

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: AOI (AOI Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains vector polygons representing the boundaries of all digital data produced as part of the Environmental Sensitivity Index (ESI) for the St. Mary's River. This data set comprises a portion of the ESI data for St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2013

1.3.3.3 Ending Date

2019

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2013 to 2019 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent the digital data extent for all data produced as part of the St. Mary's River ESI atlas.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: RESEARCH PLANNING, INC

Publication_Date: 2021

Title: STUDY AREA BOUNDARY AND EXTENT

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Source_Scale_Denominator: 40000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2020

Ending_Date: 2021

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The AOI was generated for a specified onshore and offshore extent of the ESI study area.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 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

5.0 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

AOI

5.1.1.2 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TILE_NAME

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

ENTER MIN

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

ENTER MAX

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

NAME

5.1.2.2 ATTRIBUTE DEFINITION

USGS Quad name or a descriptive name of region covered.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.4 UNREPRESENTABLE DOMAIN

Acceptable values change from atlas to atlas.

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

SCALE

5.1.2.2 ATTRIBUTE DEFINITION

The map production scale denominator.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

40000

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scale = 1:40,000

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

UTM_ZONE

5.1.2.2 ATTRIBUTE DEFINITION

UTM_ZONE contains full projection definition for the appropriate UTM zone.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.4 UNREPRESENTABLE DOMAIN

Acceptable values change from atlas to atlas.

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

PAGESIZE

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.4 UNREPRESENTABLE DOMAIN

Acceptable values change from atlas to atlas.

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

VIEW_PDF

5.1.2.2 ATTRIBUTE DEFINITION

Link to ESI PDFs on the NOAA server.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.4 UNREPRESENTABLE DOMAIN

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: BENTHIC (Benthic Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for submerged aquatic vegetation (SAV) in St. Mary's River. Vector polygons in this data set represent SAV 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 St. Mary's River. 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 BENTHICPT data layer, part of the larger St. Mary's River ESI database, for additional benthic information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2013

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 1986-2013 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Benthic

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of available hardcopy documents on SAV distribution. See also the BENTHICPT data layer, part of the larger St. Mary's River ESI database, for additional benthic information. These data do not necessarily represent all benthic occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 609, Submerged aquatic vegetation, n/a.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: DONALD W. SCHLOESSER

Publication_Date: 1986

Title: A FIELD GUIDE TO VALUABLE UNDERWATER AQUATIC PLANTS OF THE GREAT LAKES

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information

Publication_Place: ANN ARBOR, MI

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE, GREAT LAKES FISHERY LABORATORY

Online_Linkage: <https://pubs.usgs.gov/unnumbered/93728/report.pdf>

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: BENTHIC INFORMATION

Source_Information

Source_Citation:

Originator: ENVIRONMENT CANADA - CANADIAN WILDLIFE SERVICE

Publication_Date: 2013

Title: ST MARY'S RIVER AREA OF CONCERN: COASTAL WETLAND HABITAT SCOPING REPORT

Geospatial_Data_Presentation_Form: DOCUMENT

Type_of_Source_Media: ONLINE

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: BENTHIC INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data was used to depict SAV distribution and seasonality for this data layer: 1) a St. Marys River coastal habitat scoping report from Environment Canada and 2) seasonality information from a field guide to underwater plants in the Great Lakes. Benthic habitats mapped in the ESI atlas include submerged aquatic vegetation (SAV). SAV areas identified in an Environment Canada coastal wetland habitat scoping report were mapped as polygons. No exhaustive SAV mapping data that covered the entire St. Marys River were available. Points and areas mapped in this atlas indicate locations of known presence, but other SAV areas may exist as well.

The above digital and/or hardcopy sources were compiled by the project biologist to create the BENTHIC 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 1:40,000 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 BENTHIC data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 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

5.0 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, BENTHIC) 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 St. Mary's River atlas, the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

BENTHIC

5.1.1.2 ENTITY TYPE DEFINITION

The BENTHIC table contains attribute information for the vector polygons in this data set representing SAV 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (8), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (8), and record number.

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. No concentration data was available so the field is blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird
Enumerated_Domain_Value_Definition: Bird
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: canine
Enumerated_Domain_Value_Definition: Canine
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: chordate
Enumerated_Domain_Value_Definition: Chordate
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: coral
Enumerated_Domain_Value_Definition: Coral
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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: BENTHICPT (Benthic Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for submerged aquatic vegetation (SAV) in St. Mary's River. Vector points in this data set represent SAV 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 St. Mary's River. 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 BENTHIC data layer, part of the larger St. Mary's River ESI database, for additional benthic information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 1986-2020 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Benthic

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of survey data and available hardcopy documents on SAV distribution. See also the BENTHIC data layer, part of the larger St. Mary's River ESI database, for additional benthic information. These data do not necessarily represent all benthic points occurrences in St. Mary's River. The following species are included in this data set:
(Species_ID, Common Name, Scientific Name [n/a if not applicable]): 609, Submerged aquatic vegetation, n/a.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: DONALD W. SCHLOESSER

Publication_Date: 1986

Title: A FIELD GUIDE TO VALUABLE UNDERWATER AQUATIC PLANTS OF THE GREAT LAKES

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information

Publication_Place: ANN ARBOR, MI

Publisher: UNITED STATES FISH AND WILDLIFE SERVICE, GREAT LAKES FISHERY LABORATORY

Online_Linkage: <https://pubs.usgs.gov/unnumbered/93728/report.pdf>

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: BENTHICPT INFORMATION

Source_Information

Source_Citation:

Originator: GREAT LAKES COASTAL WETLAND MONITORING PROGRAM (CWMP), CENTRAL MICHIGAN UNIVERSITY

Publication_Date: 2020

Title: WETLAND AND SUBMERGED VEGETATION 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: 2011

Ending Date: 2020

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BENTHICPT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data were used to depict benthic SAV point distribution and seasonality for this data layer: 1) digital data from the Central Michigan University Coastal Wetland Monitoring Program and 2) seasonality information from a field guide to underwater aquatic plants of the Great Lakes. Benthic habitats mapped in the ESI atlas include submerged aquatic vegetation (SAV). SAV point locations were mapped from the Central Michigan University Coastal Wetland Monitoring Program. These point locations represent survey sites where at least one SAV species was observed. No exhaustive SAV mapping data that covered the entire St. Marys River were available. Points and areas mapped in this atlas indicate locations of known presence, but other SAV areas may exist as well.

The above digital and/or hardcopy sources were compiled by the project biologist to create the BENTHICPT 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 1:40,000 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 BENTHICPT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 Point and Vector Object Count

47

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

5.0 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, BENTHICPT) 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 St. Mary's River atlas, the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

BENTHICPT

5.1.1.2 ENTITY TYPE DEFINITION

The BENTHICPT table contains attribute information for the vector points in this data set representing SAV 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (38), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (38), and record number.

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. No concentration data was available so the field is blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: BIRDS (Bird Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for wading birds, shorebirds, waterfowl, raptors, diving birds, passerine birds, and gulls and terns in the St. Mary's River. 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 St. Mary's River. 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 St. Mary's River ESI database, for additional bird information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2013

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2013 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Bird

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 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 St. Mary's River ESI database, for additional bird information. These data do not necessarily represent all bird occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 1, Common loon, *Gavia immer*; 4, Red-necked grebe, *Podiceps grisegena*; 5, Horned grebe, *Podiceps auritus*; 8, Double-crested cormorant, *Phalacrocorax auritus*; 16, Mallard, *Anas platyrhynchos*; 17, Northern pintail, *Anas acuta*; 18, Green-winged teal, *Anas crecca*; 20, Northern shoveler, *Anas clypeata*; 21, Canvasback, *Aythya valisineria*; 22, Greater scaup, *Aythya marila*; 23, Lesser scaup, *Aythya affinis*; 24, Common goldeneye, *Bucephala clangula*; 26, Bufflehead, *Bucephala albeola*; 27, Long-tailed duck, *Clangula hyemalis*; 29, White-winged scoter, *Melanitta fusca*; 30, Surf scoter, *Melanitta perspicillata*; 32, Common merganser, *Mergus merganser*; 33, Red-breasted merganser, *Mergus serrator*; 34, American coot, *Fulica americana*; 45, Common tern, *Sterna hirundo*; 55, Whimbrel, *Numenius phaeopus*; 56, Spotted sandpiper, *Actitis macularia*; 58, Greater yellowlegs, *Tringa melanoleuca*; 59, Lesser yellowlegs, *Tringa flavipes*; 61, Pectoral sandpiper, *Calidris melanotos*; 62, Least sandpiper, *Calidris minutilla*; 63, Dunlin, *Calidris alpina*; 64, Short-billed dowitcher, *Limnodromus griseus*; 67, Sanderling, *Calidris alba*; 69, Semipalmated plover, *Charadrius semipalmatus*; 71, Black-bellied plover, *Pluvialis squatarola*; 76, Bald eagle, *Haliaeetus leucocephalus*; 77, Osprey, *Pandion haliaetus*; 107, Peregrine falcon, *Falco peregrinus*; 124, Redhead, *Aythya americana*; 136, Caspian tern, *Hydroprogne caspia*; 156, Semipalmated sandpiper, *Calidris pusilla*; 162, Gadwall, *Anas strepera*; 164, American golden-plover, *Pluvialis dominica*; 169, American wigeon, *Anas americana*; 172, Sandhill crane, *Grus canadensis*; 173, American white pelican, *Pelecanus erythrorhynchos*; 178, Least bittern,

Ixobrychus exilis; 179, Pied-billed grebe, Podilymbus podiceps; 180, Ring-necked duck, Aythya collaris; 185, American bittern, Botaurus lentiginosus; 186, American black duck, Anas rubripes; 187, Virginia rail, Rallus limicola; 188, Sora, Porzana carolina; 189, Yellow rail, Coturnicops noveboracensis; 190, Blue-winged teal, Anas discors; 191, Wood duck, Aix sponsa; 193, Black tern, Chlidonias niger; 197, Black scoter, Melanitta americana; 198, Hooded merganser, Lophodytes cucullatus; 224, Sedge wren, Cistothorus platensis; 225, Marsh wren, Cistothorus palustris; 229, Swamp sparrow, Melospiza georgiana; 237, Baird's sandpiper, Calidris bairdii; 238, White-rumped sandpiper, Calidris fuscicollis; 272, Teals, Anas spp.; 284, Buff-breasted sandpiper, Tryngites subruficollis; 286, Dowitchers, Limnodromus spp.; 293, Yellowlegs, Tringa spp.; 299, Scaup, Aythya spp.; 302, Scoters, Melanitta spp.; 849, Wilson's snipe, Gallinago delicata; 906, Common gallinule, Gallinula galeata; 940, Le Conte's sparrow, Ammodramus leconteii; 1026, Grebes, n/a; 1027, Swans, Cygnus spp..

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: DAMON MCCORMICK (COMMON COAST)

Publication_Date: 2021

Title: COMMON LOON - ST MARYS

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: 2021

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: EBIRD

Publication_Date: 2021

Title: EBIRD WEBSITE

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Online_Linkage: <https://ebird.org>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MFNI)

Publication_Date: 2020

Title: Biotics_poly_2020_SMR

Geospatial_Data_Presentation_Form: vector digital data

Other_Citation_Details: unpublished

Type_of_Source_Media: email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2013

Title: MNFI STRAITS SURVEY DATA, EUP_DABBLERS, EUP_DIVERS,
EUP_GEESE_SWANS, EUP_SEA_DUCKS, EUP_WATERBIRDS, EUP_WATERFOWL

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: 2012

Ending_Date: 2013

Source_Currentness_Reference: Date of survey

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2018

Title: MNFI_SMR_marsh_bird_data

Geospatial_Data_Presentation_Form: EXPERT KNOWLEDGE

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: 2018

Source_Currentness_Reference: Date of survey

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2021

Title: SPECIES PROFILES

Geospatial_Data_Presentation_Form: online

Other_Citation_Details: unpublished

Online_Linkage: <https://mnfi.anr.msu.edu/species/description/>

Type_of_Source_Media: online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source Contribution: BIRDS INFORMATION

2.5.2 Process Step

2.5.2.1 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 the University of Minnesota, USFWS, Common Coast, Michigan Natural Features Inventory, 2) vector digital data sets, and 3) published and unpublished reports, maps, and survey data.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

34

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

5.0 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 St. Mary's River atlas, the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

BIRDS

5.1.1.2 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (1), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (1), and record number.

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 location, or a term that describes relative abundance of birds at a particular site. The field may contain counts of individuals (UP TO XXXX NESTS). In cases where no quantitative count data was available, the field may either be blank or contain descriptive terms such as "PRESENT". Counts were derived from a variety of surveys, and may range in date (see lineage).

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: BIRDSPT (Bird Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for wading birds, raptors, diving birds, and gulls and terns in the St. Mary's River. Vector points in this data set represent 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 St. Mary's River. 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 St. Mary's River ESI database, for additional bird information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2012

1.3.3.3 Ending Date

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2012 to 2020 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Bird

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy documents, survey data, maps, and digital data on bird nesting locations. See also the BIRDS data layer, part of the larger St. Mary's River ESI database, for additional bird information. These data do not necessarily represent all bird points occurrences in St. Mary's River. 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; 38, Herring gull, Larus argentatus; 40, Ring-billed gull, Larus delawarensis; 45, Common tern, Sterna hirundo; 54, Great blue heron, Ardea herodias; 76, Bald eagle, Haliaeetus leucocephalus; 90, Black-crowned night-heron, Nycticorax nycticorax; 136, Caspian tern, Hydroprogne caspia; 193, Black tern, Chlidonias niger.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: CUTHBERT, FJ AND L. WIRES

Publication_Date: 2013

Title: THE FOURTH DECADAL U.S. GREAT LAKES COLONIAL WATERBIRD SURVEY (2007-2010): RESULTS AND RECOMMENDATIONS TO IMPROVE THE SCIENTIFIC BASIS FOR CONSERVATION AND MANAGEMENT. FINAL REPORT.

Geospatial_Data_Presentation_Form: report

Other_Citation_Details: unpublished

Type_of_Source_Media: email

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2007

Ending_Date: 2010

Source_Currentness_Reference: Date of survey

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: EBIRD

Publication_Date: 2021

Title: EBIRD WEBSITE

Geospatial_Data_Presentation_Form: SPREADSHEET

Other_Citation_Details: UNPUBLISHED

Online_Linkage: <https://ebird.org>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MFNI)

Publication_Date: 2020

Title: Biotics_poly_2020_SMR

Geospatial_Data_Presentation_Form: vector digital data

Other_Citation_Details: unpublished

Type_of_Source_Media: email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2013

Title: MNFI STRAITS SURVEY DATA, EUP_DABBERS, EUP_DIVERS,
EUP_GEESE_SWANS, EUP_SEA_DUCKS, EUP_WATERBIRDS, EUP_WATERFOWL

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: 2012

Ending_Date: 2013

Source_Currentness_Reference: Date of survey

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: USFWS

Publication_Date: 2012

Title: SurveyData2012pp_Final

Geospatial_Data_Presentation_Form: vector digital data

Other_Citation_Details: unpublished

Type_of_Source_Media: email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2012

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

2.5.2 Process Step

2.5.2.1 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 the University of Minnesota and Michigan Natural Features Inventory, 2) vector digital data sets from USFWS and MNFI, and 3) unpublished reports, maps, and survey data.

The above digital and/or hardcopy sources were compiled by the project biologist to create the BIRDSPPT 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 1:40,000 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 BIRDSPPT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 Point and Vector Object Count

49

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

5.0 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 St. Mary's River atlas, the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

BIRDSPT

5.1.1.2 ENTITY TYPE DEFINITION

The BIRDSPT table contains attribute information for the vector points in this data set representing . 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (31), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (31), and record number.

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 counts of individuals (UP TO XXXX NESTS). In cases where no quantitative count data was available, the field may either be blank or contain descriptive terms such as "PRESENT". Counts were derived from a variety of surveys, and may range in date (see lineage).

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous
Enumerated_Domain_Value_Definition: Anadromous fish
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: barnacle
Enumerated_Domain_Value_Definition: Barnacle
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bat
Enumerated_Domain_Value_Definition: Bat
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bear
Enumerated_Domain_Value_Definition: Bear
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bird
Enumerated_Domain_Value_Definition: Bird
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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp
Enumerated_Domain_Value_Definition: Kelp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl
Enumerated_Domain_Value_Definition: Landfowl
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard
Enumerated_Domain_Value_Definition: Lizard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: ESIL (Environmental Sensitivity Index Shoreline Types - Lines)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains vector lines representing the ESI classified shoreline of the St. Mary's River classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for St. Mary's River. 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 St. Mary's River ESI database, for additional ESI information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

1975

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 1975 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent vector lines representing the ESI classified shoreline of the St. Mary's River. See also the ESIP data layer, part of the larger St. Mary's River ESI database, for additional ESI information.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI)

Publication_Date: 2017

Title: BASEMAP IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

Online_Linkage:

<https://www.arcgis.com/home/item.html?id=10df2279f9684e4a9f6a7f08febac2a9>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2017

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION
Source_Information
Source_Citation:
Originator: GOOGLE EARTH
Publication_Date: 2020
Title: AERIAL AND OBLIQUE IMAGERY
Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA
Online_Linkage: <https://www.google.com/earth/>
Type_of_Source_Media: ONLINE
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2020
Source_Currentness_Reference: DATE OF ACCESS
Source_Citation_Abbreviation: NONE
Source_Contribution: ESIL INFORMATION
Source_Information
Source_Citation:
Originator: MICROSOFT BING
Publication_Date: 2018
Title: AERIAL IMAGERY
Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA
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: 2012

Ending_Date: 2018

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA)

Publication_Date: 2007

Title: NOAA CONTINUALLY UPDATED SHORELINE PRODUCT (CUSP)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <http://shoreline.noaa.gov/data/datasheets/cusp.html>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2007

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: NATURAL RESOURCES CANADA

Publication_Date: 2020

Title: NATIONAL HYDRO NETWORK

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.nrcan.gc.ca/science-and-data/science-and-research/earth-sciences/geography/topographic-information/geobase-surface-water-program-geea/national-hydrographic-network/21361>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY (OMNRF)

Publication_Date: 2019

Title: WETLANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://geohub.lio.gov.on.ca/datasets/5216a770ef684d2fae8bcc13ee9c4357_15

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2019

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: RESEARCH PLANNING, INC

Publication_Date: 2021

Title: STUDY AREA BOUNDARY AND EXTENT

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Source_Scale_Denominator: 40000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2020

Ending_Date: 2021

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: US FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2013

Title: NATIONAL WETLANDS INVENTORY

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

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

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1975

Ending_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: US GEOLOGICAL SURVEY (USGS)

Publication_Date: 2016

Title: NATIONAL HYDROGRAPHY DATASET

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending_Date: 2016

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The shoreline and classifications were fully updated using the following sources and methods. The shorelines for the St. Mary's River were derived from the integration of the National Oceanic and Atmospheric Administration (NOAA) Continually Updated Shoreline Product (CUSP, 2008); the U.S. Geological Survey (USGS) high-resolution National Hydrography Dataset (NHD, 2003-2014); the Natural Resources Canada, National Hydro Network (NHN, 1978-2011); and manual digitization at 1:4,000 from ESRI Basemap World Imagery (2010-2019), BING Aerial Imagery, and Google Earth aerial imagery (2014-2020). The most recent shoreline was utilized.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

String

3.3.1.2 Point and Vector Object Count

3330

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

5.0 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

ESIL

5.1.1.2 ENTITY TYPE DEFINITION

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

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ESI

5.1.2.2 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.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed Rocky Shores

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

3B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

4

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sand Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

5

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Mixed Sand and Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8C

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

9B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Vegetated Low Banks

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

LINE

5.1.2.2 ATTRIBUTE DEFINITION

Type of geographic feature.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shoreline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ENVIR

5.1.2.2 ATTRIBUTE DEFINITION

Type of regional environment.

5.1.2.3 ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

L

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lacustrine

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

MOST_SENSITIVE

5.1.2.2 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.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed Rocky Shores

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

3B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

4

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sand Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

5

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Mixed Sand and Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8C

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

9B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Vegetated Low Banks

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

LANDWARD_SHORETYPE

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1A: Exposed Rocky Shores

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed Rocky Shores

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1B: Exposed, Solid Man-made Structures

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

3B: Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

4: Sand Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sand Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

5: Mixed Sand and Gravel Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Mixed Sand and Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6A: Gravel Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6B: Riprap

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8A: Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8B: Sheltered, Solid Man-made Structures

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8C: Sheltered Riprap

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

9B: Vegetated Low Banks

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Vegetated Low Banks

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B: Freshwater Marshes

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C: Swamps

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D: Scrub-shrub Wetlands

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

SEAWARD_SHORETYPE1

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1A: Exposed Rocky Shores

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed Rocky Shores

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1B: Exposed, Solid Man-made Structures

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

3B: Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

4: Sand Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sand Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

5: Mixed Sand and Gravel Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Mixed Sand and Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6A: Gravel Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6B: Riprap

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8A: Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8B: Sheltered, Solid Man-made Structures

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8C: Sheltered Riprap

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

9B: Vegetated Low Banks

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Vegetated Low Banks

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B: Freshwater Marshes

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C: Swamps

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D: Scrub-shrub Wetlands

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

SEAWARD_SHORETYPE2

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1A: Exposed Rocky Shores

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed Rocky Shores

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1B: Exposed, Solid Man-made Structures

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Exposed, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

3B: Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Eroding Scarps (Unconsolidated Sediment)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

4: Sand Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sand Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

5: Mixed Sand and Gravel Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Mixed Sand and Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6A: Gravel Beaches

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Gravel Beaches

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

6B: Riprap

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8A: Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Scarps (Bedrock/Mud/Clay)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8B: Sheltered, Solid Man-made Structures

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered, Solid Man-made Structures

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

8C: Sheltered Riprap

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Riprap

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

9B: Vegetated Low Banks

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Vegetated Low Banks

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B: Freshwater Marshes

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C: Swamps

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D: Scrub-shrub Wetlands

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

GENERAL_SYMBOL

5.1.2.2 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.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 5

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

GENERALIZED_ESI_TYPE

5.1.2.2 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.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

1: Armored

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Armored

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

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

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rocky and Steep Shorelines (Bedrock/Sand/Clay)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

3: Beaches (Sand/Gravel)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beaches (Sand/Gravel)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

4: Flats (Mud/Sand)

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Flats (Mud/Sand)

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

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

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

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

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

SOURCE_ID

5.1.2.2 ATTRIBUTE DEFINITION

Source identifier that links to the SOURCES data table.

This id indicates the source of a vector line segment.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ESI_SOURCE

5.1.2.2 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.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: ESIP (Environmental Sensitivity Index Shoreline Types - Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains vector polygons representing the coastal habitats of the St. Mary's River classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for St. Mary's River. 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 St. Mary's River ESI database, for additional ESI information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

1975

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 1975 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 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 St. Mary's River ESI database, for additional ESI information.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000 USGS topographic quads should conform to National Map Accuracy Standards at scales of 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI)

Publication_Date: 2017

Title: BASEMAP IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

Online_Linkage:

<https://www.arcgis.com/home/item.html?id=10df2279f9684e4a9f6a7f08febac2a9>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2017

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information

Source_Citation:

Originator: GOOGLE EARTH

Publication_Date: 2020

Title: AERIAL AND OBLIQUE IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

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

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information

Source_Citation:

Originator: MICROSOFT BING

Publication_Date: 2018

Title: AERIAL IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

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: 2012

Ending_Date: 2018

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information

Source_Citation:

Originator: ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY
(OMNRF)

Publication_Date: 2019

Title: WETLANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://geohub.lio.gov.on.ca/datasets/5216a770ef684d2fae8bcc13ee9c4357_15

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2019

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information

Source_Citation:

Originator: US FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2013

Title: NATIONAL WETLANDS INVENTORY

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

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

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1975

Ending_Date: 2013

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The shoreline habitats were classified based on NOAA CUSP, the USFWS NWI wetland polygons, the Ontario Ministry of Natural Resources (OMNRF) wetlands (2006-2019); and nadir aerial imagery from the following sources: Google Earth and ESRI Basemap World Imagery.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

2595

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

5.0 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

ESIP

5.1.1.2 ENTITY TYPE DEFINITION

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

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ESI

5.1.2.2 ATTRIBUTE DEFINITION

The item ESI contains values representing the ESI polygon type.

5.1.2.3 ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

WATER_CODE

5.1.2.2 ATTRIBUTE DEFINITION

Specifies a polygon as either water or land.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

L

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

W

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ENVIR

5.1.2.2 ATTRIBUTE DEFINITION

Type of regional environment.

5.1.2.3 ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

L

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lacustrine

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ESI_DESCRIPTION

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3 ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10B: Freshwater Marshes

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Freshwater Marshes

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10C: Swamps

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Swamps

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

10D: Scrub-shrub Wetlands

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Scrub-shrub Wetlands

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

SOURCE_ID

5.1.2.2 ATTRIBUTE DEFINITION

Source identifier that links to the SOURCES data table.

This id indicates the source of a vector line segment.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ESI_SOURCE

5.1.2.2 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.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: FISH (Fish Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for freshwater and anadromous fish species in the St. Mary's River. Vector polygons in this data set represent fish distribution and spawning 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 St. Mary's River. 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 FISHPT data layer, part of the larger St. Mary's River ESI database, for additional fish information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

1973

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 1973 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Fish

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, digital data, and hardcopy reports. See also the FISHPT data layer, part of the larger St. Mary's River ESI database, for additional fish information. These data do not necessarily represent all fish occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 68, Chinook salmon, *Oncorhynchus tshawytscha*; 69, Coho salmon, *Oncorhynchus kisutch*; 70, Pink salmon, *Oncorhynchus gorbuscha*; 74, Rainbow trout, *Oncorhynchus mykiss*; 84, Rainbow smelt, *Osmerus mordax*; 100, Brown trout, *Salmo trutta*; 144, Atlantic salmon, *Salmo salar*; 152, Yellow perch, *Perca flavescens*; 161, Lake sturgeon, *Acipenser fulvescens*; 165, Lake whitefish, *Coregonus clupeaformis*; 166, Brook trout, *Salvelinus fontinalis*; 167, Lake trout, *Salvelinus namaycush*; 174, Longnose sucker, *Catostomus catostomus*; 175, White sucker, *Catostomus commersoni*; 178, Rock bass, *Ambloplites rupestris*; 179, Largemouth bass, *Micropterus salmoides*; 180, Smallmouth bass, *Micropterus dolomieu*; 181, Black crappie, *Pomoxis nigromaculatus*; 182, Bluegill, *Lepomis macrochirus*; 185, Northern pike, *Esox lucius*; 186, Muskellunge, *Esox masquinongy*; 188, Walleye, *Stizostedion vitreum vitreum*; 190, White bass, *Morone chrysops*; 201, Channel catfish, *Ictalurus punctatus*; 205, Freshwater drum, *Aplodinotus grunniens*; 211, Brown bullhead, *Ameiurus nebulosus*; 212, Pumpkinseed, *Lepomis gibbosus*; 218, Bowfin, *Amia calva*; 235, Cisco, *Coregonus artedi*; 237, Burbot, *Lota lota*; 238, Round whitefish (menominee), *Prosopium cylindraceum*; 464, Longnose gar, *Lepisosteus osseus*; 498, Bullhead catfish, *Ameiurus spp.*; 997, American brook lamprey, *Lampetra appendix*; 1011, Forage fish, n/a; 1296, Round goby, *Neogobius melanostomus*; 1299, Redhorses, *Moxostoma*.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR)

Publication_Date: 2021

Title: STATE OF MICHIGAN'S STATUS AND STRATEGY FOR ROUND GOBY MANAGEMENT

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.michigan.gov/documents/invasives/egle-ais-neogobius-melanostomus_708946_7.pdf

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MFNI)

Publication_Date: 2020

Title: Biotics_poly_2020_SMR

Geospatial_Data_Presentation_Form: vector digital data

Other_Citation_Details: unpublished

Type_of_Source_Media: email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: NEAL GODBY

Publication_Date: 2021

Title: SPECIES USE OF THE RAPIDS

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: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: NEAL GODBY, DAVE FIELDER, RUSTY AIKENS, FRANK ZOMER, ANJIE BOWEN

Publication_Date: 2021

Title: FISH MAPPING WORKSHOP

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: 2021

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: W.B. SCOTT AND E.J. CROSSMAN

Publication_Date: 1973

Title: FRESHWATER FISHES OF CANADA

Geospatial_Data_Presentation_Form: HARDCOPY TEXT

Publication_Information

Publication_Place: OTTAWA

Publisher: FISHERIES RESEARCH BOARD OF CANADA

Other_Citation_Details: BULLETIN 184

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1973

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Three main sources of data were used to depict fish distribution and seasonality for this data layer: 1) personal interviews with resource experts from Michigan Department of Natural Resources, U. S. Fish and Wildlife Service, Sault Ste. Marie Tribe of Chippewa Indians, and Bay Mills Indian Community; 2) vector digital data from Michigan Natural Features Inventory; and 3) hardcopy text of seasonality sources. Fish species depicted in this atlas include species of conservation interest, or species of commercial, recreational, or ecological importance. Fish polygons and spawning points were created based on digital data, publications, and expert opinion provided by resource experts at DNR, USFWS, and area Tribes.

General distributions – Fish general distributions were mapped using expert knowledge collected during workshops. Species included were determined by the experts in the study area. The St. Marys River was divided into seven reaches for fish general distributions: Upper River, Rapids, Lake Nicolet, Lake George, Lake Munuscong, St. Joseph Channel, and Raber Bay. These divisions are often used by local resource managers as well. Resource experts did not identify any specific concentration areas; instead, they emphasized the ecological importance of the St. Marys River as a whole. Expert knowledge for mapping of fish general distributions was supplemented with information from the MNFI Biotics dataset.

All fish that spawn in the study area were mapped with spawning months included in the seasonalities for all locations in the study area (in the general distribution polygons), per expert recommendation. Fish spawning can occur throughout the system, and different species utilize different habitats for spawning. The spawning habitat(s) for each mapped species are shown in a table in the Introductory pages that accompany the atlas. Specific spawning locations were not available for many of the mapped species, so use of this table in conjunction with the spatial data informs the user of the areas used for spawning by each species.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

8

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

5.0 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 St. Mary's River atlas,

the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

FISH

5.1.1.2 ENTITY TYPE DEFINITION

The FISH table contains attribute information for the vector polygons in this data set representing fish distribution and spawning 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (2), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (2), and record number.

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. No concentration data was available so the field is blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped
Enumerated_Domain_Value_Definition: Pinniped
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: polar bear
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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: FISHPT (Fish Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for freshwater and anadromous fish species in the St. Mary's River. Vector points in this data set represent fish spawning 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 St. Mary's River. 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 FISH data layer, part of the larger St. Mary's River ESI database, for additional fish information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2011

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 1973-2011 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Fish

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of digital data and hardcopy reports. See also the FISH data layer, part of the larger St. Mary's River ESI database, for additional fish information. These data do not necessarily represent all fish points occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 84, Rainbow smelt, *Osmerus mordax*; 152, Yellow perch, *Perca flavescens*; 165, Lake whitefish, *Coregonus clupeaformis*; 167, Lake trout, *Salvelinus namaycush*; 180, Smallmouth bass, *Micropterus dolomieu*; 188, Walleye, *Stizostedion vitreum vitreum*; 235, Cisco, *Coregonus artedi*; 237, Burbot, *Lota lota*; 247, Emerald shiner, *Notropis atherinoides*; 1271, Slimy sculpin, *Cottus cognatus*.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: GREAT LAKES AQUATIC HABITAT FRAMEWORK (GLAHF)

Publication_Date: 2011

Title: GREAT LAKES SPAWNING AND NURSERY SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.glahf.org/data/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISHPT INFORMATION

Source_Information

Source_Citation:

Originator: W.B. SCOTT AND E.J. CROSSMAN

Publication_Date: 1973

Title: FRESHWATER FISHES OF CANADA

Geospatial_Data_Presentation_Form: HARDCOPY TEXT

Publication_Information

Publication_Place: OTTAWA

Publisher: FISHERIES RESEARCH BOARD OF CANADA

Other_Citation_Details: BULLETIN 184

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar Date: 1973

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISHPT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data were used to depict fish spawning point distribution and seasonality for this data layer: 1) digital point data from Great Lakes Aquatic Habitat Framework and 2) seasonality information from hardcopy texts. Fish species depicted in this atlas include species of conservation interest, or species of commercial, recreational, or ecological importance. Fish polygons and spawning points were created based on digital data, publications, and expert opinion provided by resource experts at DNR, USFWS, and area Tribes. Spawning locations – Point locations of known spawning sites were provided by GLAHF.

The above digital and/or hardcopy sources were compiled by the project biologist to create the FISHPT 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 1:40,000 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 FISHPT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 Point and Vector Object Count

51

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

5.0 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, FISHPT) 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 St. Mary's River atlas, the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

FISHPT

5.1.1.2 ENTITY TYPE DEFINITION

The FISHPT table contains attribute information for the vector points in this data set representing fish spawning 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (32), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (32), and record number.

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. No concentration data was available so the field is blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird
Enumerated_Domain_Value_Definition: Bird
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: canine
Enumerated_Domain_Value_Definition: Canine
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: chordate
Enumerated_Domain_Value_Definition: Chordate
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: coral
Enumerated_Domain_Value_Definition: Coral
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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: HABITATS (Habitat Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for threatened and endangered plants in the St. Mary's River. Vector polygons in this data set represent 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 St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2020-2021 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Habitat

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of digital data on threatened and endangered plant distribution. These data do not necessarily represent all habitat occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 60, Threatened plant, n/a.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MFNI)

Publication_Date: 2020

Title: Biotics_poly_2020_SMR

Geospatial_Data_Presentation_Form: vector digital data

Other_Citation_Details: unpublished

Type_of_Source_Media: email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: NONE

Source_Contribution: HABITATS INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2021

Title: SPECIES PROFILES

Geospatial_Data_Presentation_Form: online

Other_Citation_Details: unpublished

Online_Linkage: <https://mnfi.anr.msu.edu/species/description/>

Type_of_Source_Media: online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HABITATS INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The main source of data used to depict habitat distribution for this data layer was Element Occurrence data provided by MNFI.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 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

5.0 ENTITY AND ATTRIBUTE INFORMATION

Overview _ Description:

Entity _ 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 St. Mary's River atlas, the number is 186), 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 _ 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

HABITATS

5.1.1.2 ENTITY TYPE DEFINITION

The HABITATS table contains attribute information for the vector polygons in this data set representing . 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (3), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (3), and record number.

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp
Enumerated_Domain_Value_Definition: Kelp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: landfowl
Enumerated_Domain_Value_Definition: Landfowl
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lizard
Enumerated_Domain_Value_Definition: Lizard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_ottter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: HERP (Herpetofauna Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for vulnerable herpetofauna in the St. Mary's River. Vector polygons in this data set represent 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 St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2021 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Herpetofauna

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of digital data on vulnerable herp species distribution. These data do not necessarily represent all herpetofauna occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 273, Pickerel frog, Lithobates palustris; 274, Smooth greensnake, Opheodrys vernalis.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2021

Title: MNFI_SGS_PF

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: 2021

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2021

Title: SPECIES PROFILES

Geospatial_Data_Presentation_Form: online

Other_Citation_Details: unpublished

Online_Linkage: <https://mnfi.anr.msu.edu/species/description/>

Type_of_Source_Media: online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The main source used to depict herp distribution for this data layer was Element Occurrence data provided by MNFI.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

2

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

5.0 ENTITY AND ATTRIBUTE INFORMATION

Overview _ Description:

Entity _ 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 St. Mary's River atlas, the number is 186), 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 _ 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

HERP

5.1.1.2 ENTITY TYPE DEFINITION

The HERP table contains attribute information for the vector polygons in this data set representing . 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (6), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (6), and record number.

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 or qualitative data was available for herps, so the concentration field is blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp
Enumerated_Domain_Value_Definition: Kelp
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: landfowl
Enumerated_Domain_Value_Definition: Landfowl
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lizard
Enumerated_Domain_Value_Definition: Lizard
Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_ottter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: HYDROL (Hydrography Lines)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains vector lines representing coastal hydrography used in the creation of the Environmental Sensitivity Index (ESI) for the St. Mary's River. This data set comprises a portion of the ESI data for St. Mary's River. 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 St. Mary's River ESI database, for additional ESI information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2006

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2006 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Hydrography

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent linear hydrography for the St. Mary's River. See also the HYDROP data layer, part of the larger St. Mary's River ESI database, for additional ESI information.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000 USGS topographic quads should conform to National Map Accuracy Standards at scales of 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI)

Publication_Date: 2017

Title: BASEMAP IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

Online_Linkage:

<https://www.arcgis.com/home/item.html?id=10df2279f9684e4a9f6a7f08febac2a9>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2017

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: GOOGLE EARTH

Publication_Date: 2020

Title: AERIAL AND OBLIQUE IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

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

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: MICROSOFT BING

Publication_Date: 2018

Title: AERIAL IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

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: 2012

Ending_Date: 2018

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA)

Publication_Date: 2007

Title: NOAA CONTINUALLY UPDATED SHORELINE PRODUCT (CUSP)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <http://shoreline.noaa.gov/data/datasheets/cusp.html>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2007

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: NATURAL RESOURCES CANADA

Publication_Date: 2020

Title: NATIONAL HYDRO NETWORK

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.nrcan.gc.ca/science-and-data/science-and-research/earth-sciences/geography/topographic-information/geobase-surface-water-program-geea/national-hydrographic-network/21361>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY (OMNRF)

Publication_Date: 2019

Title: WETLANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://geohub.lio.gov.on.ca/datasets/5216a770ef684d2fae8bcc13ee9c4357_15

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2019

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: RESEARCH PLANNING, INC

Publication_Date: 2021

Title: STUDY AREA BOUNDARY AND EXTENT

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Source_Scale_Denominator: 40000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2020

Ending_Date: 2021

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: US GEOLOGICAL SURVEY (USGS)

Publication_Date: 2016

Title: NATIONAL HYDROGRAPHY DATASET

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending Date: 2016

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The Great Lakes St. Mary's River system continuous shoreline was derived from the integration of the National Oceanic and Atmospheric Administration (NOAA) Continually Updated Shoreline Product (CUSP, 2008); the U.S. Geological Survey (USGS) high-resolution National Hydrography Dataset (NHD, 2003-2014); the Natural Resources Canada, National Hydro Network (NHN, 1978-2011); and manual digitization at 1:4,000 from ESRI Basemap World Imagery (2010-2019), BING Aerial Imagery, and Google Earth aerial imagery (2014-2020). The most recent shoreline was utilized.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

String

3.3.1.2 Point and Vector Object Count

1399

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

5.0 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

HYDROL

5.1.1.2 ENTITY TYPE DEFINITION

The HYDROL table contains attribute information for the vector lines representing linear hydrography features in the HYDRO data layer.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

LINE

5.1.2.2 ATTRIBUTE DEFINITION

Type of geographic feature.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

E

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Extent of AOI

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

H

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Hydrography

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shoreline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

SOURCE_ID

5.1.2.2 ATTRIBUTE DEFINITION

Source identifier that links to the SOURCES data table.

This id indicates the source of a vector line segment.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: HYDROP (Hydrography Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains vector polygons representing coastal hydrography used in the creation of the Environmental Sensitivity Index (ESI) for the St. Mary's River. This data set comprises a portion of the ESI data for St. Mary's River. 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 St. Mary's River ESI database, for additional ESI information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2006

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2006 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Hydrography

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent polygonal hydrography for St. Mary's River. See also the HYDROL data layer, part of the larger St. Mary's River ESI database, for additional ESI information.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000 USGS topographic quads should conform to National Map Accuracy Standards at scales of 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE (ESRI)

Publication_Date: 2017

Title: BASEMAP IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

Online_Linkage:

<https://www.arcgis.com/home/item.html?id=10df2279f9684e4a9f6a7f08febac2a9>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2010

Ending_Date: 2017

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: GOOGLE EARTH

Publication_Date: 2020

Title: AERIAL AND OBLIQUE IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

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

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: MICROSOFT BING

Publication_Date: 2018

Title: AERIAL IMAGERY

Geospatial_Data_Presentation_Form: RASTER DIGITAL DATA

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: 2012

Ending_Date: 2018

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA)

Publication_Date: 2007

Title: NOAA CONTINUALLY UPDATED SHORELINE PRODUCT (CUSP)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <http://shoreline.noaa.gov/data/datasheets/cusp.html>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2007

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: NATURAL RESOURCES CANADA

Publication_Date: 2020

Title: NATIONAL HYDRO NETWORK

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.nrcan.gc.ca/science-and-data/science-and-research/earth-sciences/geography/topographic-information/geobase-surface-water-program-geea/national-hydrographic-network/21361>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: ONTARIO MINISTRY OF NATURAL RESOURCES AND FORESTRY (OMNRF)

Publication_Date: 2019

Title: WETLANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://geohub.lio.gov.on.ca/datasets/5216a770ef684d2fae8bcc13ee9c4357_15

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2006

Ending_Date: 2019

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: RESEARCH PLANNING, INC

Publication_Date: 2021

Title: STUDY AREA BOUNDARY AND EXTENT

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Source_Scale_Denominator: 40000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2020

Ending_Date: 2021

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDRO INFORMATION

Source_Information

Source_Citation:

Originator: US GEOLOGICAL SURVEY (USGS)

Publication_Date: 2016

Title: NATIONAL HYDROGRAPHY DATASET

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2011

Ending Date: 2016

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution:HYDROP INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The Great Lakes St. Mary's River system land and water polygonal interface was based on NOAA CUSP, the USFWS NWI wetland polygons, the Ontario Ministry of Natural Resources (OMNRF) wetlands (2006-2019); and nadir aerial imagery from the following sources: Google Earth and ESRI Basemap World Imagery.

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 1:40,000 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.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

1283

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

5.0 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

HYDROP

5.1.1.2 ENTITY TYPE DEFINITION

The HYDROP table contains attribute information for the vector polygons representing polygonal hydrography features in the HYDRO data layer.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

WATER_CODE

5.1.2.2 ATTRIBUTE DEFINITION

Specifies a polygon as either water or land.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

L

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

W

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: INVERTL (Invertebrate Lines)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for freshwater mussels in the St. Mary's River. Vector lines in this data set represent 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 St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2018

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 1973-2018 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Invertebrate

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of digital data on freshwater mussel occurrences. These data do not necessarily represent all invertebrate lines occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 765, Threatened mussel, n/a.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: USFWS

Publication_Date: 2018

Title: MUSSELPROTOCOLSTREAM_STMARYSEI

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2018

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERTL INFORMATION

Source_Information

Source_Citation:

Originator: W.B. SCOTT AND E.J. CROSSMAN

Publication_Date: 1973

Title: FRESHWATER FISHES OF CANADA

Geospatial_Data_Presentation_Form: HARDCOPY TEXT

Publication_Information

Publication_Place: OTTAWA

Publisher: FISHERIES RESEARCH BOARD OF CANADA

Other_Citation_Details: BULLETIN 184

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1973

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: INVERTL INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The main source of data used to depict invertebrate line distribution for this data layer was digital data provided by USFWS and MI DNR.

The above digital and/or hardcopy sources were compiled by the project biologist to create the INVERTL 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 1:40,000 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 INVERTL data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

String

3.3.1.2 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

5.0 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, INVERTL) 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 St. Mary's River atlas, the number is 186), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

INVERTL

5.1.1.2 ENTITY TYPE DEFINITION

The INVERTL table contains attribute information for the vector lines in this data set representing . 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (27), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (27), and record number.

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 a species at a particular location. No qualitative or quantitative concentration information was available, thus the field was left blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: MANAGED_POLY (Managed Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use or management resource data for National Forests, management areas, Nature Conservancy properties, and state parks in St. Mary's River. Vector polygons in this data set represent park or managed area features. 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 St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2019

1.3.3.3 Ending Date

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2019 to 2020 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Managed

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data for human-use or management resources. These data do not necessarily represent all Managed polygons in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR)

Publication_Date: 20190329

Title: CONSERVATION AND RECREATION LANDS (FEE AND OTHERS)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://gis-midnr.opendata.arcgis.com/datasets/a0836d06d2b644c0bac79734cfcb2acc_0

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20190329

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MANAGED_POLY INFORMATION

Source_Information

Source_Citation:

Originator: THE NATURE CONSERVANCY (TNC)

Publication_Date: 202007

Title: TNC LANDS & TRANSFERRED TNC LANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.tnclands.tnc.org/#>

Source_Scale_Denominator: 24000

Type_of_Source_Media: PAPER

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202007

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: MANAGED_POLY INFORMATION

Source_Information

Source_Citation:

Originator: UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) FOREST SERVICE

Publication_Date: 202007

Title: ADMINISTRATIVE FOREST BOUNDARIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://data.fs.usda.gov/geodata/edw/datasets.php?dsetCategory=boundaries>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202007

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: MANAGED_POLY INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Three main sources were used to depict management areas for this data layer: 1) U.S. Department of Agriculture (USDA) Forest Service (FS); 2) Michigan Department of Natural Resources (MIDNR); and 3) the Nature Conservancy. Boundaries for the Hiawatha National Forest were provided by the USDA Forest Service. Management area data were provided by Michigan Department of Natural Resources (MIDNR) and include wildlife management areas, state forest areas, and other special management areas. These lands are managed mainly by MIDNR, specifically the divisions within, including forest resources, parks and recreation, and wildlife divisions. Boundaries of The Nature Conservancy (TNC) properties were obtained from the TNC Lands database. State park boundaries were provided by Michigan Department of Natural Resources (MIDNR).

The above digital and/or hardcopy sources were compiled by the project biologist to create the MANAGED_POLY 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 1:40,000 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 MANAGED_POLY data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

19

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

5.0 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, MANAGED_POLY) 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 St. Mary's River, the

number is 186). ID is a unique combination of the atlas number (186), an element specific number (MANAGED_POLY = 50), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

MANAGED_POLY

5.1.1.2 ENTITY TYPE DEFINITION

The MANAGED_POLY table contains attribute information for the vector polygons representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (50), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (50), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: NAV_MARINE_POINT (Navigational or Marine Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use resource data for anchorages, boat ramps, ferry terminals, lock and dam systems, and marinas in St. Mary's River. Vector points in this data set represent navigational/marine-recreational/maritime features. 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 St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2017

1.3.3.3 Ending Date

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2017 to 2020 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Navigational or marine

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data on human-use resources. These data do not necessarily represent all Navigational or marine points in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: GOOGLE MAPS

Publication_Date: 202008

Title: MARINAS

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Publication_Information

Publication_Place:

Publisher:

Other_Citation_Details:

Online_Linkage: <https://maps.google.com/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 202008

Ending_Date:

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MIDEQ)

Publication_Date: 20190529

Title: WRD DAMS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://gisp.mcgi.state.mi.us/arcgis/rest/services/DEQ/MiWaters/MapServer/0>

Source_Scale_Denominator: 24000

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20190529

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR)

Publication_Date: 20201120

Title: MICHIGAN PUBLIC BOATING ACCESS SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://gis-midnr.opendata.arcgis.com/datasets/e33baefa170b46928869155f3627de92_1

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20201120

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: NOAA OCM

Publication_Date: 20170920

Title: ANCHORAGE AREAS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <http://marinecadastre.gov/data/>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20170920

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: UNITED STATES DEPARTMENT OF TRANSPORTATION (USDOT) BUREAU OF TRANSPORTATION STATISTICS (BTS)

Publication_Date: 2018

Title: NATIONAL CENSUS FERRY OPERATORS

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Online_Linkage: <https://www.bts.dot.gov/2018-ncfo-terminal>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2018

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Five main sources of data were used to depict human-use resources for this data layer: 1) digital data from NOAA's Office of Coastal Management (NOAA OCM); 2) Michigan Department of Natural Resources (MIDNR); 3) U.S. Department of Transportation (USDOT) Bureau of Transportation Services (BTS); 4) Michigan Department of Environmental Quality (MIDEQ); and 5) data obtained through Google maps. Locations where commercial vessels can be anchored offshore were provided by the NOAA's Office of Coastal Management (OCM). Designated public boating access sites were provided by Michigan Department of Natural Resources

(MIDNR). Ferry terminal data from the National Census of Ferry Operators (NCFO) were obtained through the US Department of Transportation Bureau of Transportation Statistics (USDOT BTS). Data for lock and dam systems were provided by Michigan Department of Natural Resources (MIDNR) on behalf of Michigan Department of Environmental Quality (MIDEQ). Marinas were located using Google maps.

The above digital and/or hardcopy sources were compiled by the project biologist to create the NAV_MARINE_POINT 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 1:40,000 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 NAV_MARINE_POINT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 Point and Vector Object Count

25

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

5.0 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, NAV_MARINE_POINT) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (NAV_MARINE_POINT = 82), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

NAV_MARINE_POINT

5.1.1.2 ENTITY TYPE DEFINITION

The NAV_MARINE_POINT table contains attribute information for the vector points representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (82), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (82), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: POLITICAL_LINE (Political Lines)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use resource data for the international boundary in St. Mary's River. Vector lines in this data set represent political or jurisdictional management features. 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 St. Mary's River. 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 POLITICAL_POLY and POLITICAL_POINT data layers, part of the larger St. Mary's River ESI database, for additional political/jurisdictional information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2013

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2013 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Political

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data for human-use resources. See also the POLITICAL_POLY and POLITICAL_POINT data layers, part of the larger St. Mary's River ESI database, for additional political/jurisdictional information. These data do not necessarily represent all Political lines in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA) OFFICE OF COASTAL SURVEY (OCS)

Publication_Date: 20130913

Title: MARITIME LIMITS AND BOUNDARIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place:

Publisher:

Other_Citation_Details:

Online_Linkage: <https://nauticalcharts.noaa.gov/data/us-maritime-limits-and-boundaries.html#access-digital-data>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20130913

Ending_Date:

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: POLITICAL_LINE INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Spatial data representing the international border were provided by the NOAA Office of Coastal Survey (OCS).

The above digital and/or hardcopy sources were compiled by the project biologist to create the POLITICAL_LINE 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 1:40,000 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 POLITICAL_LINE data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

String

3.3.1.2 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

5.0 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, POLITICAL_LINE) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (POLITICAL_LINE = 41), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

POLITICAL_LINE

5.1.1.2 ENTITY TYPE DEFINITION

The POLITICAL_LINE table contains attribute information for the vector lines representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (41), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (41), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: POLITICAL_POINT (Political Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use resource data for coast guard stations in St. Mary's River. Vector points in this data set represent political or jurisdictional management features. 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 St. Mary's River. 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 POLITICAL_POLY and POLITICAL_LINE data layers, part of the larger St. Mary's River ESI database, for additional political/jurisdictional information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2020 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Political

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data for human-use resources. See also the POLITICAL_POLY and POLITICAL_LINE data layers, part of the larger St. Mary's River ESI database, for additional political/jurisdictional information. These data do not necessarily represent all Political points in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: GOOGLE MAPS

Publication_Date: 202008

Title: COAST GUARD STATION

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Publication_Information

Publication Place:

Publisher:

Other_Citation_Details:

Online_Linkage: <https://maps.google.com/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 202008

Ending_Date:

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: POLITICAL_POINT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

U.S. Coast Guard (USCG) stations were located via Google maps.

The above digital and/or hardcopy sources were compiled by the project biologist to create the POLITICAL_POINT 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 1:40,000 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 POLITICAL_POINT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 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

5.0 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, POLITICAL_POINT) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (POLITICAL_POINT = 42), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

POLITICAL_POINT

5.1.1.2 ENTITY TYPE DEFINITION

The POLITICAL_POINT table contains attribute information for the vector points representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (42), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (42), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: POLITICAL_POLY (Political Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use or management resource data for Tribal lands in St. Mary's River. Vector polygons in this data set represent political or jurisdictional management features. 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 St. Mary's River. 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 POLITICAL_LINE and POLITICAL_POINT data layers, part of the larger St. Mary's River ESI database, for additional political/jurisdictional information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2016

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2016 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Political

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data for human-use or management resources. See also the POLITICAL_LINE and POLITICAL_POINT data layers, part of the larger St. Mary's River ESI database, for additional political/jurisdictional information. These data do not necessarily represent all Political polygons in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA)

Publication_Date: 20161024

Title: 2016 AMERICAN INDIAN/ALASKA NATIVE/NATIVE HAWAIIAN AREAS
(AIANNH) MICHIGAN, MINNESOTA, AND WISCONSIN

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://edg.epa.gov/data/PUBLIC/R5/EDGIndianLandsCensus2016r1.zip>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20161024

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: POLITICAL_POLY INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Tribal land boundaries were downloaded from the U.S Environmental Protection Agency (USEPA).

The above digital and/or hardcopy sources were compiled by the project biologist to create the POLITICAL_POLY 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 1:40,000 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 POLITICAL_POLY data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

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

5.0 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, POLITICAL_POLY) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (POLITICAL_POLY = 40), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

POLITICAL_POLY

5.1.1.2 ENTITY TYPE DEFINITION

The POLITICAL_POLY table contains attribute information for the vector polygons representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (40), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (40), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: RESOURCE_POINT (Resource Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use or management resource data for aquaculture sites, artificial reef locations, popular recreational fishing sites, tribal subsistence, and water intakes in St. Mary's River. Vector points in this data set represent resource management features. 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 St. Mary's River. 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 RESOURCE_POLY data layer, part of the larger St. Mary's River ESI database, for additional resource management information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2019

1.3.3.3 Ending Date

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2019 to 2020 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Resource

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data for human-use or management resources. See also the RESOURCE_POLY data layer, part of the larger St. Mary's River ESI database, for additional resource management information. These data do not necessarily represent all Resource points in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: GREAT LAKES AQUATIC HABITAT FRAMEWORK (GLAHF)

Publication_Date: 202007

Title: MI_tribal_fish_ports_CORA

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.glahf.org/data/>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202007

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: GREAT LAKES AQUATIC HABITAT FRAMEWORK (GLAHF)

Publication_Date: 202007

Title: REEF LOCATIONS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://www.glahf.org/data/>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202007

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF AGRICULTURE AND RURAL DEVELOPMENT (MDARD), DR STEVE HUSSEY

Publication_Date: 20201217

Title: FISH FARMS 2020

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20201217

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MIDEQ)

Publication_Date: 20190529

Title: SURFACE WATER INTAKES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://gisp.mcgi.state.mi.us/arcgis/rest/services/DEQ/DW_Wells/MapServer/8

Source_Scale_Denominator: 24000

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20190529

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR), DAVE FIELDER

Publication_Date: 20201119

Title: 2017 CREEL SURVEY - RECREATIONAL FISHING SITES

Geospatial_Data_Presentation_Form: DOCUMENT

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20201119

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Three main sources of data were used to depict human-use resources for this data layer: 1) Michigan Department of Agriculture and Rural Development (MDARD); 2) Great Lakes Aquatic Habitat Framework (GLAHF); and 3) Michigan Department of Natural Resources (MIDNR). Managed aquaculture sites were provided by the Michigan Department of Agriculture and Rural Development (MDARD). Artificial reef data were provided by the Great Lakes Aquatic Habitat Framework (GLAHF). Recreational fishing sites were digitized from a hardcopy map within a MIDNR provided 2017 creel survey report showing heavily fished areas along the St Mary's river. The site names that correspond with the survey were included in the atlas. Subsistence fishing locations in the form of Tribal fish ports were mapped using data from the Great Lakes Aquatic Framework (GLAHF). Per MIDNR personal communication, the entire St Mary's River is open to tribal subsistence fishing with tribal members limited to 100 feet of gill net within the river, as opposed to 300 feet elsewhere within Treaty territory. Excluding tribal fish ports, subsistence areas were not mapped due to their expansive reach throughout the atlas.

Water intakes were provided by Michigan Department of Natural Resources (MIDNR) on behalf of Michigan Department of Environmental Quality (MIDEQ).

The above digital and/or hardcopy sources were compiled by the project biologist to create the RESOURCE_POINT 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 1:40,000 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 RESOURCE_POINT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 Point and Vector Object Count

15

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

5.0 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, RESOURCE_POINT) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (RESOURCE_POINT = 62), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

RESOURCE_POINT

5.1.1.2 ENTITY TYPE DEFINITION

The RESOURCE_POINT table contains attribute information for the vector points representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (62), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (62), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: RESOURCE_POLY (Resource Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use or management resource data for essential habitats in St. Mary's River. Vector polygons in this data set represent resource management features. 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 St. Mary's River. 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 RESOURCE_POINT data layer, part of the larger St. Mary's River ESI database, for additional resource management information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2019

1.3.3.3 Ending Date

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2019 to 2021 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Resource

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data for human-use or management resources. See also the RESOURCE_POINT data layer, part of the larger St. Mary's River ESI database, for additional resource management information. These data do not necessarily represent all Resource polygons in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR), MIKE RUBLEY

Publication_Date: 20190425

Title: CRITICAL DUNES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place:

Publisher:

Other_Citation_Details: UNPUBLISHED

Online_Linkage:

Source_Scale_Denominator: 24000

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20190425

Ending_Date:

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POLY INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2021

Title: MICHIGAN NATURAL FEATURES COMMUNITY DATA - ESSENTIAL HABITATS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POLY INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Essential habitat data depicting ecological communities were received from Michigan Natural Features Inventory (MNFI). These communities include bogs, boreal forests, Great Lakes marshes, limestone cobble shores, mesic northern forests, northern shrub thickets, poor fens, and rich conifer swamp communities. Locations of critical dunes were provided by Michigan Department of Natural Resources (MIDNR).

The above digital and/or hardcopy sources were compiled by the project biologist to create the RESOURCE_POLY 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 1:40,000 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 RESOURCE_POLY data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 Point and Vector Object Count

9

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

5.0 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, RESOURCE_POLY) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (RESOURCE_POLY = 60), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

RESOURCE_POLY

5.1.1.2 ENTITY TYPE DEFINITION

The RESOURCE_POLY table contains attribute information for the vector polygons representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE
NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (60), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (60), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: SOCECON_LINE (Socioeconomic Lines)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use resource data for pipelines and rail routes in St. Mary's River. Vector lines in this data set represent socioeconomic features. 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 St. Mary's River. 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 SOCECON_POINT data layer, part of the larger St. Mary's River ESI database, for additional socioeconomic information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2019

1.3.3.3 Ending Date

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2019 to 2020 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Socioeconomic

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data on human-use resources. See also the SOCECON_POINT data layer, part of the larger St. Mary's River ESI database, for additional socioeconomic information. These data do not necessarily represent all Socioeconomic lines in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MICHIGAN GEOGRAPHIC FRAMEWORK (MGF)

Publication_Date: 20190412

Title: RAILROADS (V17A)

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: <https://gis-michigan.opendata.arcgis.com/datasets/railroads-v17a>

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20190412

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_LINE INFORMATION

Source_Information

Source_Citation:

Originator: UNITED STATES ENERGY INFORMATION ADMINISTRATION (USEIA)

Publication_Date: 20200428

Title: NATURAL GAS INTERSTATE AND INTRASTATE PIPELINES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: http://www.eia.gov/maps/layer_info-m.php

Source_Scale_Denominator: 1000,000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20200428

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_LINE INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data were used to depict human-use resources for this data layer. Major crude oil pipelines were provided by the U.S. Energy Information Association (USEIA). Locations of railways were downloaded from the Michigan Geographic Framework (MGF).

The above digital and/or hardcopy sources were compiled by the project biologist to create the SOCECON_LINE 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 1:40,000 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 SOCECON_LINE data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

String

3.3.1.2 Point and Vector Object Count

2

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

5.0 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, SOCECON_LINE) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (SOCECON_LINE = 91), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

SOCECON_LINE

5.1.1.2 ENTITY TYPE DEFINITION

The SOCECON_LINE table contains attribute information for the vector lines representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (91), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (91), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: SOCECON_POINT (Socioeconomic Points)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains human-use data for airports, archaeological sites, abandoned vessels, beaches, and historical sites in St. Mary's River. Vector points in this data set represent socioeconomic features. 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 St. Mary's River. 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 SOCECON_LINE data layer, part of the larger St. Mary's River ESI database, for additional socioeconomic information.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Range of Dates/Times

1.3.3.1 Beginning Date

2016

1.3.3.3 Ending Date

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness dates for this data range from 2016 to 2020 and are documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Socioeconomic

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of expert knowledge, available hardcopy reports, and/or digital data on human-use or management resources. See also the SOCECON_LINE data layer, part of the larger St. Mary's River ESI database, for additional socioeconomic information. These data do not necessarily represent all Socioeconomic points in St. Mary's River.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: FEDERAL AVIATION ADMINISTRATION (FAA)

Publication_Date: 20200716

Title: AIRPORTS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://ais-faa.opendata.arcgis.com/datasets/e747ab91a11045e8b3f8a3efd093d3b5_0

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20200716

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_POINT INFORMATION

Source_Information

Source_Citation:

Originator: GOOGLE MAPS

Publication_Date: 202008

Title: BEACHES

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Online_Linkage: <https://maps.google.com/>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202008

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR)

Publication_Date: 202007

Title: MICHIGAN HISTORICAL MARKERS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://gis-midnr.opendata.arcgis.com/datasets/d62f75202cae42259c6dfd208c6ed76c_0

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202007

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_POINT INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN DEPARTMENT OF NATURAL RESOURCES (MIDNR), MIKE RUBLEY

Publication_Date: 20190425

Title: ARCHAEOLOGICAL SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Source_Scale_Denominator: 24000

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20190425

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_POINT INFORMATION

Source_Information

Source_Citation:

Originator: NOAA OCS

Publication_Date: 2016

Title: WRECKS AND OBSTRUCTIONS DATABASE - AWOIS WRECKS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2016

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_POINT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Four main sources of data were used to depict human-use resources for this data layer: 1) personal interviews and digital data provided by resource experts from the Michigan Department of Natural Resources (MIDNR); 2) digital data provided by the U.S. Department of Transportation (USDOT) Federal Aviation Administration (FAA) Aeronautical Information Services; 3) digital data from NOAA's Office of Coast Survey (NOAA OCS) Automated Wrecks and Obstructions Information System (AWOIS); and 4) data obtained from Google maps. Locations of airports were downloaded from the United States Department of Transportation (USDOT) Federal Aviation Administration (FAA) – Aeronautical Information Services. Generic archaeological sites were provided by Michigan Department of Natural Resources (MIDNR). Data on locations of abandoned and derelict vessels comes from NOAA's Office of Coast Survey Automated Wrecks and Obstructions Information System (AWOIS). Locations of recreational beaches used for activities such as swimming, sun-bathing, fishing, etc., were

located via Google maps. Historical sites from Michigan Department of Natural Resources (MIDNR) depict point locations of Michigan's historical markers.

The above digital and/or hardcopy sources were compiled by the project biologist to create the SOCECON_POINT 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 1:40,000 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 SOCECON_POINT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

Entity point

3.3.1.2 Point and Vector Object Count

93

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

5.0 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, SOCECON_POINT) 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 St. Mary's River, the number is 186). ID is a unique combination of the atlas number (186), an element specific number (SOCECON_POINT = 92), 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

SOCECON_POINT

5.1.1.2 ENTITY TYPE DEFINITION

The SOCECON_POINT table contains attribute information for the vector points representing human-use, socioeconomic, or management features. 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (92), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

HUNUM

5.1.2.2 ATTRIBUTE DEFINITION

An identifier that links directly to the SOC_DAT table.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (92), and record number.

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.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ELEMENT

5.1.2.2 ATTRIBUTE DEFINITION

Category of the human-use features.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: POLITICAL

Enumerated_Domain_Value_Definition: Political/Jurisdictional management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MANAGED

Enumerated_Domain_Value_Definition: Parks/Managed areas

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: RESOURCE

Enumerated_Domain_Value_Definition: Resource management

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAT_HAZARD

Enumerated_Domain_Value_Definition: Natural hazard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: NAV_MARINE

Enumerated_Domain_Value_Definition: Navigation/Marine - recreational/Maritime

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: SOCECON

Enumerated_Domain_Value_Definition: Other socioeconomic features

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

TYPE

5.1.2.2 ATTRIBUTE DEFINITION

The human-use features in the data are those that could be impacted by an oil spill or could provide access for response operations.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Airport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AN

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Anchorage

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AQ

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Aquaculture

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Artificial Reef

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Archaeological Site

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

AV

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Abandoned Vessel

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

B

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Beach

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

BR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Boat Ramp

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

CG

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Coast Guard Station, District, or Sector

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

EH

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Essential Habitat

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

F

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Ferry

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

FO

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

National Forest

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

HS

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Historical Site or Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

IB

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

International Border

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

LD

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Lock and Dam

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

M

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Marina

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

MA

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Management Area

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

NC

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Nature Conservancy

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

P

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Regional or State Park

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

PL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Pipeline

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RF

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Recreational Fishing

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

RR

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Rail Route

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

S

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Subsistence

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

TL

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Tribal Land

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.1 ENUMERATED DOMAIN

5.1.2.4.1.1 ENUMERATED DOMAIN VALUE

WI

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Water Intake

5.1.2.4.1.3 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998

1.0 Identification Information

1.1 Citation

1.1.1 Originator

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

1.1.2 Publication Date

202105

1.1.4 Title

St. Mary's River: T_MAMMAL (Terrestrial Mammal Polygons)

1.1.5 Edition

First

1.1.6 Geospatial Data Presentation Form

vector digital data

1.1.7 Series Information

1.1.7.1 Series Name

None

1.1.7.2 Issue Identification

St. Mary's River

1.1.8 Publication Information

1.1.8.1 Publication Place

Seattle, Washington

1.1.8.2 Publisher

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

1.1.9 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.

1.1.10 Online Linkage

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

1.2 Description

1.2.1 Abstract

This data set contains sensitive biological resource data for Canada lynx in the St. Mary's River. Vector polygons in this data set represent 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 St. Mary's River. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.2.2 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.

1.3 Time Period of Content

1.3.3 Single_Date/Time:

1.3.3.1 Calendar_Date:

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2021 and is documented in the Lineage section.

1.4 Status

1.4.1 Progress

Complete

1.4.2 Maintenance and Update Frequency

None Scheduled

1.5 Spatial Domain

1.5.1 Bounding Coordinates

1.5.1.1 West Bounding Coordinate

-84.75000

1.5.1.2 East Bounding Coordinate

-83.87500

1.5.1.3 North Bounding Coordinate

46.62500

1.5.1.4 South Bounding Coordinate

46.00000

1.6 Keywords

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

ISO 19115 Topic Category

1.6.1.2 Theme Keyword

biota

1.6.1.2 Theme Keyword

environment

1.6.1 Theme

1.6.1.1 Theme Keyword Thesaurus

None

1.6.1.2 Theme Keyword

Environmental Monitoring

1.6.1.2 Theme Keyword

ESI

1.6.1.2 Theme Keyword

Sensitivity maps

1.6.1.2 Theme Keyword

Coastal resources

1.6.1.2 Theme Keyword

Oil spill planning

1.6.1.2 Theme Keyword

Coastal Zone Management

1.6.1.2 Theme Keyword

Wildlife

1.6.1.2 Theme Keyword

Terrestrial Mammal

1.6.2 Place

1.6.2.1 Place Keyword Thesaurus

None

1.6.2.2 Place Keyword

St. Mary's River

1.7 Access Constraints

None

1.8 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.

1.10 Browse Graphic

1.10.1 Browse Graphic File Name

datafig.jpg

1.10.2 Browse Graphic File Description

Depicts the relationships between spatial data layers and attribute data tables for the St. Mary's River ESI data.

1.10.3 Browse Graphic File Type

JPEG

1.11 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

1.13 Native Data Set Environment

The software packages used to develop the atlas are Environmental Systems Research Institute's ArcGIS for Desktop 10.4.1(R) and SQL SERVER(R) (version 2005). The hardware configuration is PC's with Windows Operating System 10.

The following Geodatabase Feature Classes are included in the data set: aoi, benthic, benthicpt, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invertl, managed_poly, nav_marine_point, political_line, political_point, political_poly, resource_point, resource_poly, socecon_line, socecon_point, and t_mammal. Associated relational and desktop data tables are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, sources, species, and status.

2.0 Data Quality Information

2.1 Attribute Accuracy

2.1.1 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.

2.2 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 ESI 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.

2.3 Completeness Report

These data represent a synthesis of digital data for vulnerable terrestrial mammal distribution. These data do not necessarily represent all terrestrial mammal occurrences in St. Mary's River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 124, Canadian lynx, *Lynx canadensis*.

2.4 Positional Accuracy

2.4.1 Horizontal Positional Accuracy

2.4.1.1 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 1:40,000. 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.

2.5 Lineage

Source_Information

Source_Citation:

Originator: MENSING, CHRIS (USFWS)

Publication_Date: 2021

Title: SPECIES INFO FOR INVERTS, HERPS, MAMMALS

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: 2021

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: T_MAMMAL INFORMATION

Source_Information

Source_Citation:

Originator: MICHIGAN NATURAL FEATURES INVENTORY (MNFI)

Publication_Date: 2021

Title: LYNX (LYNX CANADENSIS)

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: ONLINE

Online_Linkage: <https://mnfi.anr.msu.edu/species/description/11476/Lynx-canadensis>

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2021

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: T_MAMMAL INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The main source of data used to depict terrestrial mammal distribution for this data layer was Element Occurrence digital data provided by MNFI.

The above digital and/or hardcopy sources were compiled by the project biologist to create the T_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 1:40,000 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 T_MAMMAL data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

2.5.2.3 Process Date

202105

2.5.2.6 Process Contact

2.5.2.6.2 Contact Organization Primary

2.5.2.6.1.2 Contact Organization

NOAA, Office of Response and Restoration

2.5.2.6.1.1 Contact Person

Jill Petersen

2.5.2.6.4 Contact Address

2.5.2.6.4.1 Address Type

Physical address

2.5.2.6.4.2 Address

7600 Sand Point Way, N.E.

2.5.2.6.4.3 City

Seattle

2.5.2.6.4.4 State or Province

Washington

2.5.2.6.4.5 Postal Code

98115-6349

2.5.2.6.5 Contact Voice Telephone

(206) 526-6944

2.5.2.6.7 Contact Facsimile Telephone

(206) 526-6329

2.5.2.6.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

3.0 Spatial Data Organization Information

3.2 Direct Spatial Reference Method

Vector

3.3 Point and Vector Object Information

3.3.1 SDTS Terms Description

3.3.1.1 SDTS Point and Vector Object Type

GT-polygon composed of chains

3.3.1.2 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

5.0 ENTITY AND ATTRIBUTE INFORMATION

Overview _ Description:

Entity _ 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, T_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 St. Mary's River atlas, the number is 186), 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 _ 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).

5.1 DETAILED DESCRIPTION

5.1.1 ENTITY TYPE

5.1.1.1 ENTITY TYPE LABEL

T_MAMMAL

5.1.1.2 ENTITY TYPE DEFINITION

The T_MAMMAL table contains attribute information for the vector polygons in this data set representing . 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.

5.1.1.3 ENTITY TYPE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

ID

5.1.2.2 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 (186), element number (9), and record number.

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

"NEED TO ADD"

5.1.2 ATTRIBUTE

5.1.2.1 ATTRIBUTE LABEL

RARNUM

5.1.2.2 ATTRIBUTE DEFINITION

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

5.1.2.3. ATTRIBUTE DEFINITION SOURCE

NOAA ESI Guidelines

5.1.2.4 ATTRIBUTE DOMAIN VALUES

5.1.2.4.2 RANGE DOMAIN

5.1.2.4.2.1 RANGE DOMAIN MINIMUM

"NEED TO ADD"

5.1.2.4.2.2 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.

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 (186), element number (9), and record number.

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. No concentration data was available, so the field is blank.

Attribute_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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: Insect

Enumerated_Domain_Value_Definition: Insect

Enumerated_Domain_Value_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: algae

Enumerated_Domain_Value_Definition: Algae

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: alligator

Enumerated_Domain_Value_Definition: Alligator

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: anadromous

Enumerated_Domain_Value_Definition: Anadromous fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: barnacle

Enumerated_Domain_Value_Definition: Barnacle

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bat

Enumerated_Domain_Value_Definition: Bat

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bear

Enumerated_Domain_Value_Definition: Bear

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

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: canine

Enumerated_Domain_Value_Definition: Canine

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: chordate

Enumerated_Domain_Value_Definition: Chordate

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: coral

Enumerated_Domain_Value_Definition: Coral

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: crayfish

Enumerated_Domain_Value_Definition: Crayfish

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: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: echinoderm

Enumerated_Domain_Value_Definition: Echinoderm

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fav

Enumerated_Domain_Value_Definition: Floating aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: feline

Enumerated_Domain_Value_Definition: Feline

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: frog

Enumerated_Domain_Value_Definition: Frog

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: gastropod

Enumerated_Domain_Value_Definition: Gastropod

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: hardbottom

Enumerated_Domain_Value_Definition: Hardbottom

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: insect

Enumerated_Domain_Value_Definition: Insect

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: kelp

Enumerated_Domain_Value_Definition: Kelp

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: landfowl

Enumerated_Domain_Value_Definition: Landfowl

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lizard

Enumerated_Domain_Value_Definition: Lizard

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: lobster

Enumerated_Domain_Value_Definition: Lobster

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: m_resident

Enumerated_Domain_Value_Definition: Marine resident 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: pinniped

Enumerated_Domain_Value_Definition: Pinniped

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: polar bear

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: reef

Enumerated_Domain_Value_Definition: Reef

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: reptile

Enumerated_Domain_Value_Definition: Reptile

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav

Enumerated_Domain_Value_Definition: Submerged aquatic vegetation

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sea_otter

Enumerated_Domain_Value_Definition: Sea otter

Enumerated_Domain_Value_Definition_Source: NOAA ESI Guidelines

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shellfish

Enumerated_Domain_Value_Definition: Shellfish

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: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

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: softbottom

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: ungulate

Enumerated_Domain_Value_Definition: Ungulate

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_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: worm

Enumerated_Domain_Value_Definition: Worm

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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 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:

5.1.2.4.4 Unrepresentable Domain

Acceptable values change from atlas to atlas.

6.0 DISTRIBUTION INFORMATION

6.1 DISTRIBUTOR

6.1.1 CONTACT PERSON PRIMARY

6.1.1.1 CONTACT PERSON

John Kaperick

6.1.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

6.1.4 CONTACT ADDRESS

6.1.4.1 ADDRESS TYPE

Physical Address

6.1.4.2 ADDRESS

7600 Sand Point Way N.E.

6.1.4.3 CITY

Seattle

6.1.4.4 STATE OR PROVINCE

Washington

6.1.4.5 POSTAL CODE

98115-6349

6.1.5 CONTACT VOICE TELEPHONE

(206) 526-6400

6.1.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

6.2 RESOURCE DESCRIPTION

Downloadable Data

6.3 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.

6.5 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.

7.0 METADATA REFERENCE INFORMATION

7.1 METADATA DATE

202106

7.2 METADATA REVIEW DATE

202106

7.4 METADATA CONTACT

7.4.1 CONTACT PERSON PRIMARY

7.4.1.1 CONTACT PERSON

Jill Petersen

7.4.1.2 CONTACT ORGANIZATION

NOAA, Office of Response and Restoration

7.4.3 CONTACT POSITION

ESI Manager

7.4.4 CONTACT ADDRESS

7.4.4.1 ADDRESS TYPE

Physical Address

7.4.4.2 ADDRESS

7600 Sand Point Way, N.E.

7.4.4.3 CITY

Seattle

7.4.4.4 STATE OR PROVINCE

Washington

7.4.4.5 POSTAL CODE

98115-6349

7.4.5 CONTACT VOICE TELEPHONE

(206) 526-6944

7.4.7 CONTACT FACSIMILE TELEPHONE

(206) 526-6329

7.4.8 CONTACT ELECTRONIC MAIL ADDRESS

Jill.Petersen@noaa.gov

7.5 METADATA STANDARD NAME

Content Standards for Digital Geospatial Metadata

7.6 METADATA STANDARD VERSION

FGDC-STD-001-1998