, Wadmalaw, and Kiawah Rivers. For these areas, sampling data was used to construct preliminary seasonal presence/absences that were supplemented with expert knowledge from SCDNR staff or other sources. Areas in between sampling stations, most often these occurred between electrofishing and trammel stations, were populated using combinations of seasonalities from adjacent sampling. Additional distributions and life history seasonalities, such as larvae, eggs, and spawning months, were typically gathered from ELMR Program data (Nelson et al. 1991) or expert knowledge provided by SCDNR staff. For the nearshore areas out to 10m depth, fish species distributions and seasonalities were created using data from The Southeast Area Monitoring and Assessment Program (SEAMAP) program, both the Inner Strata Sampling Data and the Longline Surveys, of The Atlantic States Marine Fisheries Commission (ASMFC). Fishery-independent sampling for the Inner Strata Sampling program is conducted in roughly three months out of the year, April, July, and October; however, sampling in practice strays into many of the preceding and following months. Data used for the ESI included the years 2004-2013, and the frequencies of species caught were used to determine monthly presence/absence. Presence within a month was determined by the same 10% frequency cut-off as was used with SCDNR fishery independent sampling data. Sampling months were used as proxies for the season within which sampling occurred. Thus, if a species was found to be present in April, it was assumed to be present in March and May; likewise this was done for June and August (July), and September and November (October). After consulting with SEAMAP/SCDNR staff and reviewing literature on nearshore species, seasonalities of select species were used to populate areas from 10m depth out to the boundary of the AOI. In the Savannah River, data from Jennings and Weyers (2002) and Gut and Curran (2015) were used to determine distributions and seasonalities of species in all reaches of the estuary. Jennings and Weyers data were used in areas that averaged less than 15 ppt salinity and Gut and Curran data were used for the lower estuary. Additional polygons that represent known aggregation sites of estuarine-dependent fish spawning in the Charleston Harbor area were delineated based on expert knowledge and published reports. The coast has not been comprehensively surveyed for spawning locations, so more information on these species' life-history is also contained in the 'general distribution' polygons to capture seasons in which spawning, eggs, and larvae are likely to be present. South Carolina bays and estuaries, especially Bulls Bay, are important nursery areas for several shark species. Nursery areas and general distributions of sharks were mapped based on anecdotal information provided by SCDNR, based on their experience surveying in South Carolina. Please note, the life-history stages for fish do not match the correct terminology for sharks. As a result, areas with months for shark 'larvae' represent months for which that polygon serves as habitat or a nursery area for young-of-year sharks (i.e. primary nursery areas). The above digital and/or hardcopy sources were compiled by the project biologist to create the FISH data layer. 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 FISH data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 3276

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, FISH) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the Detailed_Description of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: FISH

Entity_Type_Definition:

The FISH table contains attribute information for the vector polygons in this data set representing fish distribution, spawning and nursery areas, concentration areas, and anadromous fish runs. Note that all attribute information is stored in a series of relational files,

described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.
Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (2), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table. RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (2), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values of a species at a particular location. Given spatial and temporal gaps in the trammel and electrofishing data, confidence in the coverage and accuracy of quantitative data was not high enough to consider calculating concentrations for these data sources. Qualitative values such as 'high', 'present', 'rare', or 'low' were assigned based on expert opinion. For sharks, areas of 'high' abundance represent important nursery areas. For sturgeon species, areas of 'high' concentration represent concentration areas for juvenile and/or adult sturgeon, and areas of 'low' concentrations were assigned to areas that experts know do not have high concentrations, but do not feel like their knowledge is thorough enough to assign a concentration of 'rare'.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING

Enumerated_Domain_Value_Definition: Calving

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY

Enumerated_Domain_Value_Definition: Colony

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA

Enumerated_Domain_Value_Definition: Concentration Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING
Enumerated_Domain_Value_Definition: Denning
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION
Enumerated_Domain_Value_Definition: General Distribution
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA
Enumerated_Domain_Value_Definition: Harvest Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT
Enumerated_Domain_Value_Definition: Haul Out
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD
Enumerated_Domain_Value_Definition: Hazard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE
Enumerated_Domain_Value_Definition: High Ecological Value
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION
Enumerated_Domain_Value_Definition: Migration
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING
Enumerated_Domain_Value_Definition: Nesting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA
Enumerated_Domain_Value_Definition: Nursery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING
Enumerated_Domain_Value_Definition: Puppings
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING
Enumerated_Domain_Value_Definition: Rafting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING
Enumerated_Domain_Value_Definition: Roosting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA
Enumerated_Domain_Value_Definition: Spawning Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE
Enumerated_Domain_Value_Definition: Thermal Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE
Enumerated_Domain_Value_Definition: Vulnerable Occurrence
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING
Enumerated_Domain_Value_Definition: Wintering
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic

section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid

Enumerated_Domain_Value_Definition: Alcid

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous

Enumerated_Domain_Value_Definition: Diadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin

Enumerated_Domain_Value_Definition: Dolphin

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery

Enumerated_Domain_Value_Definition: Estuarine nursery fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern

Enumerated_Domain_Value_Definition: Gull or tern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert

Enumerated_Domain_Value_Definition: Invertebrate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic

Enumerated_Domain_Value_Definition: Marine benthic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic

Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee

Enumerated_Domain_Value_Definition: Manatee

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine

Enumerated_Domain_Value_Definition: Passerine bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic

Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant

Enumerated_Domain_Value_Definition: Plant

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor

Enumerated_Domain_Value_Definition: Raptor

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp

Enumerated_Domain_Value_Definition: Shrimp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake

Enumerated_Domain_Value_Definition: Snake

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP

Attribute_Definition: September

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED

Entity_Type_Definition:

The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 12

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if

ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not

reported
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -
Enumerated_Domain_Value_Definition:
Breed category not used or not appropriate for record(s) in question
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = internesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -
Enumerated_Domain_Value_Definition:
Breed category not used or not appropriate for record(s) in question
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This

attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -
Enumerated_Domain_Value_Definition:
Breed category not used or not appropriate for record(s) in question
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE

Attribute_Definition: Two-letter state abbreviation.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S

Attribute_Definition: State threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F

Attribute_Definition: Federal threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: HABITATS (Habitat Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: HABITATS (Habitat Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for federally endangered and threatened

plants, rare state plants, and sensitive ecological communities in South Carolina. Vector polygons in this data set represent federally endangered and threatened plant, rare state plant, and sensitive ecological community distributions. 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 South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1984

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1984 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning
Theme_Keyword: Coastal Zone Management
Theme_Keyword: Wildlife
Theme_Keyword: Habitat

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydro, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge, available hardcopy documents, survey data, maps, and digital data on federally endangered and threatened plant, rare state plant, and sensitive ecological community distributions. These data do not necessarily represent all habitat occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 7, Rough boneset, *Eupatorium pilosum*; 9, Viviparous spikerush, *Eleocharis vivipara*; 48, Shell middens, n/a; 78, Northern long sedge, *Carex folliculata*; 144, Carolina grasswort, *Lilaeopsis carolinensis*; 145, Seabeach amaranth, *Amaranthus pumilus*; 222, Florida privet, *Forestiera segregata*; 248, Spoon-flower, *Peltandra sagittifolia*; 398, Blackstem spleenwort, *Asplenium resiliens*; 411, Godfrey's swampprivet, *Forestiera godfreyi*; 412, Harper's fimbry, *Fimbristylis perpusilla*; 413, Leafless swallow-wort, *Orthosia scoparia*; 456, Needle palm, *Rhapidophyllum hystrix*; 518, Nutmeg hickory, *Carya myristiciformis*; 519, Plymouth rose gentian, *Sabatia kennedyana*; 520, Rattlesnakemaster, *Eryngium aquaticum* var. *ravenelii*; 601, Smooth hedgenettle, *Stachys tenuifolia*; 603, Willdenow's sedge, *Carex basiantha*; 729, Robbins' spikerush, *Eleocharis robbinsii*; 743, Shoreline sedge, *Carex hyalinolepis*; 791, Incised agrimony, *Agrimonia incisa*; 796, Manyflower grasspink, *Calopogon multiflorus*; 797, Bandanna of the Everglades, *Canna flaccida*; 813, Sarvis holly, *Ilex amelanchier*; 822, Climbing fetterbush, *Pieris phillyreifolia*; 831, Hairy shadow witch, *Ponthieva racemosa*; 846, LARGERoot morning-glory, *Ipomoea macrorrhiza*; 948, Fourangle flatsedge, *Cyperus tetragonus*; 949, Georgia frostweed, *Helianthemum georgianum*.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy,

or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
LAND, WATER, AND CONSERVATION DIVISION

Publication_Date: 2014

Title: RARE, THREATENED, & ENDANGERED SPECIES (RTES) GIS DATA

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1984

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HABITATS INFORMATION

Process_Step:

Process_Description:

SCDNR provided records from SCDNR's Rare, Threatened, & Endangered Species (RTES) GIS data and herbarium records from the University of South Carolina (USC) and Clemson University. Plant species included from this data were selected by resource experts and are listed in the atlas's species list. The only federally protected species to occur within the project area is seabeach amaranth (federally threatened). In addition, shell midden occurrences in the RTES GIS data have been mapped because of the variety of rare trees, shrubs, and herbs associated with the high-calcium soils of these habitats. To mask the exact location of herbarium records, an arbitrary geographic shift was applied within 25 m of the original location. Shifted points were buffered with a 50 m radial buffer to create a polygon. Any overlapping polygons for a single species were dissolved into a single occurrence. Additional

shell midden locations may be known by the South Carolina State Historic Preservation Office (SC SHPO), but could not be mapped due to the likely archaeological significance and sensitivity of these sites. The display of this data does not imply that areas reflect current plant locations, but rather are to be used as a guide to what has been observed historically and in recent years (mainly 1983-2014).

The above digital and/or hardcopy sources were compiled by the project biologist to create the HABITATS data layer. 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 HABITATS data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 154

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, HABITATS) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the *Browse_Graphic* section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the *Detailed_Description* of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: HABITATS

Entity_Type_Definition:

The HABITATS table contains attribute information for the vector polygons in this data set representing federally endangered and threatened plant, rare state plant, and sensitive ecological community distributions. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (3), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table. RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute

information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (3), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density value of a habitat at a particular location. No quantitative or qualitative information on concentrations of threatened and endangered plants were available; therefore this field was left blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING

Enumerated_Domain_Value_Definition: Calving

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY

Enumerated_Domain_Value_Definition: Colony

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA
Enumerated_Domain_Value_Definition: Concentration Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING
Enumerated_Domain_Value_Definition: Denning
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION
Enumerated_Domain_Value_Definition: General Distribution
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA
Enumerated_Domain_Value_Definition: Harvest Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT
Enumerated_Domain_Value_Definition: Haul Out
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD
Enumerated_Domain_Value_Definition: Hazard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE
Enumerated_Domain_Value_Definition: High Ecological Value
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION
Enumerated_Domain_Value_Definition: Migration
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING
Enumerated_Domain_Value_Definition: Nesting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA
Enumerated_Domain_Value_Definition: Nursery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING
Enumerated_Domain_Value_Definition: Pupping
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING
Enumerated_Domain_Value_Definition: Rafting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING
Enumerated_Domain_Value_Definition: Roosting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA
Enumerated_Domain_Value_Definition: Spawning Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE
Enumerated_Domain_Value_Definition: Thermal Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE
Enumerated_Domain_Value_Definition: Vulnerable Occurrence
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING
Enumerated_Domain_Value_Definition: Wintering
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid
Enumerated_Domain_Value_Definition: Alcid
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian
Enumerated_Domain_Value_Definition: Amphibian
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve
Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin

Enumerated_Domain_Value_Definition: Dolphin

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery

Enumerated_Domain_Value_Definition: Estuarine nursery fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern

Enumerated_Domain_Value_Definition: Gull or tern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert

Enumerated_Domain_Value_Definition: Invertebrate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic

Enumerated_Domain_Value_Definition: Marine benthic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic

Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee

Enumerated_Domain_Value_Definition: Manatee

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine

Enumerated_Domain_Value_Definition: Passerine bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic

Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant

Enumerated_Domain_Value_Definition: Plant

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor

Enumerated_Domain_Value_Definition: Raptor

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp
Enumerated_Domain_Value_Definition: Shrimp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake
Enumerated_Domain_Value_Definition: Snake
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland vegetation
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl
Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED

Entity_Type_Definition:

The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: 12

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = interesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE
Attribute_Definition: Two-letter state abbreviation.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S
Attribute_Definition: State threatened or endangered status.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C
Enumerated_Domain_Value_Definition: Species of Special Concern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Experimental essential population
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F

Attribute_Definition: Federal threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER
Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508
Metadata_Review_Date: 201508
Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.9.32 on Tue Aug 04 10:16:44 2015

South Carolina: HERP (Herpetofauna Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: HERP (Herpetofauna Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for sea turtles, diamondback terrapin, eastern

diamondback rattlesnake (state species of concern), and federally and state protected amphibians in South Carolina. Vector polygons in this data set represent sea turtle nesting areas and sea turtles, diamondback terrapin, eastern diamondback rattlesnake, and federally and state protected amphibian distributions. 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 South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 2006 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources
Theme_Keyword: Oil spill planning
Theme_Keyword: Coastal Zone Management
Theme_Keyword: Wildlife
Theme_Keyword: Herpetofauna

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge, available hardcopy documents, survey data, maps, and digital data on sea turtle nesting areas and sea turtles, diamondback terrapin, eastern diamondback rattlesnake, and federally and state protected amphibian distributions. These data do not necessarily represent all herpetofauna occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 2, Green sea turtle, *Chelonia mydas*; 4, Kemp's ridley sea turtle, *Lepidochelys kempii*; 5, Leatherback sea turtle, *Dermochelys coriacea*; 6, Loggerhead sea turtle, *Caretta caretta*; 29, Carolina gopher frog, *Lithobates capito*; 197, Carolina diamondback terrapin, *Malaclemys terrapin centrata*; 199, Frosted flatwoods salamander, *Amblystoma cingulatum*; 216, Northern dwarf siren, *Pseudobranchius striatus*; 217, Eastern diamond-backed rattlesnake, *Crotalus adamanteus*.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy, or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector

digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- MICHELLE PATE

Publication_Date: 2014

Title: SEA TURTLE NESTING AND IN-WATER HABITAT IN SOUTH CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR),
WILDLIFE AND FRESHWATER FISHERIES DIVISION

Publication_Date: 2013

Title: TURTLENESTS_SC

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: CHARLESTON, SOUTH CAROLINA

Publisher: GOVERNOR'S SOUTH ATLANTIC ALLIANCE (GSAA)

Online_Linkage: <http://www.gsaaportal.org/explore/catalog>

Source_Scale_Denominator: 25000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2011

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)-
WILL DILLMAN, WILDLIFE BIOLOGIST

Publication_Date: 2014

Title:

LOCATION AND SEASONALITIES OF THREATENED AND
ENDANGERED HERPETOFAUNA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. FISH AND WILDLIFE SERVICE (USFWS), ECOLOGICAL SERVICES -
MELISSA BIMBI

Publication_Date: 2014

Title: SEASONALITY DATA FOR SEA TURTLES IN SOUTH CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Process_Step:

Process_Description:

Three main sources of data were used to depict herp distribution and seasonality for this data layer: 1) personal interviews with resource experts from the U.S. Fish and Wildlife Service (USFWS) and the South Carolina Department of Natural Resources (SCDNR); 2) numerous published and unpublished reports; and 3) digital data from the Governors' South Atlantic Alliance Coast and Ocean Portal (GSAA). Turtle nesting sites were adopted from the digital data included in the GSAA Portal. SCDNR provided the data to the GSAA. Contact these agencies for more information concerning these data. Protected amphibians mapped in this atlas include the flatwoods salamander (federally and state endangered), gopher frog (state endangered), and dwarf siren (state threatened), which breed and brumate in ephemeral wetlands. These species have been mapped based on documented occurrences to upland areas, freshwater marshes (ESI 10B), swamps (ESI 10C), and scrub-shrub wetlands (ESI 10D) because the ephemeral wetlands in which these species breed may occur at a finer scale than the scale at which wetlands (ESI 10B, C, D) were mapped. Flatwoods salamander and gopher frog are more likely to be present in these wetlands during their brumation and breeding seasons and move into uplands during the remainder of the year. For the flatwoods salamander, this period occurs October through May and for gopher frog, it occurs December through June. Dwarf siren may be present in wetlands year-round. Eastern diamondback rattlesnakes (state species of special concern) have been mapped broadly to upland areas, but occurrences in the state become more common moving south from the Santee River. Concentration areas have been left unmapped to protect this species from potential poaching. Diamondback terrapins (subspecies: Carolina diamondback terrapin, *Malaclemys terrapin centrata*), were mapped in salt- and brackish-water marshes (ESI 10A polygons). All marshes and creeks seaward of Highway 17 may be considered potential habitat for terrapins, which are fairly abundant in coastal South Carolina. Though mapped with general distribution to salt- and brackish-water marshes, when nesting, terrapins may be present on upland areas that border marshes on both sides of barrier islands (although mostly on the marsh side of the islands). The above digital and/or hardcopy sources were compiled by the project biologist to create the HERP data layer. 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 HERP data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 19137

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, HERP) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the Detailed_Description of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: HERP

Entity_Type_Definition:

The HERP table contains attribute information for the vector polygons in this data set representing sea turtle nesting areas and sea turtles, diamondback terrapin, eastern diamondback rattlesnake, and federally and state protected amphibian distributions. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (6), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table. RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (6), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values of a species at a particular location. In cases where no quantitative count data was available, the field may either be blank or contain descriptive terms such as "HIGH" or "LOW".

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING

Enumerated_Domain_Value_Definition: Calving

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY

Enumerated_Domain_Value_Definition: Colony

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA

Enumerated_Domain_Value_Definition: Concentration Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING

Enumerated_Domain_Value_Definition: Denning

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION

Enumerated_Domain_Value_Definition: General Distribution
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA
Enumerated_Domain_Value_Definition: Harvest Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT
Enumerated_Domain_Value_Definition: Haul Out
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD
Enumerated_Domain_Value_Definition: Hazard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE
Enumerated_Domain_Value_Definition: High Ecological Value
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION
Enumerated_Domain_Value_Definition: Migration
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING
Enumerated_Domain_Value_Definition: Nesting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA

Enumerated_Domain_Value_Definition: Nursery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING
Enumerated_Domain_Value_Definition: Pupping
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING
Enumerated_Domain_Value_Definition: Rafting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING
Enumerated_Domain_Value_Definition: Roosting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA
Enumerated_Domain_Value_Definition: Spawning Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE
Enumerated_Domain_Value_Definition: Thermal Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE
Enumerated_Domain_Value_Definition: Vulnerable Occurrence
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING

Enumerated_Domain_Value_Definition: Wintering
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid

Enumerated_Domain_Value_Definition: Alcid

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous

Enumerated_Domain_Value_Definition: Diadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin

Enumerated_Domain_Value_Definition: Dolphin

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery

Enumerated_Domain_Value_Definition: Estuarine nursery fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern

Enumerated_Domain_Value_Definition: Gull or tern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert

Enumerated_Domain_Value_Definition: Invertebrate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic

Enumerated_Domain_Value_Definition: Marine benthic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic

Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee

Enumerated_Domain_Value_Definition: Manatee

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine

Enumerated_Domain_Value_Definition: Passerine bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic

Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant

Enumerated_Domain_Value_Definition: Plant

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor

Enumerated_Domain_Value_Definition: Raptor

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp

Enumerated_Domain_Value_Definition: Shrimp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake

Enumerated_Domain_Value_Definition: Snake

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT

Attribute_Definition: October
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED

Entity_Type_Definition:

The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 12

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = interesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE

Attribute_Definition: Two-letter state abbreviation.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S

Attribute_Definition: State threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C
Enumerated_Domain_Value_Definition: Species of Special Concern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Experimental essential population
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F
Attribute_Definition: Federal threatened or endangered status.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on federal list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g.

ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of

the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: HYDROL (Hydrography Lines)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: HYDROL (Hydrography Lines)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains vector lines representing coastal hydrography used in the creation of the Environmental Sensitivity Index (ESI) for South Carolina. This data set comprises a portion of the ESI data for South Carolina. 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. See also the HYDROP data layer, part of the larger South Carolina ESI database, for additional ESI information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1973 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Hydrography

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality

Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent linear hydrography for South Carolina. See also the HYDROP data layer, part of the larger South Carolina ESI database, for additional ESI information.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The hydrography data set was developed from pre-existing digital data and reflects the positional accuracy of these original data. The horizontal positional accuracy of the 1:24,000 USGS topographic quads should conform to National Map Accuracy Standards at scales of 1:24,000. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRIID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

Publication_Date: 2014

Title: ARCGIS BASEMAP WORLD IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: REDLANDS, CA

Publisher: ESRI

Online_Linkage: <http://www.esri.com/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: GOOGLE EARTH

Publication_Date: 2014

Title: GOOGLE EARTH IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Online_Linkage: <http://www.google.com/earth/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING AERIAL IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2012

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING BIRDSEYE

Geospatial_Data_Presentation_Form: OBLIQUE AERIAL PHOTOGRAPHY

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S.
DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS),
NATIONAL GEODETIC SURVEY (NGS)

Publication_Date: 2013

Title:

CONTINUALLY UPDATED SHORELINE PRODUCT. SHORELINE MAPPING
PROGRAM

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MARYLAND

Publisher: NOAA'S OCEAN SERVICE (NOS), NATIONAL GEODETIC SURVEY (NGS)

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2001

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: RESEARCH PLANNING, INC. (RPI)

Publication_Date: 2014

Title: ESI SHORELINE BOUNDARY AND PRINTING INDEX

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Source_Scale_Denominator: 45000

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2013

Title: NATIONAL WETLANDS INVENTORY (NWI) - WETLANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: WASHINGTON D.C.
Publisher: U.S.FISH AND WILDLIFE SERVICE

Online_Linkage: <http://www.fws.gov/wetlands>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973
Ending_Date: 2007

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: HYDROL INFORMATION

Process_Step:

Process_Description:

The South Carolina shoreline was derived from the integration of the National Oceanic and Atmospheric Administration (NOAA) Continually Updated Shoreline Product (CUSP) (2001-2013); the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) dataset (1973-2007); and manual digitization at 1:4,000 from 2010-2012 Bing aerial imagery, ArcGIS Basemap World Imagery, and 2012-2014 Google Earth aerial imagery. The most recent shoreline was utilized where available. The above digital and/or hardcopy sources were compiled to create the HYDROL data layer. Depending on the type of source data, four general approaches are used for compiling the data layer: 1) hardcopy maps are digitized at their source scale; 2) digital data layers are evaluated and used "as is" or integrated with the other data sources; 3) overflight classifications are digitized from the scanned and registered hardcopy field maps; and/or 4) classifications are interpreted from oblique gps referenced photography or video taken during the overflights. After the initial shoreline classification, these data are edgematched and checked for logical consistency errors. Review maps are plotted at 1:24,000 scale for verification of polygonal and linear attributes. 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 HYDROL data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration
Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: String
Point_and_Vector_Object_Count: 24924

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001
Longitude_Resolution: 0.000000001
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, one relational attribute or data table, SOURCES, is used to store the source data information in the ESI data structure. The geographic data layer containing resource information (in this case, HYDROL) is linked to the SOURCES table using the SOURCE_ID. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: HYDROL

Entity_Type_Definition:

The HYDROL table contains attribute information for the vector lines representing linear hydrography features in the HYDRO data layer.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: LINE

Attribute_Definition: Type of geographic feature.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Extent of AOI

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: H

Enumerated_Domain_Value_Definition: Hydrography

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Shoreline

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links to the SOURCES data table. This id indicates the source of a vector line segment.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data

set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE
Attribute_Definition: Publication place.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER
Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: HYDROP (Hydrography Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: HYDROP (Hydrography Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains vector polygons representing coastal hydrography used in the

creation of the Environmental Sensitivity Index (ESI) for South Carolina. This data set comprises a portion of the ESI data for South Carolina. 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. See also the HYDROL data layer, part of the larger South Carolina ESI database, for additional ESI information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1973 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Hydrography

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical

consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent polygonal hydrography for South Carolina. See also the HYDROL data layer, part of the larger South Carolina ESI database, for additional ESI information.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The hydrography data set was developed from pre-existing digital data and reflects the positional accuracy of these original data. The horizontal positional accuracy of the 1:24,000 USGS topographic quads should conform to National Map Accuracy Standards at scales of 1:24,000. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

ESRI, DIGITALGLOBE, GEOEYE, I-CUBED, USDA FSA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

Publication_Date: 2014

Title: ARCGIS BASEMAP WORLD IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: REDLANDS, CA

Publisher: ESRI

Online_Linkage: <http://www.esri.com/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: GOOGLE EARTH

Publication_Date: 2014

Title: GOOGLE EARTH IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Online_Linkage: <http://www.google.com/earth/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2014

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING AERIAL IMAGERY

Geospatial_Data_Presentation_Form: REMOTE-SENSING IMAGE

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2012

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MICROSOFT BING

Publication_Date: 2014

Title: BING BIRDSEYE

Geospatial_Data_Presentation_Form: OBLIQUE AERIAL PHOTOGRAPHY

Publication_Information:

Publication_Place: ROCHESTER, NY

Publisher: MICROSOFT BING

Online_Linkage: <http://www.bing.com/maps/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S.
DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS),
NATIONAL GEODETIC SURVEY (NGS)

Publication_Date: 2013

Title:

CONTINUALLY UPDATED SHORELINE PRODUCT. SHORELINE MAPPING

PROGRAM
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: SILVER SPRING, MARYLAND
Publisher: NOAA'S OCEAN SERVICE (NOS), NATIONAL GEODETIC SURVEY (NGS)

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2001
Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: HYDROP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: RESEARCH PLANNING, INC. (RPI)
Publication_Date: 2014
Title: ESI SHORELINE BOUNDARY AND PRINTING INDEX
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Other_Citation_Details: UNPUBLISHED

Source_Scale_Denominator: 45000
Type_of_Source_Media: PERSONAL COMMUNICATION
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014
Ending_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: HYDROP INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2013
Title: NATIONAL WETLANDS INVENTORY (NWI) - WETLANDS
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: WASHINGTON D.C.
Publisher: U.S.FISH AND WILDLIFE SERVICE

Online_Linkage: <http://www.fws.gov/wetlands>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1973
Ending_Date: 2007

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE
Source_Contribution: HYDROP INFORMATION

Process_Step:

Process_Description:

The land and water polygons were derived from the integration of the National Oceanic and Atmospheric Administration (NOAA) Continually Updated Shoreline Product (CUSP) (2001-2013); the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) dataset (1973-2007); and manual digitization at 1:4,000 from 2010-2012 Bing aerial imagery, ArcGIS Basemap World Imagery, and 2012-2014 Google Earth aerial imagery. The most recent shoreline was utilized where available.

The above digital and/or hardcopy sources were compiled to create the HYDROP data layer. Depending on the type of source data, four general approaches are used for compiling the data layer: 1) hardcopy maps are digitized at their source scale; 2) digital data layers are evaluated and used "as is" or integrated with the other data sources; 3) overflight classifications are digitized from the scanned and registered hardcopy field maps; and/or 4) classifications are interpreted from oblique gps referenced photography or video taken during the overflights. After the initial shoreline classification, these data are edgematched and checked for logical consistency errors. Review maps are plotted at 1:24,000 scale for verification of polygonal and linear attributes. 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 HYDROP data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration
Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains
Point_and_Vector_Object_Count: 12959

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001
Longitude_Resolution: 0.000000001
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, one relational attribute or data table, SOURCES, is used to store the source data information in the ESI data structure. The geographic data layer containing resource information (in this case, HYDROP) is linked to the SOURCES table using the SOURCE_ID. The entity-relationship diagram describes relationships between attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can

be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: HYDROP

Entity_Type_Definition:

The HYDROP table contains attribute information for the vector polygons representing polygonal hydrography features in the HYDRO data layer.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: WATER_CODE

Attribute_Definition: Specifies a polygon as either water or land.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: L

Enumerated_Domain_Value_Definition: Land

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: W

Enumerated_Domain_Value_Definition: Water

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR
Attribute_Definition: Author or developer of source material or data set.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:
Date of source material, publication, or date of personal communication with expert source.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM
Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE
Attribute_Definition: Title of source material or data.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT
Attribute_Definition: The format of the source material.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE
Attribute_Definition: Publication place.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508
Metadata_Review_Date: 201508
Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager
Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: INVERT (Invertebrate Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: INVERT (Invertebrate Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for marine and estuarine invertebrate species

in South Carolina. Vector polygons in this data set represent invertebrate distribution, spawning areas, and concentration areas. 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 South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1984

Ending_Date: 2015

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1984 to 2015 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Invertebrate

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydro, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above *Attribute_Accuracy_Report*, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge, scientific articles, state and federal agency reports, survey data, maps, and digital data on invertebrate distribution, spawning areas, nursery areas, and concentration areas. These data do not necessarily represent all invertebrate occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 43, Eastern oyster, *Crassostrea virginica*; 44, Horseshoe crab, *Limulus polyphemus*; 49, Blue crab, *Callinectes sapidus*; 50, White shrimp, *Litopenaeus setiferus*; 51, Brown shrimp, *Farfantepenaeus aztecus*; 119, Atlantic brief squid, *Lolliguncula brevis*; 657, Cannonball jellyfish, *Stomolophus meleagris*.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy, or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: ATLANTIC STATES MARINE FISHERIES COMMISSION (ASMFC)

Publication_Date: 2015

Title:

SOUTHEAST AREA MONITORING AND ASSESSMENT PROGRAM -
SOUTH ATLANTIC INNER STRATA SAMPLING DATA

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2004

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: BURREL, V.G., JR.

Publication_Date: 1986

Title:

SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL
REQUIREMENTS OF COASTAL FISHES AND INVERTEBRATES (SOUTH
ATLANTIC) - AMERICAN OYSTER

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: WASHINGTON, D.C.

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE

Other_Citation_Details:

BIOLOGICAL REPORT 82(11.57). U.S. ARMY CORPS OF ENGINEERS TR
EL-82-4. 17 PP.

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1986

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: LARSON, S.C., M.J. VAN DEN AVYLE, AND E.L. BOZEMAN, JR.

Publication_Date: 1989

Title:

SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL
REQUIREMENTS OF COASTAL FISHES AND INVERTEBRATES (SOUTH
ATLANTIC) - BROWN SHRIMP

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: WASHINGTON, D.C.

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE

Other_Citation_Details:

BIOLOGICAL REPORT 82(11.90). U.S. ARMY CORPS OF ENGINEERS TR
EL-82-4. 14 PP.

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1989

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: MUNCY, R.J.

Publication_Date: 1984

Title:

SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL
REQUIREMENTS OF COASTAL FISHES AND INVERTEBRATES (SOUTH
ATLANTIC) - WHITE SHRIMP

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: WASHINGTON, D.C.

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE

Other_Citation_Details:

FWS/OBS-82/11.27. U.S. ARMY CORPS OF ENGINEERS TR EL-82-4. 19 PP.

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1984

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA),
DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE
(NOS), NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE (NCCOS),
CENTER FOR COASTAL MONITORING AND ASSESSMENT (CCMA),
BIOGEOGRAPHY PROGRAM

Publication_Date: 2000

Title:

NOAA'S ESTUARINE LIVING MARINE RESOURCES (ELMR) DATA BASE
- SOUTHEAST REGION

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher:

NOAA'S OCEAN SERVICE, NATIONAL CENTERS FOR COASTAL
OCEAN SCIENCE (NCCOS)

Other_Citation_Details: ELMR REP. NO. 9, 167 P.

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1985

Ending_Date: 2000

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES
(SCDNR)

Publication_Date: 2010

Title: SCDNR OYSTER 2010 LIVE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: DISC

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2010

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES
(SCDNR)

Publication_Date: 2015

Title: BLUE CRABS

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information:

Publication_Place: COLUMBIA, SC

Publisher: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Online_Linkage: <http://www.dnr.sc.gov/marine/pub/seascience/bluecrab.html>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- JOHN ARCHAMBAULT

Publication_Date: 2015

Title:

NEARSHORE AND INSHORE FISH AND INVERTEBRATE LIFE HISTORY
AND DISTRIBUTION INFORMATION

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- JOHN ARCHAMBAULT

Publication_Date: 2015

Title: SOUTH CAROLINA TRAMMEL NET SAMPLING DATA

Geospatial_Data_Presentation_Form: SPREADSHEET
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2004

Ending_Date: 2013

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- LARRY DELANCEY

Publication_Date: 2015

Title: INVERTEBRATES OF SOUTH CAROLINA

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
- PEARSE WEBSTER

Publication_Date: 2015

Title: MARINE RESOURCES OF SOUTH CAROLINA
Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE
Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: INVERT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)-
AMY FOWLER

Publication_Date: 2015

Title: HORSESHOE CRAB LIFE HISTORY AND DISTRIBUTION INFORMATION

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: INVERT INFORMATION

Process_Step:

Process_Description:

Five main sources of data were used to depict invertebrate distribution and seasonality for this data layer: 1) personal interviews with resource experts from the South Carolina Department of Natural Resources (SCDNR); 2) fishery-independent sampling data provided by SCDNR; 3) fishery-independent sampling data provided by the Atlantic States Marine Fisheries Commission's (ASMFC) Southeast Area Monitoring and Assessment Program (SEAMAP); 4) hardcopy maps and coordinates depicting horseshoe crab spawning beaches and nursery areas; and 5) vector digital data on oyster reef locations provided by SCDNR. Nearshore marine and

estuarine distributions of brown shrimp, white shrimp, and blue crab were mapped using expert knowledge of SCDNR staff, SCDNR Trammel Data, and life history information from Estuarine Living Marine Resources (ELMR) program (Nelson et al. 1991). Nearshore marine distributions Atlantic brief squid and cannonball jellyfish were mapped primarily using data provided by SEAMAP. Presence and absence by month calculated from SCDNR and ASMFC data used the exact same methods as were used for fish species. SCDNR Trammel data was used to map blue crab distributions, with data summarized by SCDNR staff for the years 2002-2014 to give total number of blue crab occurrences per sampling station. From this summary, the frequency of blue crab caught was calculated for each month and sampling region. Polygonal sampling regions were created using geographic distribution of sampling stations and were vetted by SCDNR staff. When blue crab was found to occur with a 10% frequency or higher in a given month for a given sampling region it was marked as present for that month and sampling region. Blue crab were mapped to the following estuary and river systems using this method: St. Helena Sound, Charleston Harbor, Lower Wando River, Bulls Bay and Muddy Bay, and Winyah Bay. Additional life history seasonalities, such as larvae, eggs, and spawning months, were typically gathered from interviews with resource experts at SCDNR, USFWS Species Profiles, or ELMR Program data (Nelson et al. 1991). For the nearshore area out to 10m depth, invertebrate species distribution and seasonalities were supplemented with data from the SEAMAP program of the ASMFC. Fishery-independent sampling for the SEAMAP program is conducted in roughly three months out of the year (April, July, and October); however, sampling in practice strays into many of the preceding and following months. Data used for the ESI included the years 2004-2013 and the frequencies of species caught were used to determine monthly presence/absence. Presence within a month was determined by the same 10% frequency cut-off as was used with SCDNR fishery independent sampling data. Sampling months were used a proxies for the season within which sampling occurred. Thus, if a species was found to be present in April, it was assumed to be present in March and May; likewise this was done for June and August (July), and September and November (October). After consulting with SEAMAP/SCDNR staff and reviewing literature on nearshore species, seasonalities of select species were used to populate areas from 10m depth out to the boundary of the AOI. Horseshoe crab spawning and nursery areas were mapped based on hardcopy maps and lists of coordinates provided by Amy Fowler with SCDNR. After hand digitizing these areas for the ESI product, the geographies of nursery and spawning areas were vetted by SCDNR staff. In addition, the general distribution of horseshoe crabs is represented in the ESI, and is based on expert opinion. Oyster reefs were mapped using digital data provided by SCDNR. The minimum mapping unit of the South Carolina Oyster Reef data set was 5 square meters. In order to minimize the number of polygons, ensure inclusion of smaller reefs not captured with the mapping methods, and create a more generalized distribution; polygons in the data set were buffered by 25 meters and merged together. The above digital and/or hardcopy sources were compiled by the project biologist to create the INVERT data layer. 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 INVERT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 35016

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this

case, INVERT) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the Detailed_Description of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: INVERT

Entity_Type_Definition:

The INVERT table contains attribute information for the vector polygons in this data set representing invertebrate distribution, spawning areas, and concentration areas. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT

data table. ID is a concatenation of atlas number (234), element number (7), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table.

RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute information is stored in a series of relational files, described below. See the [Browse_Graphic](#) section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (7), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values of a species at a particular location. Given spatial and temporal gaps in the trammel and electrofishing data, confidence in the coverage and accuracy of quantitative data was not high enough to consider calculating concentrations for these data sources. Oyster reefs were given a categorical concentration of "REEF", to emphasize their relative permanence and density. Horseshoe crab spawning beaches were assigned a concentration of "HIGH" due to the high density of horseshoe crabs that are present on the beach during spawning events.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING

Enumerated_Domain_Value_Definition: Calving

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY

Enumerated_Domain_Value_Definition: Colony

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA

Enumerated_Domain_Value_Definition: Concentration Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING

Enumerated_Domain_Value_Definition: Denning

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION

Enumerated_Domain_Value_Definition: General Distribution

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA

Enumerated_Domain_Value_Definition: Harvest Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT

Enumerated_Domain_Value_Definition: Haul Out

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD

Enumerated_Domain_Value_Definition: Hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE

Enumerated_Domain_Value_Definition: High Ecological Value

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION

Enumerated_Domain_Value_Definition: Migration

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING

Enumerated_Domain_Value_Definition: Nesting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA

Enumerated_Domain_Value_Definition: Nursery Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING

Enumerated_Domain_Value_Definition: Pupping

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING

Enumerated_Domain_Value_Definition: Rafting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING

Enumerated_Domain_Value_Definition: Roosting

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA

Enumerated_Domain_Value_Definition: Spawning Area

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE

Enumerated_Domain_Value_Definition: Thermal Refuge

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE

Enumerated_Domain_Value_Definition: Vulnerable Occurrence

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING

Enumerated_Domain_Value_Definition: Wintering

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid

Enumerated_Domain_Value_Definition: Alcid

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous

Enumerated_Domain_Value_Definition: Diadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin

Enumerated_Domain_Value_Definition: Dolphin

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery

Enumerated_Domain_Value_Definition: Estuarine nursery fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern

Enumerated_Domain_Value_Definition: Gull or tern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert

Enumerated_Domain_Value_Definition: Invertebrate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic

Enumerated_Domain_Value_Definition: Marine benthic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic

Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee

Enumerated_Domain_Value_Definition: Manatee

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine

Enumerated_Domain_Value_Definition: Passerine bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic

Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant

Enumerated_Domain_Value_Definition: Plant

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor

Enumerated_Domain_Value_Definition: Raptor

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp

Enumerated_Domain_Value_Definition: Shrimp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake

Enumerated_Domain_Value_Definition: Snake

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT

Attribute_Definition: October
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED

Entity_Type_Definition:

The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 12

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = interesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE

Attribute_Definition: Two-letter state abbreviation.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S

Attribute_Definition: State threatened or endangered status.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C
Enumerated_Domain_Value_Definition: Species of Special Concern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Experimental essential population
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F
Attribute_Definition: Federal threatened or endangered status.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on federal list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g.

ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of

the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: M_MAMMAL (Marine Mammal Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: M_MAMMAL (Marine Mammal Polygons)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive biological resource data for whales, dolphins, and manatees in South Carolina. Vector polygons in this data set represent marine mammal distribution. 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 South Carolina. 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.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness date for this data is 2014 and is documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Marine Mammal

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydro, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above *Attribute_Accuracy_Report*, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge, available hardcopy documents, survey data, and digital data on marine mammal distribution. These data do not necessarily represent all marine mammal occurrences in South Carolina. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 10, West Indian manatee, *Trichechus manatus*; 13, Humpback whale, *Megaptera novaeangliae*; 17, Bottlenose dolphin, *Tursiops truncatus*; 18, Pygmy sperm whale, *Kogia breviceps*; 19, Short-finned pilot whale, *Globicephala macrorhynchus*; 21, Atlantic spotted dolphin, *Stenella frontalis*; 81, North Atlantic right whale, *Eubalaena glacialis*.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the biological data layers can come from expert interviews, hardcopy, or digital sources. Some of the spatial components of the biological data layers may have been developed using regional experts who estimate concentration areas. It is difficult to estimate the positional accuracy of such data, except to state that they are compiled on hardcopy base maps with a scale of 1:24,000. Some of the spatial components of the biological data sets are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Note that biological resource data by their very nature are considered "fuzzy", and this should be understood when considering the positional accuracy of vector digital objects representing these resources. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: GEORGIA DEPARTMENT OF NATURAL RESOURCES (GADNR) -
CLAY GEORGE

Publication_Date: 2014

Title: MARINE MAMMALS IN THE SOUTHEASTERN U.S.

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: M_MAMMAL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) -
WAYNE MCFEE

Publication_Date: 2014

Title: MARINE MAMMAL HABITAT AND SEASONALITY IN SOUTH
CAROLINA WATERS

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: M_MAMMAL INFORMATION

Process_Step:

Process_Description:

Two main sources of data were used to depict marine mammal distribution and seasonality for this data layer: 1) personal interviews with resource experts from NOAA's National Ocean Service, U.S. Fish and Wildlife Service, and the Georgia Department of Natural Resources (GADNR); and 2) numerous published and unpublished reports. The above digital and/or hardcopy sources were compiled by the project biologist to create the M_MAMMAL data layer. 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 M_MAMMAL data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

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Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 3058

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001
Longitude_Resolution: 0.000000001
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, M_MAMMAL) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the South Carolina atlas, the number is 234), an element/layer specific number (BIRDS are layer 1, FISH are layer 2, etc.), and a unique record number. The RARNUM represents a unique combination of species, seasonalities, concentrations, and source information. For each of these groupings, a number is generated. That number is concatenated with the atlas number to create a "resource at risk" number that is unique across atlases. BIORES and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure. Due to the complexity of the relational database model, the data items are also post-processed into a flat file format. This table, called BIOFILE, may be used in place of the relational files described below to ease simple data queries. The items in the flat file are ELEMENT, SUBELEMENT, NAME, GEN_SPEC, S, F, NHP, DATE_PUB, CONC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC, BREED1, BREED2, BREED3, BREED4, BREED5, RARNUM, G_SOURCE, S_SOURCE, and BREED. All of these items are the same as their counterparts in the individual data tables described below, except the BREED1-BREED5 and BREED items. BREED is a newly generated variable used to link to the BREED_DT data table, a modified, more compact version of the relational BREED data table. BREED1-BREED5 give a text summary of when each life stage occurs within the associated map object. The life stages referred to are the same as those listed in the Detailed_Description of the BREED data table. The link to the BIOFILE may be made through the BIO_LUT, using ID to link to RARNUM, or BIOFILE may be linked directly to the RARNUM in each of the geographic layer's attribute data tables. As mentioned, BREED_DT is an auxiliary support data table to the flat file structure, which allows the user to do searches based on month for seasonal breeding activities. The link from the flat file to BREED_DT is the BREED item. A second supporting data table is SOURCES. This is the same as the source file described above, and the link from the flat file is both G_SOURCE and S_SOURCE. It should be noted that although the flat file eases data query, it is not a normalized database structure, and actual updates performed by the states and other responsible agencies should be done using the relational data tables. The entity-relationship diagram describing relationships between attribute tables in the ESI data structure does NOT include the BIOFILE data table, and this data table is NOT described in detail below.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: M_MAMMAL

Entity_Type_Definition:

The M_MAMMAL table contains attribute information for the vector polygons in this data set representing marine mammal distribution. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (4), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links directly to the BIORES table or the flat format BIOFILE table. RARNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIO_LUT

Entity_Type_Definition:

The data table BIO_LUT is a lookup table that contains items necessary for linking vector objects in the biological data layers with the BIORES data table. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIO_LUT data table to records in the BIORES data table or the flat format BIOFILE data table. RARNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the biology data layers to records in the BIO_LUT data table. ID is a concatenation of atlas number (234), element number (4), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORES

Entity_Type_Definition:

The data table BIORES contains both biological attribute data and items necessary for linking vector objects in the biological data layers via the BIO_LUT data table to other associated data tables. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORES data table to records in the BIO_LUT data table or the flat format BIOFILE data table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"
Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values of a species at a particular location. No quantitative data was available for marine mammals, so the concentration field may either be blank or contain descriptive terms such as "HIGH" or "COMMON".

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: MAPPING_QUALIFIER

Attribute_Definition: An indication of why this feature was mapped in the ESI.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CALVING

Enumerated_Domain_Value_Definition: Calving

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COLONY

Enumerated_Domain_Value_Definition: Colony

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CONCENTRATION AREA

Enumerated_Domain_Value_Definition: Concentration Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: DENNING
Enumerated_Domain_Value_Definition: Denning
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: GENERAL DISTRIBUTION
Enumerated_Domain_Value_Definition: General Distribution
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HARVEST AREA
Enumerated_Domain_Value_Definition: Harvest Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAUL OUT
Enumerated_Domain_Value_Definition: Haul Out
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HAZARD
Enumerated_Domain_Value_Definition: Hazard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HIGH ECOLOGICAL VALUE
Enumerated_Domain_Value_Definition: High Ecological Value
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MIGRATION

Enumerated_Domain_Value_Definition: Migration
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NESTING
Enumerated_Domain_Value_Definition: Nesting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NURSERY AREA
Enumerated_Domain_Value_Definition: Nursery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PUPPING
Enumerated_Domain_Value_Definition: Pupping
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAFTING
Enumerated_Domain_Value_Definition: Rafting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ROOSTING
Enumerated_Domain_Value_Definition: Roosting
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SPAWNING AREA
Enumerated_Domain_Value_Definition: Spawning Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: THERMAL REFUGE

Enumerated_Domain_Value_Definition: Thermal Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: VULNERABLE OCCURRENCE
Enumerated_Domain_Value_Definition: Vulnerable Occurrence
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WINTERING
Enumerated_Domain_Value_Definition: Wintering
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: G_SOURCE

Attribute_Definition:

Geographic source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: S_SOURCE

Attribute_Definition:

Seasonality source identifier that links records in the BIORES data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SPECIES

Entity_Type_Definition:

The data table SPECIES identifies all species in the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure. Refer to the Completeness Report for list of layer specific species.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name for the entire ESI data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alcid

Enumerated_Domain_Value_Definition: Alcid

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous

Enumerated_Domain_Value_Definition: Diadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin

Enumerated_Domain_Value_Definition: Dolphin

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery

Enumerated_Domain_Value_Definition: Estuarine nursery fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gull_tern

Enumerated_Domain_Value_Definition: Gull or tern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: invert

Enumerated_Domain_Value_Definition: Invertebrate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic

Enumerated_Domain_Value_Definition: Marine benthic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic

Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: manatee

Enumerated_Domain_Value_Definition: Manatee

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine

Enumerated_Domain_Value_Definition: Passerine bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic

Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant

Enumerated_Domain_Value_Definition: Plant

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor

Enumerated_Domain_Value_Definition: Raptor

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shrimp

Enumerated_Domain_Value_Definition: Shrimp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: snake

Enumerated_Domain_Value_Definition: Snake

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: GRANK

Attribute_Definition: Global Rank of the species as defined by NatureServe

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NatureServe Global Conservation Status Ranks

Codeset_Source: NatureServe

Attribute:

Attribute_Label: GRANKDATE

Attribute_Definition: Date the GRANK was assessed

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Date unspecified

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SEASONAL

Entity_Type_Definition:

The data table SEASONAL contains information on the seasonal presence of each species associated with each spatial vector object. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: SEASON_ID

Attribute_Definition:

Numeric identifier for the unique monthly presence and life history characteristics of each species at a given location.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the

BIORES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: BREED

Entity_Type_Definition:

The data table BREED identifies the monthly presence of certain life-history stages or activities for each species at a given location.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BIoRES data table to records in the SEASONAL and BREED data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP), the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (e.g. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: MON

Attribute_Definition:

Two-digit calendar month. Each life history stage or activity type for a particular species can have up to 12 records to account for each month of the year.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Attribute:

Attribute_Label: BREED1

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED1 = nesting; if ELEMENT is "FISH" then BREED1 = spawning; if ELEMENT is "INVERT" then BREED1 = spawning; if ELEMENT is "HERP" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = migrating; if ELEMENT is "FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "HERP" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = molting; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "HERP" then BREED3 = interesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This attribute is not used for BENTHIC, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED4 = juveniles; if ELEMENT is "INVERT" then BREED4 = juveniles; if ELEMENT is "HERP" then BREED4 = juveniles; if ELEMENT is "M_MAMMAL" then BREED4 = molting. This attribute is not used for BENTHIC, BIRD, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: BREED5

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "FISH" then BREED5 = adults; if ELEMENT is "INVERT" then BREED5 = adults; if ELEMENT is "HERP" then BREED5 = adults. This attribute is not used for BENTHIC, BIRD, M_MAMMAL, HABITAT, or T_MAMMAL elements.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present or not reported

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: -

Enumerated_Domain_Value_Definition:

Breed category not used or not appropriate for record(s) in question

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: STATUS

Entity_Type_Definition:

The data table STATUS identifies the species that are listed as either threatened or endangered by a state, federal, or international authority. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BENTHIC

Enumerated_Domain_Value_Definition: Benthic

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HERP

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SPECIES_ID

Attribute_Definition:

Numeric identifier for each species that is unique within each element and refers to a nationwide master ESI species list maintained at NOAA.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: STATE

Attribute_Definition: Two-letter state abbreviation.

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: S
Attribute_Definition: State threatened or endangered status.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on state list
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C
Enumerated_Domain_Value_Definition: Species of Special Concern
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Experimental essential population
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F
Attribute_Definition: Federal threatened or endangered status.
Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on federal list

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of Special Concern

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Threatened or endangered due to similarity of appearance

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Experimental essential population

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: S_DATE

Attribute_Definition:

Publication date of source material used to assign state status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: F_DATE

Attribute_Definition:

Publication date of source material used to assign federal status values for each species, if used.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

Concatenation of ELEMENT and SPECIES_ID. This item links records in the BIORES data table to records in the SPECIES and STATUS data tables.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT (or 'X' in the case of BENTHIC and 'R' in the case of HERP) and the next five characters are SPECIES_ID (e.g. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR
Attribute_Definition: Author or developer of source material or data set.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:
Date of source material, publication, or date of personal communication with expert source.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM
Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE
Attribute_Definition: Title of source material or data.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT
Attribute_Definition: The format of the source material.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE
Attribute_Definition: Publication place.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508
Metadata_Review_Date: 201508
Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen
Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

South Carolina: MGT (Management Area Polygons)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
 - [Data Quality Information](#)
 - [Spatial Data Organization Information](#)
 - [Spatial Reference Information](#)
 - [Entity and Attribute Information](#)
 - [Distribution Information](#)
 - [Metadata Reference Information](#)
-

Identification_Information:

Citation:

Citation_Information:

Originator:

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Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains sensitive human-use data for Army Corps of Engineers (ACE) jurisdictions, anchorages, commercial fishing locations, coast guard jurisdictions, critical habitats, county boundaries, essential habitats, Environmental Protection Agency (EPA) regions, Federal Emergency Management Agency (FEMA) regions, National Forests, management areas, military areas, Nature Conservancy lands, National Estuarine Research Reserves (NERR), National Parks, state/local parks, renewable energy sites, state waters, tribal lands, and wildlife refuges for South Carolina. Vector polygons in this data set represent management areas. Location specific type 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 South Carolina. 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. See also

the SOCECONL and SOCECONPT data layers, part of the larger South Carolina ESI database, for additional human-use information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1964

Ending_Date: 2015

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1964 to 2015 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Management

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with

environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's

are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of digital boundaries for management areas. See also the SOCECONL and SOCECONPT data layers, part of the larger South Carolina ESI database, for additional human-use information. These data do not necessarily represent all management areas in South Carolina.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the human-use data layers can come from expert interviews, hardcopy, or digital sources. Most of the spatial components of the human-use data layers are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Some of the spatial components of the human-use data layers are compiled on hardcopy base maps with a scale of 1:24,000. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

BUREAU OF OCEAN ENERGY MANAGEMENT (BOEM), OFFICE OF RENEWABLE ENERGY

Publication_Date: 2011

Title: WIND PLANNING AREAS - ATLANTIC

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: HERNDON, VA

Publisher: BUREAU OF OCEAN ENERGY MANAGEMENT

Online_Linkage:

https://www.data.boem.gov/homepg/data_center/mapping/geographic_mapping.asp

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ENTERPRISE GIS SERVICES

Publication_Date: 2008

Title: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) REGIONS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON, D.C.

Publisher:

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ENTERPRISE GIS SERVICES

Online_Linkage: <http://gis.fema.gov/DataFeeds.html>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1964

Ending_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC), FISH AND WILDLIFE RESEARCH INSTITUTE (FWRI)

Publication_Date: 2005

Title:

CORAL, CORAL REEF, AND LIVE_HARD BOTTOM EFH-HAPC; COASTAL MIGRATORY PELAGICS EFH-HAPC; SHRIMP EFH-HAPC; SNAPPER/GROUPER EFH-HAPC

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <http://www.safmc.net/ecosystem-management/mapping-and-gis-data>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2005

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM (NERRS)

Publication_Date: 2014

Title: NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: COLUMBIA, SOUTH CAROLINA

Publisher: NATIONAL ESTUARINE RESEARCH RESERVE SYSTEM

Online_Linkage: <http://www.nerrs.noaa.gov/>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) FISHERIES
SERVICE OFFICE OF PROTECTED RESOURCES (OPR) AND U. S. FISH & WILDLIFE
SERVICE (USFWS), NORTH FLORIDA ECOLOGICAL SERVICES OFFICE

Publication_Date: 2014

Title:
NEARSHORE REPRODUCTIVE CRITICAL HABITAT FOR THE NORTHWEST ATLANTIC
OCEAN DISTINCT POPULATION SEGMENT OF LOGGERHEAD SEA TURTLE (CARETTA
CARETTA)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) FISHERIES
SERVICE'S OFFICE OF PROTECTED RESOURCES

Online_Linkage:

http://www.nmfs.noaa.gov/pr/species/turtles/criticalhabitat_loggerhead.htm#maps

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), DEPARTMENT OF
COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), OFFICE FOR COASTAL

MANAGEMENT (OCM)
Publication_Date: 2014
Title: ANCHORAGE AREAS OF THE UNITED STATES AS OF JULY 2014
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: CHARLESTON, SC
Publisher: NOAA'S OCEAN SERVICE, OFFICE FOR COASTAL MANAGEMENT (OCM)

Online_Linkage: <ftp://ftp.coast.noaa.gov/pub/MSP/AnchorageAreas.zip>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010
Ending_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S. DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS, OFFICE FOR COASTAL MANAGEMENT(OCM)

Publication_Date: 2013

Title:
COASTAL ZONE MANAGEMENT ACT BOUNDARY FOR THE UNITED STATES AND U.S. TERRITORIES AS OF DECEMBER 2013

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: CHARLESTON, SC
Publisher: NOAA'S OCEAN SERVICE, OFFICE FOR COASTAL MANAGEMENT (OCM)

Online_Linkage:
<http://www.coast.noaa.gov/arcgis/rest/services/MarineCadastre/NationalViewer/MapServer>

Source_Scale_Denominator: 80000
Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1996
Ending_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: NATIONAL PARK SERVICE (NPS)
Publication_Date: 2009
Title: NATIONAL PARK BOUNDARIES
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: FORT COLLINS, CO
Publisher: NATIONAL PARK SERVICE

Online_Linkage: <http://catalog.data.gov/dataset/national-park-boundariesf0a4c>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2002
Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
Publication_Date: 2011
Title:
COMPREHENSIVE SPATIAL DATABASE ON SOUTH CAROLINA'S COASTAL RESOURCES
AND USES
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: CHARLESTON, SOUTH CAROLINA
Publisher: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Online_Linkage: <http://www.dnr.sc.gov/GIS/gisenergy.html>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR) - JIM SCURRY,
TECHNOLOGY DEVELOPMENT PROGRAM DIRECTOR

Publication_Date: 2014

Title:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES OWNED WILDLIFE
MANAGEMENT AREAS, 2014

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR) OFFICE OF
FISHERIES MANAGEMENT MARINE RESOURCES RESEARCH INSTITUTE (MRRI) GIS LAB
- ERIN KOCH

Publication_Date: 2013

Title:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES OFFICE OF FISHERIES
MANAGEMENT COMMERCIAL TRAWL ZONE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2013

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR) OFFICE OF
FISHERIES MANAGEMENT MARINE RESOURCES RESEARCH INSTITUTE (MRRI) GIS LAB
- ERIN KOCH

Publication_Date: 2014

Title:

SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES OFFICE OF FISHERIES
MANAGEMENT SHELLFISH PERMIT AREAS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: THE NATURE CONSERVANCY (TNC)

Publication_Date: 2011

Title: THE NATURE CONSERVANCY'S CONSERVATION LANDS SYSTEM

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: MINNEAPOLIS, MINNESOTA

Publisher: THE NATURE CONSERVANCY

Online_Linkage: <http://www.tnclands.tnc.org/#>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. ARMY ENGINEER RESEARCH AND DEVELOPMENT CENTER, COLD REGIONS
RESEARCH AND ENGINEERING LABORATORY REMOTE SENSING AND GEOGRAPHIC

INFORMATION SYSTEMS CENTER
Publication_Date: 2010
Title: UNITED STATES ARMY CORPS OF ENGINEERS BOUNDARIES
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: WASHINGTON D.C.
Publisher: UNITED STATES ARMY CORPS OF ENGINEERS

Online_Linkage:
<https://www.sciencebase.gov/catalog/item/4f4e4779e4b07f02db47f46b>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2010

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. COAST GUARD (USCG) DISTRICTS OPERATIONS SYSTEMS CENTER
Publication_Date: 2010
Title: UNITED STATES COAST GUARD BOUNDARIES
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: KEARNEYSVILLE, WV
Publisher: COAST GUARD OPERATIONS SYSTEMS CENTER

Online_Linkage:
<https://www.sciencebase.gov/catalog/item/get/4f4e49b0e4b07f02db5c915e>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2010

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE (USDA FS) AUTOMATED LANDS

PROGRAM
Publication_Date: 2015
Title: S_USA.ADMINISTRATIVEFOREST
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: WASHINGTON D.C.
Publisher:
US FOREST SERVICE CHIEF INFORMATION OFFICE, ENTERPRISE DATA
WAREHOUSE

Online_Linkage:
<http://data.fs.usda.gov/geodata/edw/datasets.php?dsetCategory=boundaries>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:
U.S. DEPARTMENT OF COMMERCE, U.S. CENSUS BUREAU, GEOGRAPHY DIVISION

Publication_Date: 2014

Title:
TIGER/LINE SHAPEFILE, 2014, NATION, U.S., CURRENT AMERICAN INDIAN/ALASKA
NATIVE/NATIVE HAWAIIAN AREAS NATIONAL (AIANNH) NATIONAL

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON D.C.

Publisher:
U.S. DEPARTMENT OF COMMERCE, U.S. CENSUS BUREAU, GEOGRAPHY DIVISION,
GEOGRAPHIC PRODUCTS BRANCH

Online_Linkage: <http://www2.census.gov/geo/tiger/TIGER2014/AIANNH/>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2013

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. DEPARTMENT OF COMMERCE, U.S. CENSUS BUREAU, GEOGRAPHY DIVISION

Publication_Date: 2014

Title:

TIGER/LINE SHAPEFILE, 2014, NATION, UNITED STATES, CURRENT COUNTY AND EQUIVALENT NATIONAL SHAPEFILE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON, D.C.

Publisher:

U.S. DEPARTMENT OF COMMERCE, U.S. CENSUS BUREAU, GEOGRAPHY DIVISION,
GEOGRAPHIC PRODUCTS BRANCH

Online_Linkage: <ftp://ftp2.census.gov/geo/tiger/TIGER2014/COUNTY/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2013

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. DEPARTMENT OF COMMERCE, U.S. CENSUS BUREAU, GEOGRAPHY DIVISION

Publication_Date: 2014

Title:

TIGER/LINE SHAPEFILE, 2014, NATION, UNITED STATES, MILITARY INSTALLATION NATIONAL SHAPEFILE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON, D.C.

Publisher:

U.S. DEPARTMENT OF COMMERCE, U.S. CENSUS BUREAU, GEOGRAPHY DIVISION,
GEOGRAPHIC PRODUCTS BRANCH

Online_Linkage: <http://www2.census.gov/geo/tiger/TIGER2013/MIL/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2013
Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)

Publication_Date: 2011

Title:

ENVIRONMENTAL PROTECTION AGENCY REGION BOUNDARIES, UNITED STATES, 2011,
ENVIRONMENTAL PROTECTION AGENCY, SEGS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: RESEARCH TRIANGLE PARK, NORTH CAROLINA

Publisher:

U.S. EPA OFFICE OF ENVIRONMENTAL INFORMATION (OEI) - OFFICE OF
INFORMATION ANALYSIS AND ACCESS (OIAA)

Online_Linkage: <https://edg.epa.gov/data>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2001

Title:

FINAL DETERMINATION OF CRITICAL HABITAT FOR WINTERING PIPING PLOVERS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: FEDERAL REGISTER

Publisher: DEPARTMENT OF INTERIOR

Other_Citation_Details: FEDERAL REGISTER VOL. 65, NO. 130, PG. 41782, JULY 6, 2000

Online_Linkage: <http://ecos.fws.gov/crithab/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2000

Ending_Date: 2001

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2015

Title: FISH AND WILDLIFE SERVICE INTEREST BOUNDARIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: FALLS CHURCH, VIRGINIA

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE

Online_Linkage: <http://www.fws.gov/GIS/Data/CadastralDB>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MGT INFORMATION

Process_Step:

Process_Description:

The mapping extent was dependent upon information availability and location of mapped coastal habitats and shorelines. Sources of data used to depict human-use resources in this data layer include digital datasets provided by the following agencies: NOAA's Office for Coastal Management (OCM), U.S. Army Corps of Engineers Research and Development Center, U.S. Coast Guard (USCG) Districts Operations Systems Center, South Carolina Department of Natural Resources (SCDNR), Bureau of Ocean Energy Management (BOEM), U.S. Census Bureau, U.S. Fish and Wildlife Service (USFWS), NOAA's Fisheries Service Office of Protected Resources (OPR), U.S. Environmental Protection Agency (USEPA), Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute (FWRI), Federal Emergency Management Agency (FEMA), U.S. Census Bureau (USCB), National Estuarine Research Reserve System (NERR), U.S. Department of Agriculture Forest Service (USDA FS), National Park Service (NPS), and The Nature Conservancy (TNC). Anchorage areas and state waters provided by Marine Cadastre operated by NOAA's Office for Coastal Management. Data hosted by <http://sciencebase.gov> provided Army Corps of Engineers jurisdictional boundaries and U.S. Coast Guard jurisdictional boundaries (districts and sectors). Commercial fishing polygons depict shellfish permit areas provided by SCDNR. County jurisdictional boundaries were acquired from the U.S. Census Bureau. Designated critical habitat for the frosted flatwoods salamander and piping plover were provided by the USFWS. Loggerhead sea turtle critical habitat were provided by NOAA's Fisheries Service Office of Protected Resources. Environmental Protection Agency Region data came from the USEPA. Essential Habitat for the snapper grouper,

shrimp, coral, and coastal migratory pelagic hazard prediction and assessment capability (HPAC) were provided by the Florida Fish and Wildlife Conservation Commission. Federal Emergency Management Agency Region were acquired by the FEMA Enterprise GIS Services. Management areas such as protected marsh land, natural area, preserves, tracts, mitigation sites, wildlife management areas, and coastal reserves were provided by SCDNR. Military jurisdictional boundaries that fall under the responsibility of the Department of Defense came from the U.S. Census Bureau. National Estuarine Research Reserve (NERR) boundary data for ACE Basin and North Inlet-Winyah Bay NERR were provided by the NERR System. Francis Marion and Sumter National Forest data were provided by USDA FS. Fort Sumter National Monument and Charles Pinckney National Historic Site were used from the National Park boundaries dataset downloaded from <http://Data.gov>. Boundaries of The Nature Conservancy (TNC) properties and easements were provided by TNC. State park data were provided by SCDNR. Recreational fishing boundaries were provided by SCDNR Office of Fisheries Management Marine Resources Research Institute GIS Lab. Renewable energy wind planning areas were provided by BOEM. Tribal Land for the Wassamasaw tribe was provided by the U.S. Census Bureau. USFWS National Wildlife Refuge (NWR) data were downloaded from the USFWS National Cadastral Data. All polygons were edited to reflect the updated ESI shoreline. The above digital and/or hardcopy sources were compiled by the project biologist to create the MGT data layer. 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 MGT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of chains

Point_and_Vector_Object_Count: 121

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001
Longitude_Resolution: 0.000000001
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 80
Semi-major_Axis: 6378137.000000
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, two relational attribute or data tables, SOC_DAT, and SOURCES, are used to store the complex socioeconomic data in the ESI data structure. The geographic data layer containing socioeconomic data resource information (in this case, MGT) is linked to the Socioeconomic Resources table (SOC_DAT) using the unique ID and the lookup table SOC_LUT, or it can be linked directly using HUNUM. HUNUM is a unique reference number concatenated with the atlas number (for South Carolina, the number is 234). ID is a unique combination of the atlas number (234), an element specific number (MGT = 11), and a unique record number. SOC_DAT and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: MGT

Entity_Type_Definition:

The MGT table contains attribute information for the vector polygons representing sensitive human-use data for Army Corps of Engineers (ACE) jurisdictions, anchorages, commercial fishing locations, coast guard jurisdictions, critical habitats, county boundaries, essential habitats, Environmental Protection Agency (EPA) regions, Federal Emergency Management Agency (FEMA) regions, National Forests, management areas, military areas, Nature Conservancy lands, National Estuarine Research Reserves (NERR), National Parks, state/local parks, renewable energy sites, state waters, tribal lands, and wildlife refuges. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ACE

Enumerated_Domain_Value_Definition: Army Corps of Engineers

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AN
Enumerated_Domain_Value_Definition: Anchorage
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CF
Enumerated_Domain_Value_Definition: Commercial Fishing
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CG
Enumerated_Domain_Value_Definition: Coast Guard Station, District, or Sector
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CH
Enumerated_Domain_Value_Definition: Critical Habitat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CO
Enumerated_Domain_Value_Definition: County Border
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EH
Enumerated_Domain_Value_Definition: Essential Habitat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA
Enumerated_Domain_Value_Definition: EPA Regions
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FA
Enumerated_Domain_Value_Definition: Fishery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FEMA
Enumerated_Domain_Value_Definition: FEMA Region
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FO
Enumerated_Domain_Value_Definition: National Forest
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MA
Enumerated_Domain_Value_Definition: Management Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MI
Enumerated_Domain_Value_Definition: Military
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NC
Enumerated_Domain_Value_Definition: Nature Conservancy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NERR
Enumerated_Domain_Value_Definition: National Estuarine Research Reserve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NP
Enumerated_Domain_Value_Definition: National Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: P
Enumerated_Domain_Value_Definition: Regional or State Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RE
Enumerated_Domain_Value_Definition: Renewable Energy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SW
Enumerated_Domain_Value_Definition: State Waters
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: TL
Enumerated_Domain_Value_Definition: Tribal Land
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WR
Enumerated_Domain_Value_Definition: Wildlife Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the human-use data layers to records in the SOC_LUT data table. ID is a concatenation of atlas number (234), element number (11), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"
Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links directly to the SOC_DAT table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"
Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOC_LUT

Entity_Type_Definition:

The data table SOC_LUT is a lookup table that contains items necessary for linking vector objects in the human-use data layers with the SOC_DAT data table. See the Browse_Graphic section for a link

to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_LUT data table to records in the SOC_DAT data table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the human-use data layers to records in the SOC_LUT data table. ID is a concatenation of atlas number (234), element number (11), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOC_DAT

Entity_Type_Definition:

The data table SOC_DAT contains both human-use attribute data and items necessary for linking the human-use spatial data layers to the SOURCES data table. See the *Browse_Graphic* section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_DAT data table to records in the SOC_LUT data table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations.

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ABANDONED VESSEL
Enumerated_Domain_Value_Definition: Abandoned Vessel
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ACCESS
Enumerated_Domain_Value_Definition: Access
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AIRPORT
Enumerated_Domain_Value_Definition: Airport
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ANCHORAGE
Enumerated_Domain_Value_Definition: Anchorage
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ARMY CORPS OF ENGINEERS
Enumerated_Domain_Value_Definition: Army Corps of Engineers
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ARTIFICIAL REEF
Enumerated_Domain_Value_Definition: Artificial Reef
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BEACH
Enumerated_Domain_Value_Definition: Beach
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BOAT RAMP
Enumerated_Domain_Value_Definition: Boat Ramp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COAST GUARD

Enumerated_Domain_Value_Definition: Coast Guard Station, District, or Sector

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COMMERCIAL FISHING

Enumerated_Domain_Value_Definition: Commercial Fishing

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COUNTY

Enumerated_Domain_Value_Definition: County Border

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CRITICAL HABITAT

Enumerated_Domain_Value_Definition: Critical Habitat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA FACILITY

Enumerated_Domain_Value_Definition: EPA Facility

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA REGION

Enumerated_Domain_Value_Definition: EPA Regions

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ESSENTIAL HABITAT

Enumerated_Domain_Value_Definition: Essential Habitat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FEMA REGION

Enumerated_Domain_Value_Definition: FEMA Region

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISHERY AREA
Enumerated_Domain_Value_Definition: Fishery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HELIPORT
Enumerated_Domain_Value_Definition: Heliport
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HISTORICAL SITE
Enumerated_Domain_Value_Definition: Historical Site or Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: LOCK AND DAM
Enumerated_Domain_Value_Definition: Lock and Dam
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGEMENT AREA
Enumerated_Domain_Value_Definition: Management Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MARINA
Enumerated_Domain_Value_Definition: Marina
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MILITARY
Enumerated_Domain_Value_Definition: Military
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL ESTUARINE RESEARCH RESERVE
Enumerated_Domain_Value_Definition: National Estuarine Research Reserve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL FOREST

Enumerated_Domain_Value_Definition: National Forest
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL GUARD
Enumerated_Domain_Value_Definition: National Guard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL PARK
Enumerated_Domain_Value_Definition: National Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATURE CONSERVANCY
Enumerated_Domain_Value_Definition: Nature Conservancy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NOAA FACILITY
Enumerated_Domain_Value_Definition: NOAA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PARK
Enumerated_Domain_Value_Definition: Regional or State Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PORT
Enumerated_Domain_Value_Definition: Port
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAIL ROUTE
Enumerated_Domain_Value_Definition: Rail Route
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RENEWABLE ENERGY
Enumerated_Domain_Value_Definition: Renewable Energy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPEATED MEASUREMENT SITE
Enumerated_Domain_Value_Definition: Repeated Measurement Site/Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RIVER MILE
Enumerated_Domain_Value_Definition: River Mile
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SHIPPING LANE
Enumerated_Domain_Value_Definition: Shipping Lane
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: STATE WATERS
Enumerated_Domain_Value_Definition: State Waters
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: TRIBAL LAND
Enumerated_Domain_Value_Definition: Tribal Land
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WASH OVER
Enumerated_Domain_Value_Definition: Wash Over
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WASTE DISPOSAL
Enumerated_Domain_Value_Definition: Waste Disposal
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WATER INTAKE
Enumerated_Domain_Value_Definition: Water Intake
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WILDLIFE REFUGE
Enumerated_Domain_Value_Definition: Wildlife Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NAME
Attribute_Definition: The feature name.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: CONTACT
Attribute_Definition: Contact person or entity.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PHONE
Attribute_Definition: Contact telephone number.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: LINK
Attribute_Definition: Link to the resource web-page.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: G_SOURCE
Attribute_Definition:
Geographic source identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: A_SOURCE

Attribute_Definition:

Attribute source identifier that links records in the SOC_DAT data table to records in the SOURCES data table.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES

Entity_Type_Definition:

The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition:

Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR

Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT
Attribute_Definition: The format of the source material.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE
Attribute_Definition: Publication place.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER
Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.9.32 on Tue Aug 04 10:16:50 2015

South Carolina: SOCECONL (Socioeconomic Resource Lines)

Metadata also available as - [[Parseable text](#)] - [[SGML](#)] - [[XML](#)]

Metadata:

- [Identification Information](#)
- [Data Quality Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Distribution Information](#)
- [Metadata Reference Information](#)

Identification_Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication_Date: 201508

Title: South Carolina: SOCECONL (Socioeconomic Resource Lines)

Edition: Second

Geospatial_Data_Presentation_Form: vector digital data

Series_Information:

Series_Name: None

Issue_Identification: South Carolina

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other_Citation_Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains human-use resource data for rail routes and shipping lanes for South Carolina. Vector lines in this data set represent human-use site locations. Location specific type 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 South Carolina. 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. See also the MGT and SOCECONPT data layers, part of the larger South Carolina ESI database, for additional human-use information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2001

Ending_Date: 2014

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 2001 to 2014 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000
East_Bounding_Coordinate: -78.50000
North_Bounding_Coordinate: 34.00000
South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category
Theme_Keyword: biota
Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None
Theme_Keyword: Environmental Monitoring
Theme_Keyword: ESI
Theme_Keyword: Sensitivity maps
Theme_Keyword: Coastal resources
Theme_Keyword: Oil spill planning
Theme_Keyword: Coastal Zone Management
Theme_Keyword: Wildlife
Theme_Keyword: Socioeconomic

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc. Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg
Browse_Graphic_File_Description:
Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.
Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg
Browse_Graphic_File_Description:
Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.
Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.
The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical

consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge and available digital data on socioeconomic resources. See also the MGT and SOCECONPT data layers, part of the larger South Carolina ESI database, for additional human-use information. These data do not necessarily represent all human-use features in South Carolina.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the human-use data layers can come from expert interviews, hardcopy, or digital sources. Most of the spatial components of the human-use data layers are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Some of the spatial components of the human-use data layers are compiled on hardcopy base maps with a scale of 1:24,000. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), OFFICE OF COAST SURVEY (OCS)

Publication_Date: 2001

Title: SHIPPING LANES IN U.S. WATERS: FAIRWAY AREA

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher: NOAA'S OCEAN SERVICE, OFFICE OF COAST SURVEY (OCS)

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2001

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONL INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

OFFICE OF THE ASSISTANT SECRETARY FOR RESEARCH AND TECHNOLOGY'S BUREAU OF TRANSPORTATION STATISTICS

Publication_Date: 2014

Title: NATIONAL TRANSPORTATION ATLAS DATABASE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON, DC

Publisher:

OFFICE OF THE ASSISTANT SECRETARY FOR RESEARCH AND TECHNOLOGY'S BUREAU OF TRANSPORTATION STATISTICS

Online_Linkage:

http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_atlas_database/2014/index.html

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2008

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONL INFORMATION

Process_Step:

Process_Description:

The mapping extent was dependent upon information availability and location of mapped coastal habitats and shorelines. The main sources of data used to depict human-use resources for this data layer were digital data sets provided by the following agencies: NOAA's Office of Coast Survey (OCM) and U.S. Department of Transportation (USDOT). Railroutes were acquired from USDOT's National Transportation Atlas Database. Shipping Lanes in US Waters data were provided by NOAA's Coastal and Marine Spatial Planning office.

The above digital and/or hardcopy sources were compiled by the project biologist to create the SOCECONL data layer. 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 SOCECONL data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: String

Point_and_Vector_Object_Count: 488

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, two relational attribute or data tables, SOC_DAT, and SOURCES, are used to store the complex socioeconomic data in the ESI data structure. The geographic data layer containing socioeconomic data resource information (in this case, SOCECONL) is linked to the Socioeconomic Resources table (SOC_DAT) using the unique ID and the lookup table SOC_LUT, or it can be linked directly using HUNUM. HUNUM is a unique reference number concatenated with the atlas number (for South Carolina, the number is 234). ID is a unique combination of the atlas number (234), an element specific number (SOCECONL = 12), and a unique record number. SOC_DAT and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOCECONL

Entity_Type_Definition:

The SOCECONL table contains attribute information for the vector lines representing rail routes and shipping lanes.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RR

Enumerated_Domain_Value_Definition: Rail Route

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SL

Enumerated_Domain_Value_Definition: Shipping Lane

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the human-use data layers to records in the SOC_LUT data table. ID is a concatenation of atlas number (234), element number (12), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links directly to the SOC_DAT table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOC_LUT

Entity_Type_Definition:

The data table SOC_LUT is a lookup table that contains items necessary for linking vector objects in the human-use data layers with the SOC_DAT data table. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_LUT data table to records in the SOC_DAT data table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the human-use data layers to records in the SOC_LUT data table. ID is a concatenation of atlas number (234), element number (12), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOC_DAT

Entity_Type_Definition:

The data table SOC_DAT contains both human-use attribute data and items necessary for linking the human-use spatial data layers to the SOURCES data table. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_DAT data table to records in the SOC_LUT data table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ABANDONED VESSEL

Enumerated_Domain_Value_Definition: Abandoned Vessel

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ACCESS

Enumerated_Domain_Value_Definition: Access

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AIRPORT
Enumerated_Domain_Value_Definition: Airport
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ANCHORAGE
Enumerated_Domain_Value_Definition: Anchorage
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ARMY CORPS OF ENGINEERS
Enumerated_Domain_Value_Definition: Army Corps of Engineers
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ARTIFICIAL REEF
Enumerated_Domain_Value_Definition: Artificial Reef
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BEACH
Enumerated_Domain_Value_Definition: Beach
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BOAT RAMP
Enumerated_Domain_Value_Definition: Boat Ramp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COAST GUARD
Enumerated_Domain_Value_Definition: Coast Guard Station, District, or Sector
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COMMERCIAL FISHING
Enumerated_Domain_Value_Definition: Commercial Fishing
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COUNTY
Enumerated_Domain_Value_Definition: County Border
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CRITICAL HABITAT
Enumerated_Domain_Value_Definition: Critical Habitat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA FACILITY
Enumerated_Domain_Value_Definition: EPA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA REGION
Enumerated_Domain_Value_Definition: EPA Regions
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ESSENTIAL HABITAT
Enumerated_Domain_Value_Definition: Essential Habitat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FEMA REGION
Enumerated_Domain_Value_Definition: FEMA Region
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISHERY AREA
Enumerated_Domain_Value_Definition: Fishery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HELIPORT
Enumerated_Domain_Value_Definition: Heliport
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HISTORICAL SITE
Enumerated_Domain_Value_Definition: Historical Site or Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: LOCK AND DAM
Enumerated_Domain_Value_Definition: Lock and Dam
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGEMENT AREA
Enumerated_Domain_Value_Definition: Management Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MARINA
Enumerated_Domain_Value_Definition: Marina
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MILITARY
Enumerated_Domain_Value_Definition: Military

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL ESTUARINE RESEARCH RESERVE
Enumerated_Domain_Value_Definition: National Estuarine Research Reserve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL FOREST
Enumerated_Domain_Value_Definition: National Forest
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL GUARD
Enumerated_Domain_Value_Definition: National Guard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL PARK
Enumerated_Domain_Value_Definition: National Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATURE CONSERVANCY
Enumerated_Domain_Value_Definition: Nature Conservancy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NOAA FACILITY
Enumerated_Domain_Value_Definition: NOAA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PARK
Enumerated_Domain_Value_Definition: Regional or State Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PORT
Enumerated_Domain_Value_Definition: Port
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAIL ROUTE
Enumerated_Domain_Value_Definition: Rail Route
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RENEWABLE ENERGY
Enumerated_Domain_Value_Definition: Renewable Energy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPEATED MEASUREMENT SITE
Enumerated_Domain_Value_Definition: Repeated Measurement Site/Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RIVER MILE
Enumerated_Domain_Value_Definition: River Mile
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SHIPPING LANE
Enumerated_Domain_Value_Definition: Shipping Lane
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: STATE WATERS
Enumerated_Domain_Value_Definition: State Waters
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: TRIBAL LAND
Enumerated_Domain_Value_Definition: Tribal Land
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WASH OVER
Enumerated_Domain_Value_Definition: Wash Over
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WASTE DISPOSAL
Enumerated_Domain_Value_Definition: Waste Disposal
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WATER INTAKE
Enumerated_Domain_Value_Definition: Water Intake
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WILDLIFE REFUGE
Enumerated_Domain_Value_Definition: Wildlife Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NAME
Attribute_Definition: The feature name.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: CONTACT

Attribute_Definition: Contact person or entity.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PHONE
Attribute_Definition: Contact telephone number.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: LINK
Attribute_Definition: Link to the resource web-page.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: G_SOURCE
Attribute_Definition:
Geographic source identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: A_SOURCE
Attribute_Definition:
Attribute source identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES
Entity_Type_Definition:
The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.
Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID
Attribute_Definition:
Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORRES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR
Attribute_Definition: Author or developer of source material or data set.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:
Date of source material, publication, or date of personal communication with expert source.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM
Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE
Attribute_Definition: Title of source material or data.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT
Attribute_Definition: The format of the source material.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE
Attribute_Definition: Publication place.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER
Attribute_Definition: Publisher.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK
Attribute_Definition: Online computer resource URL.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Description of the source scale.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

South Carolina: SOCECONPT (Socioeconomic Resource Points)

Metadata also available as - [\[Parseable text\]](#) - [\[SGML\]](#) - [\[XML\]](#)

Metadata:

- [Identification Information](#)
- [Data Quality Information](#)
- [Spatial Data Organization Information](#)
- [Spatial Reference Information](#)
- [Entity and Attribute Information](#)
- [Distribution Information](#)
- [Metadata Reference Information](#)

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Publication Date: 201508

Title: South Carolina: SOCECONPT (Socioeconomic Resource Points)

Edition: Second

Geospatial Data Presentation Form: vector digital data

Series Information:

Series Name: None

Issue Identification: South Carolina

Publication Information:

Publication Place: Seattle, Washington

Publisher:

NOAA's Ocean Service, Office of Response and Restoration (OR&R), Emergency Response Division (ERD).

Other Citation Details:

Prepared by Research Planning, Inc., Columbia, South Carolina for the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Emergency Response Division, Seattle, Washington.

Online Linkage: <http://response.restoration.noaa.gov/esi>

Description:

Abstract:

This data set contains human-use resource data for airports, beach access locations, artificial reefs, abandoned vessels, beaches, boat ramps, coast guard stations, Environmental Protection Agency (EPA) facilities, heliports, historical sites, lock and dam locations, marinas, national guard areas, NOAA facilities, ports, renewable energy locations, river miles, repeated measure sites, waste disposal locations, water intakes, and wash over sites for South Carolina. Vector points in this data set represent human-use site locations. Location specific type 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 South Carolina. 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. See also the MGT and SOCECONL data layers, part of the larger South Carolina ESI database, for additional human-use information.

Purpose:

The ESI data were collected, mapped, and digitized to provide environmental data for oil spill planning and response. The Clean Water Act with amendments by the Oil Pollution Act of 1990 requires response plans for immediate and effective protection of sensitive resources.

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1994

Ending_Date: 2015

Currentness_Reference:

The data were compiled during 2015. The currentness dates for this data range from 1994 to 2015 and are documented in the Lineage section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -81.25000

East_Bounding_Coordinate: -78.50000

North_Bounding_Coordinate: 34.00000

South_Bounding_Coordinate: 32.00000

Keywords:

Theme:

Theme_Keyword_Thesaurus: ISO 19115 Topic Category

Theme_Keyword: biota

Theme_Keyword: environment

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: Environmental Monitoring

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Socioeconomic

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: South Carolina

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Management boundaries are not to be considered legal boundaries. Edges may have been altered for cartographic processes. Note that the ESI database should not be used to the exclusion of other pertinent data or information held by state or federal agencies or other organizations. Likewise, information contained in the database cannot be used in place of consultations with environmental, natural resource, and cultural resource agencies, or in place of field surveys. Recognize that the information contained in the ESI database represents known concentration areas or occurrences of natural, cultural, and human-use resources, but does not necessarily represent the full distribution or range of each species or resource. This is particularly important to recognize when considering potential impacts to protected resources, such as endangered species, wetlands, etc.

Besides the above warnings, there are no use constraints on these data. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: datafig.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and attribute data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Browse_Graphic:

Browse_Graphic_File_Name: datafig2.jpg

Browse_Graphic_File_Description:

Depicts the relationships between spatial data layers and desktop data tables for the South Carolina ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of

Response and Restoration (OR&R), Emergency Response Division (ERD), Seattle, Washington.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.2(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 7.

The following Geodatabase Feature Classes are included in the data set: anno, aoi, birds, birdspt, esil, esip, fish, habitats, herp, hydrol, hydrop, invert, m_mammal, mgt, soceconl, and soceconpt. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

A multi-stage error checking process is used to verify both attribute accuracy and logical consistency throughout data production. The process includes a standardized data entry methodology, data review by in-house and external resource experts, a final Quality Assurance/Quality Control (QA/QC) process, and multiple automated logical consistency checks. Quantitative data (such as densities, counts, abundances, or concentrations) provided by resource experts for inclusion in the data set may vary widely in attribute accuracy, depending upon the methodology used to collect and compile such data. For a more detailed evaluation of source data attribute accuracy, contact the sources listed in the Lineage section.

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies, and SQL SERVER(R) to ArcGIS(R) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks. In the process of checking for topological and database consistencies, new ID's and RARNUM's or HUNUM's are also generated. The new ID's are a combination of atlas number, element number, and record number. In addition, the value used to represent the element is modified to reflect the type of feature being mapped. In the case of an element that is normally represented by a point or polygon, a value of 20 is added to the standard element value for mapping of linear features. In the case where an element usually mapped as a polygon is represented by a point, a value of 30 is added to the regular element value. The RARNUM's are also modified to include the atlas number, so multiple atlases can be combined and RARNUM's remain unique. RARNUM's are redefined on an element basis, so "resources at risk" groupings will contain only a single element. HUNUM's are also modified to include the atlas number.

Completeness_Report:

These data represent a synthesis of expert knowledge and available digital data on socioeconomic resources. See also the MGT and SOCECONL data layers, part of the larger South Carolina ESI database, for additional human-use information. These data do not necessarily represent all human-use features in South Carolina.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Spatial components for the human-use data layers can come from expert interviews, hardcopy, or digital sources. Most of the spatial components of the human-use data layers are developed from pre-existing digital or hardcopy sources and reflect the positional accuracy of these original data. Some of the spatial components of the human-use data layers are compiled on hardcopy base maps with a scale of 1:24,000. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI)

Publication_Date: 2015

Title: ARMY NATIONAL GUARD UNITS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: REDLANDS, CA

Publisher: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI)

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) TIDES AND CURRENTS

Publication_Date: 2015

Title: PHYSICAL OCEANOGRAPHIC REAL-TIME SYSTEM (PORTS)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MARYLAND

Publisher: NATIONAL WATER LEVEL PROGRAM

Online_Linkage: <http://tidesandcurrents.noaa.gov/ports.html>

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) TIDES AND CURRENTS

Publication_Date: 2015

Title: THE NATIONAL WATER LEVEL OBSERVATION NETWORK (NWLON)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MARYLAND

Publisher: NATIONAL WATER LEVEL PROGRAM

Online_Linkage: <http://tidesandcurrents.noaa.gov/nwlon.html>

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), COASTAL SERVICES CENTER (CSC)

Publication_Date: 2014

Title: COASTAL ENERGY FACILITIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: CHARLESTON, SC

Publisher: NOAA'S OCEAN SERVICE, OFFICE FOR COASTAL MANAGEMENT (OCM)

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE (NCCOS), CENTER FOR COASTAL MONITORING AND ASSESSMENT (CCMA), CHEMICAL IMPACTS TEAM (CIT)

Publication_Date: 2014

Title:

NATIONAL STATUS AND TRENDS: MUSSEL WATCH PROJECT ANALYTE CHEMISTRY FILE (1986 TO PRESENT)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher:

NOAA'S OCEAN SERVICE, NATIONAL CENTERS FOR COASTAL OCEAN SCIENCE (NCCOS)

Online_Linkage: <http://ccma.nos.noaa.gov/about/coast/nsandt/download.aspx>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1986

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), OFFICE FOR COASTAL MANAGEMENT (OCM)

Publication_Date: 2015

Title: OCEAN DISPOSAL SITES IN THE UNITED STATES AS OF FEBRUARY 2015

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: CHARLESTON, SC

Publisher: NOAA'S OCEAN SERVICE, OFFICE FOR COASTAL MANAGEMENT (OCM)

Online_Linkage: <ftp://ftp.coast.noaa.gov/pub/MSP/OceanDisposalSites.zip>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICE (NESDIS), NATIONAL OCEANOGRAPHIC DATA CENTER (NODC), NATIONAL COASTAL DATA DEVELOPMENT CENTER (NCDDC)

Publication_Date: 2003

Title: NATIONAL DATA BUOY CENTER BUOY LOCATIONS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: STENNIS SPACE CENTER, MS

Publisher: NATIONAL COASTAL DATA DEVELOPMENT CENTER

Online_Linkage:

http://www.ncddc.noaa.gov/approved_recs/ncddc_ims/gis/ims/final/buoylocations.html

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2003

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), NATIONAL OCEAN SERVICE (NOS), CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES (CO-OPS), DEPARTMENT OF COMMERCE (DOC)

Publication_Date: 2009

Title:
NOAA WATER LEVEL (TIDAL) DATA OF 205 STATIONS FOR THE COASTAL UNITED STATES AND OTHER NON-U.S. SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher:

NOAA'S OCEAN SERVICE, CENTER FOR OPERATIONAL OCEANOGRAPHIC PRODUCTS AND SERVICES (CO-OPS)

Online_Linkage:

http://tidesandcurrents.noaa.gov/tide_predictions.html?gid=155#listing

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2009

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), NATIONAL OCEAN SERVICE (NOS), OFFICE OF RESPONSE AND RESTORATION (OR&R), EMERGENCY RESPONSE DIVISION (ERD)

Publication_Date: 1996

Title:

SENSITIVITY OF COASTAL ENVIRONMENTS AND WILDLIFE TO SPILLED OIL: SOUTH CAROLINA

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SEATTLE, WASHINGTON

Publisher:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), NATIONAL OCEAN SERVICE (NOS), OFFICE OF RESPONSE AND RESTORATION (OR&R), EMERGENCY RESPONSE DIVISION (ERD)

Online_Linkage: <http://response.restoration.noaa.gov/esi>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1996

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), U.S. DEPARTMENT OF COMMERCE (DOC), NATIONAL OCEAN SERVICE (NOS), ASSISTANT OF THE CHIEF INFORMATION OFFICER (ACIO)

Publication_Date: 2014

Title: THE OFFICE OF COAST SURVEY'S WRECKS AND OBSTRUCTIONS DATABASE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: SILVER SPRING, MD

Publisher: OFFICE OF COAST SURVEY WRECKS AND OBSTRUCTIONS DATABASE

Online_Linkage:

http://www.nauticalcharts.noaa.gov/hsd/wrecks_and_obstructions.html

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: NATIONAL PARK SERVICE (NPS)

Publication_Date: 2014

Title: NATIONAL REGISTER OF HISTORIC PLACES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON D.C.

Publisher: NATIONAL PARK SERVICE

Online_Linkage: <https://irma.nps.gov/App/Reference/Profile/2210280/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1966

Ending_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

OFFICE OF THE ASSISTANT SECRETARY FOR RESEARCH AND TECHNOLOGY'S BUREAU OF TRANSPORTATION STATISTICS

Publication_Date: 2013

Title: NATIONAL TRANSPORTATION ATLAS DATABASE

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: WASHINGTON, DC

Publisher:

OFFICE OF THE ASSISTANT SECRETARY FOR RESEARCH AND TECHNOLOGY'S BUREAU OF
TRANSPORTATION STATISTICS

Online_Linkage:

http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_atlas_database/2013/index.html

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2008

Ending_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: RESEARCH PLANNING, INC. (RPI)

Publication_Date: 2015

Title: VARIOUS SOCIOECONOMIC FEATURES WITHIN SOUTH CAROLINA

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2015

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDHEC) - JEANNIE
EIDSON, GIS MANAGER

Publication_Date: 2009

Title: PUBLIC DRINKING WATER SUPPLY SURFACE WATER INTAKES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2009

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDHEC), OCEAN AND COASTAL RESOURCE MANAGEMENT

Publication_Date: 2011

Title: DOCK_BRIDGE_MARINA

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: COLUMBIA, SOUTH CAROLINA

Publisher:

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL, OCEAN AND COASTAL RESOURCE MANAGEMENT

Online_Linkage: <http://www.gis.sc.gov/data.html#DOT>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (SCDHEC), OCEAN AND COASTAL RESOURCE MANAGEMENT

Publication_Date: 2015

Title: BEACH ACCESS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: COLUMBIA, SOUTH CAROLINA

Publisher:

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL, OCEAN AND COASTAL RESOURCE MANAGEMENT

Online_Linkage:

<http://www.scdhec.gov/HomeAndEnvironment/maps/GIS/GISDataClearinghouse/default.aspx>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
Publication_Date: 2007
Title: SOUTH CAROLINA BOAT RAMPS
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: CHARLESTON, SOUTH CAROLINA
Publisher: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Online_Linkage: <http://www.gis.sc.gov/data.html#DOT>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2007
Ending_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES (SCDNR)
Publication_Date: 2013
Title: ARTREEFS201210
Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA
Publication_Information:

Publication_Place: CHARLESTON, SOUTH CAROLINA
Publisher: SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

Online_Linkage: <http://dnr.sc.gov/marine/reef/>

Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2012
Ending_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE
Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator:

U.S. ARMY CORPS OF ENGINEERS (USACE), INSTITUTE OF WATER RESOURCES, NAVIGATION DATA CENTER

Publication_Date: 1994

Title: WATERWAY MILE MARKER DATABASE

Geospatial_Data_Presentation_Form: SPREADSHEET

Publication_Information:

Publication_Place: NEW ORLEANS, LOUISIANA

Publisher:

UNITED STATES ARMY CORPS OF ENGINEERS, INSTITUTE OF WATER RESOURCES

Online_Linkage: <http://www.navigationdatacenter.us/data/datamile.htm>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1994

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. COAST GUARD (USCG) LOGISTICS GEOSPATIAL INTEGRATION CENTER

Publication_Date: 2007

Title: UNITED STATES COAST GUARD (USCG) UNITS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: CLEVELAND, OHIO

Publisher: US COAST GUARD LOGISTICS GEOSPATIAL INTEGRATION CENTER

Online_Linkage:

<https://www.sciencebase.gov/catalog/item/4f4e4783e4b07f02db483873>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2007

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)

Publication_Date: 2014

Title: ENVIRONMENTAL PROTECTION AGENCY MANAGED FACILITIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Source_Information:

Source_Citation:

Citation_Information:

Originator: U.S. FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2015

Title: FISH AND WILDLIFE SERVICE INTEREST BOUNDARIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information:

Publication_Place: FALLS CHURCH, VIRGINIA

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE

Online_Linkage: <http://www.fws.gov/GIS/Data/CadastralDB>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2015

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECONPT INFORMATION

Process_Step:

Process_Description:

The mapping extent was dependent upon information availability and location of mapped coastal habitats and shorelines. The main sources of data used to depict human-use resources for this data layer were digital data sets provided by the following agencies: NOAA's Office of Coast Survey (OCS), South Carolina Department of Health and Environmental Control's (SCDHEC) Office of Ocean and Coastal Resource Management, U.S. Department of Transportation's (USDOT), South Carolina Department of Natural Resources (SCDNR), NOAA's Office of Response and Restoration (OR&R) Emergency Response Division (ERD), U.S. Coast Guard (USCG) Logistics Geospatial Integration Center, U.S. Environmental Protection Agency (USEPA), National Park Service (NPS), Environmental Systems Research Institute (ESRI), Research Planning, Inc (RPI), NOAA's Tides and Currents, NOAA's National Coastal Data Development Center (NCDDC), NOAA's Chemical Impacts Team (CIT), U.S. Army Corps of Engineer (USACE) Navigation Data Center, NOAA's Office for Coastal Management (OCM), and U.S. Fish and Wildlife Service (USFWS). Abandoned vessel data comes from NOAA's Office of Coast Survey Automated Wrecks and Obstructions Information System (AWOIS). Known access locations were compiled by South Carolina Department of Health and Environmental Control's (SCDHEC) Office of Ocean and Coastal Resource Management. Airport, heliport, port, and lock and dam points were acquired from USDOT's National Transportation Atlas Database. SCDNR provided data for artificial reefs and boat ramps. Beach locations were compiled from NOAA's Office of Response and Restoration. Coast Guard unit locations were acquired from the U.S. Coast Guard (USCG) Logistics Geospatial Integration Center. U.S. Environmental Protection Agency (USEPA) Facility (EPAF) locations represent facilities that maintain a risk management plan describing its hazards and prevention activities as required by the EPA Risk Management Plan Rule (RMP), facilities that manufacture, process, or use certain chemicals in amounts above established levels regulated by the EPA Toxic Release Inventory System (TRIS) program, facilities with permits from the National Pollutant Discharge Elimination System (NPDES), and facilities that the EPA has identified and monitors for storing certain quantities of oil (OIL). The data were provided by the USEPA to NOAA's Emergency Response Division. Historic sites were depicted from sites in the NPS National Register of Historic Places. Marina and water intake data were provided by SCDHEC. National Guard locations were acquired from ESRI. Office for Coastal Management provided data for renewable energy. Repeated measurement site (RMS) locations for marine observation sites and tide gauges were obtained through NOAA's National Data Buoy Center (NDBC), and the Center for Operational Oceanographic Products and Services (CO-OPS). Mussel Watch program RMS locations were obtained from the NOAA Chemical Impacts Team. River mile markers were acquired from U.S. Army Corps of Engineer (USACE) Navigation Data Center. Washover locations are represented by points that were generated by Research Planning, Inc. at a scale of 1:8,000. A washover, or washover fan, is a relatively flat surface on the top of a barrier spit complex that slopes gently landward. It

is usually created when water forced landward by breaking waves flows across the top of the barrier spit during high spring tides or storms. This process creates a flattened-off surface along which sand is transported across the top of the spit into the standing water (lagoon) or marsh landward of the spit. The resulting deposit usually has a fan-like shape. Waste Disposal Sites were generated from Ocean Disposal Site areas to point features.

The above digital and/or hardcopy sources were compiled by the project biologist to create the SOCECONPT data layer. 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 SOCECONPT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

Process_Date: 201508

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity point

Point_and_Vector_Object_Count: 1912

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.000000001

Longitude_Resolution: 0.000000001

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 80

Semi-major_Axis: 6378137.000000

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, two relational attribute or data tables, SOC_DAT, and SOURCES, are used to store the complex socioeconomic data in the ESI data structure. The geographic data layer containing socioeconomic data resource information (in this case, SOCECONPT) is linked to the Socioeconomic Resources table (SOC_DAT) using the unique ID and the lookup table SOC_LUT, or it can be linked directly using HUNUM. HUNUM is a unique reference number concatenated with the atlas number (for South Carolina, the

number is 234). ID is a unique combination of the atlas number (234), an element specific number (SOCECONPT = 10), and a unique record number. SOC_DAT and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure.

Entity_and_Attribute_Detail_Citation:

A complete description of entity types, attributes, and attribute values for ESI atlases can be found in the NOAA ESI Guidelines (http://response.restoration.noaa.gov/esi_guidelines).

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOCECONPT

Entity_Type_Definition:

The SOCECONPT table contains attribute information for the vector points representing human-use resource data for airports, beach access locations, artificial reefs, abandoned vessels, beaches, boat ramps, coast guard stations, Environmental Protection Agency (EPA) facilities, heliports, historical sites, lock and dam locations, marinas, national guard areas, NOAA facilities, ports, renewable energy locations, river miles, repeated measure sites, waste disposal locations, water intakes, and wash over sites. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: A

Enumerated_Domain_Value_Definition: Airport

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: A2

Enumerated_Domain_Value_Definition: Access

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AR

Enumerated_Domain_Value_Definition: Artificial Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AV

Enumerated_Domain_Value_Definition: Abandoned Vessel

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: B

Enumerated_Domain_Value_Definition: Beach

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BR
Enumerated_Domain_Value_Definition: Boat Ramp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CG
Enumerated_Domain_Value_Definition: Coast Guard Station, District, or Sector
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPAF
Enumerated_Domain_Value_Definition: EPA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HP
Enumerated_Domain_Value_Definition: Heliport
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HS
Enumerated_Domain_Value_Definition: Historical Site or Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: LD
Enumerated_Domain_Value_Definition: Lock and Dam
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M
Enumerated_Domain_Value_Definition: Marina
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NG
Enumerated_Domain_Value_Definition: National Guard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NOAA
Enumerated_Domain_Value_Definition: NOAA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PT

Enumerated_Domain_Value_Definition: Port
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RE
Enumerated_Domain_Value_Definition: Renewable Energy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RM
Enumerated_Domain_Value_Definition: River Mile
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RMS
Enumerated_Domain_Value_Definition: Repeated Measurement Site/Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WD
Enumerated_Domain_Value_Definition: Waste Disposal
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WI
Enumerated_Domain_Value_Definition: Water Intake
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WO
Enumerated_Domain_Value_Definition: Wash Over
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the human-use data layers to records in the SOC_LUT data table. ID is a concatenation of atlas number (234), element number (10), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"
Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links directly to the SOC_DAT table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOC_LUT

Entity_Type_Definition:

The data table SOC_LUT is a lookup table that contains items necessary for linking vector objects in the human-use data layers with the SOC_DAT data table. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_LUT data table to records in the SOC_DAT data table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Attribute:

Attribute_Label: ID

Attribute_Definition:

An identifier that links vector objects in the human-use data layers to records in the SOC_LUT data table. ID is a concatenation of atlas number (234), element number (10), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: "NEED TO ADD"

Range_Domain_Maximum: "NEED TO ADD"

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOC_DAT

Entity_Type_Definition:

The data table SOC_DAT contains both human-use attribute data and items necessary for linking the human-use spatial data layers to the SOURCES data table. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.

Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_DAT data table to records in the SOC_LUT data table. HUNUM values of 0 are holes in the polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ABANDONED VESSEL

Enumerated_Domain_Value_Definition: Abandoned Vessel

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ACCESS

Enumerated_Domain_Value_Definition: Access

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AIRPORT

Enumerated_Domain_Value_Definition: Airport

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ANCHORAGE

Enumerated_Domain_Value_Definition: Anchorage

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ARMY CORPS OF ENGINEERS

Enumerated_Domain_Value_Definition: Army Corps of Engineers

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ARTIFICIAL REEF

Enumerated_Domain_Value_Definition: Artificial Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BEACH

Enumerated_Domain_Value_Definition: Beach

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BOAT RAMP

Enumerated_Domain_Value_Definition: Boat Ramp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COAST GUARD
Enumerated_Domain_Value_Definition: Coast Guard Station, District, or Sector
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COMMERCIAL FISHING
Enumerated_Domain_Value_Definition: Commercial Fishing
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: COUNTY
Enumerated_Domain_Value_Definition: County Border
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: CRITICAL HABITAT
Enumerated_Domain_Value_Definition: Critical Habitat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA FACILITY
Enumerated_Domain_Value_Definition: EPA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: EPA REGION
Enumerated_Domain_Value_Definition: EPA Regions
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: ESSENTIAL HABITAT
Enumerated_Domain_Value_Definition: Essential Habitat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FEMA REGION
Enumerated_Domain_Value_Definition: FEMA Region
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISHERY AREA
Enumerated_Domain_Value_Definition: Fishery Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HELIPORT

Enumerated_Domain_Value_Definition: Heliport
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HISTORICAL SITE
Enumerated_Domain_Value_Definition: Historical Site or Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: LOCK AND DAM
Enumerated_Domain_Value_Definition: Lock and Dam
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGEMENT AREA
Enumerated_Domain_Value_Definition: Management Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MARINA
Enumerated_Domain_Value_Definition: Marina
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MILITARY
Enumerated_Domain_Value_Definition: Military
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL ESTUARINE RESEARCH RESERVE
Enumerated_Domain_Value_Definition: National Estuarine Research Reserve
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL FOREST
Enumerated_Domain_Value_Definition: National Forest
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL GUARD
Enumerated_Domain_Value_Definition: National Guard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL PARK
Enumerated_Domain_Value_Definition: National Park

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NATURE CONSERVANCY
Enumerated_Domain_Value_Definition: Nature Conservancy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NOAA FACILITY
Enumerated_Domain_Value_Definition: NOAA Facility
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PARK
Enumerated_Domain_Value_Definition: Regional or State Park
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: PORT
Enumerated_Domain_Value_Definition: Port
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RAIL ROUTE
Enumerated_Domain_Value_Definition: Rail Route
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RENEWABLE ENERGY
Enumerated_Domain_Value_Definition: Renewable Energy
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPEATED MEASUREMENT SITE
Enumerated_Domain_Value_Definition: Repeated Measurement Site/Area
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RIVER MILE
Enumerated_Domain_Value_Definition: River Mile
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SHIPPING LANE
Enumerated_Domain_Value_Definition: Shipping Lane
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: STATE WATERS
Enumerated_Domain_Value_Definition: State Waters
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: TRIBAL LAND
Enumerated_Domain_Value_Definition: Tribal Land
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WASH OVER
Enumerated_Domain_Value_Definition: Wash Over
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WASTE DISPOSAL
Enumerated_Domain_Value_Definition: Waste Disposal
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WATER INTAKE
Enumerated_Domain_Value_Definition: Water Intake
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: WILDLIFE REFUGE
Enumerated_Domain_Value_Definition: Wildlife Refuge
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: NAME
Attribute_Definition: The feature name.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: CONTACT
Attribute_Definition: Contact person or entity.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PHONE
Attribute_Definition: Contact telephone number.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: LINK
Attribute_Definition: Link to the resource web-page.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: G_SOURCE
Attribute_Definition:
Geographic source identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: A_SOURCE
Attribute_Definition:
Attribute source identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOURCES
Entity_Type_Definition:
The data table SOURCES contains the primary sources used to create the ESI data set. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way this table relates to other attribute tables in the ESI data structure.
Entity_Type_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: SOURCE_ID
Attribute_Definition:
Source identifier that links records in the SOURCES data table to the items G_SOURCE and A_SOURCE in the SOC_DAT table; G_SOURCE and S_SOURCE in the BIORES table; and SOURCE_ID and ESI_Source in the ESI and HYDRO data layers.
Attribute_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: ORIGINATOR
Attribute_Definition: Author or developer of source material or data set.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

Date of source material, publication, or date of personal communication with expert source.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: YYYYMM

Enumerated_Domain_Value_Definition: YYYY for year and optionally MM for month

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUB_PLACE

Attribute_Definition: Publication place.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLISHER

Attribute_Definition: Publisher.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: ONLINE_LINK

Attribute_Definition: Online computer resource URL.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Description of the source scale.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

Date(s) of data collection that the source material is based upon.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Unrepresentable_Domain: Acceptable values change from atlas to atlas.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description: Downloadable Data

Distribution_Liability:

Although these data have been processed successfully on a computer system at the National Oceanic and Atmospheric Administration, no warranty, expressed or implied, is made by NOAA regarding the utility of the data on any other system, nor shall the act of distribution constitute any such warranty. NOAA warrants the delivery of this product in computer-readable format, and will offer a replacement copy of the product when the product is determined unreadable by computer input peripherals, or when the physical medium is delivered in damaged condition.

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include ARC export, MOSS and Shape files, and MARPLOT map folders. An ArcView ESI project and ESI_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.

Metadata_Reference_Information:

Metadata_Date: 201508

Metadata_Review_Date: 201508

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

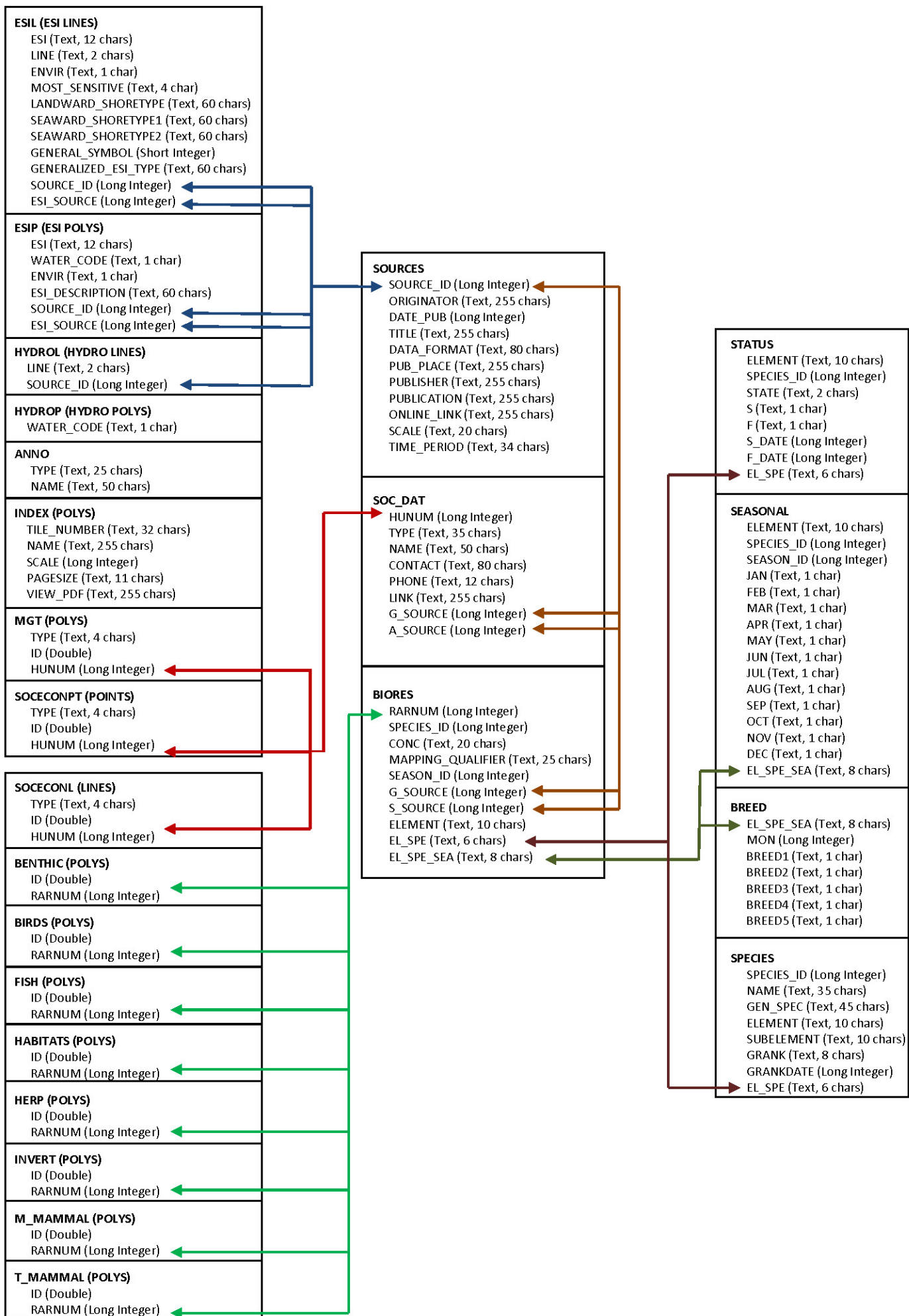
Contact_Address:

Address_Type: Physical Address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata
Metadata_Standard_Version: FGDC-STD-001-1998

Entity Diagram for the Relational Data Tables



All of the biological elements may also be mapped as points and lines. The associated attributes will remain the same, ID and RARNUM. The convention is to append PT (points) or L (lines) to the layer name as shown above. As an example, habitats mapped as points would be in the layer HABITATSPT; as a line they would be in HABITATSL. The exceptions to this rule are the mammal layers. For these, MAMMAL is reduced to MAM, so terrestrial mammals mapped as points would be in a layer named T_MAMPT; marine mammals mapped as lines would be in M_MAML.