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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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. Lawrence River. This data set comprises a portion of the ESI data for St. Lawrence 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 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. Lawrence 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. (RPI)

Publication_Date: 2020

Title: ESI STUDY AREA EXTENT

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Other_Citation_Details: UNPUBLISHED

Source_Scale_Denominator: 40000

Type_of_Source_Media: PERSONAL COMMUNICATION

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2020

Ending_Date: 2021

Source_Currentness_Reference: DATE OF COMMUNICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: AOI 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

202106

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

1

5.1.2.4.2.2 RANGE DOMAIN MAXIMUM

1

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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. Lawrence 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. Lawrence 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:

2014

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 1986-2014 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 documents on SAV distribution. These data do not necessarily represent all benthic occurrences in St. Lawrence 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: NEW YORK POWER AUTHORITY AND ENVIRONNEMENT ILLIMITE

Publication_Date: 2011

Title: HABITAT ASSESSMENT IN THE TAILRACE OF MOSES-SAUNDERS POWER DAM IN 2010

Geospatial_Data_Presentation_Form: DOCUMENT

Publication_Information

Publication_Place: MONTREAL, QUEBEC

Publisher: ENVIRONNEMENT ILLIMITIE

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2011

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BENTHIC INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK STATE DEPARTMENT OF STATE

Publication_Date: 2014

Title: SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NEW YORK STATE DEPARTMENT OF STATE

Online_Linkage: https://dos.ny.gov/significant-coastal-fish-wildlife-habitats

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BENTHIC INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data were used to depict SAV distribution and seasonality for this data layer: 1) digital habitat data from the New York State Department of State Significant Coastal Fish and Wildlife Habitats dataset and 2) published and unpublished documents. Benthic habitats

mapped in the ESI atlas include submerged aquatic vegetation (SAV). SAV areas were mapped from the New York State Department of State Significant Coastal Fish and Wildlife Habitats dataset. Additional areas identified in a NYPA and Environnement Illimité, Inc. habitat assessment report were also mapped. No exhaustive SAV mapping data that covered the entire St. Lawrence River were available. Areas mapped in this atlas indicate areas 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

202106

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_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. Lawrence River atlas, the number is 187), 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 (187), 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 (187), 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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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. Lawrence 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. Lawrence 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. Lawrence 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 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 1974-2021 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. Lawrence River ESI database, for additional bird information. These data do not necessarily represent all bird occurrences in St. Lawrence 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; 5, Horned grebe, Podiceps auritus; 8, Double-crested cormorant, Phalacrocorax auritus; 12, Canada goose, Branta canadensis; 13, Brant, Branta bernicla; 15, Snow goose, Chen caerulescens; 16, Mallard, Anas platyrhynchos; 17, Northern pintail, Anas acuta; 18, Green-winged teal, Anas crecca; 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; 32, Common merganser, Mergus merganser; 33, Red-breasted merganser, Mergus serrator; 38, Herring gull, Larus argentatus; 45, Common tern, Sterna hirundo; 54, Great blue heron, Ardea herodias; 56, Spotted sandpiper, Actitis macularia; 62, Least sandpiper, Calidris minutilla; 63, Dunlin, Calidris alpina; 67, Sanderling, Calidris alba; 69, Semipalmated plover, Charadrius semipalmatus; 71, Black-bellied plover, Pluvialis squatarola; 76, Bald eagle, Haliaeetus leucocephalus; 77, Osprey, Pandion haliaetus; 90, Black-crowned night-heron, Nycticorax nycticorax; 97, Green heron, Butorides virescens; 124, Redhead, Aythya americana; 140, Threatened raptor, n/a; 162, Gadwall, Anas strepera; 169, American wigeon, Anas americana; 176, Short-eared owl, Asio flammeus; 178, Least bittern, Ixobrychus exilis; 179, Pied-billed grebe, Podilymbus podiceps; 180, Ring-necked duck, Aythya collaris; 181, Northern harrier, Circus cyaneus; 185, American bittern, Botaurus lentiginosus; 186, American black duck, Anas rubripes; 187, Virginia rail, Rallus limicola; 188, Sora, Porzana carolina; 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; 216, Belted kingfisher, Ceryle alcyon; 223, Upland sandpiper, Bartramia longicauda; 225, Marsh wren, Cistothorus palustris; 229, Swamp sparrow, Melospiza georgiana; 272, Teals, Anas spp.; 293, Yellowlegs, Tringa spp.; 299, Scaup, Aythya spp.; 301, Mergansers, n/a; 302, Scoters, Melanitta spp.; 314, Endangered raptor, n/a; 906, Common gallinule, Gallinula galeata; 1001, Gulls, n/a; 1002, Shorebirds, n/a; 1003, Waterfowl, n/a; 1004, Wading birds, n/a; 1013, Dabbling ducks, n/a; 1014, Diving ducks, n/a; 1016, Herons, n/a; 1017, Sandpipers, n/a; 1026, Grebes, 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: DIVISION OF FISH, WILDLIFE AND MARINE RESOURCES BUREAU

Publication_Date: 2016

Title: CONSERVATION PLAN FOR BALD EAGLES IN NEW YORK STATE

Geospatial_Data_Presentation_Form: HARDCOPY TEXT

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2016

Ending_Date: 2016

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: MAZZOCCHI, IRENE (NY DEC)

Publication_Date: 2020

Title: ALL SPECIES COUNTS 2020, LAKE ONTARIO - SLR, ACTIVE COLONIES

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: 1974

Ending_Date: 2020

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK NATURAL HERITAGE PROGRAM, SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AND NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: ELEMENT OCCURRENCE SPATIAL DATA SET

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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK STATE DEPARTMENT OF STATE

Publication_Date: 2014

Title: SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NEW YORK STATE DEPARTMENT OF STATE

Online_Linkage: https://dos.ny.gov/significant-coastal-fish-wildlife-habitats

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: NY NATURAL HERITAGE PROGRAM (NYNHP)

Publication_Date: 2021

Title: NYNHP SPECIES INFO

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.nynhp.org/animals/

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: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2020

Title: OSPREY NESTING PLATFORM HIP

Geospatial_Data_Presentation_Form: HARDCOPY MAP

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: ANIMALS, PLANTS, AQUATIC LIFE; WWW.DEC.NY.GOV

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.dec.ny.gov/animals/271.html

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: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: WATERFOWL WINTER CONCENTRATION AREAS

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: RIVEREDGE ENVIRONMENTAL, INC.

Publication_Date: 2021

Title: LAKE ST. LAWRENCE COMMON TERN HABITAT IMPROVEMENT PROJECT: 2020 STATUS ASSESSMENT AND COLONY ENHANCEMENTS

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDS INFORMATION

Source_Information

Source_Citation:

Originator: THE CORNELL LAB OF ORNITHOLOGY

Publication_Date: 2021

Title: EBIRD

Geospatial_Data_Presentation_Form: MAP

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

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 NYS DEC, U. of Minnesota, Riveredge Environmental, and NY NHP, SUNY - ESF, 2) vector digital data sets provided by the above resource experts, and 3) published and unpublished reports, maps, and survey data from the above and eBird.

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

202106

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, 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. Lawrence River atlas, the number is 187), 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 (187), 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 (187), 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 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 XX NESTS) or 10S, 100S, 1000S, or 10,000S. In cases where no quantitative count data was available, the field may either be blank or contain descriptive terms such as "HIGH" or "MODERATE". 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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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, waterfowl, raptors, diving birds, and gulls and terns in the St. Lawrence River. Vector points 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. Lawrence 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. Lawrence 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 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 1974-2021 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. Lawrence River ESI database, for additional bird information. These data do not necessarily represent all bird points occurrences in St. Lawrence 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; 8, Double-crested cormorant, Phalacrocorax auritus; 12, Canada goose, Branta canadensis; 16, Mallard, Anas platyrhynchos; 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; 77, Osprey, Pandion haliaetus; 88, Great egret, Ardea alba; 90, Black-crowned night-heron, Nycticorax nycticorax; 92, Great black-backed gull, Larus marinus; 107, Peregrine falcon, Falco peregrinus; 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: ANGIE ROSS (NY DEC)

Publication_Date: 2021

Title: BALD EAGLE (BAEA) ESI 2021

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: CUTHBERT AND WIRES

Publication_Date: 2013

Title: THE FOURTH DECADAL U.S. GREAT LAKES COLONIAL WATERBIRD SURVEY (2007-2010): FINAL REPORT

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

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: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: CUTHBERT AND WIRES

Publication_Date: 2018

Title: US GREAT LAKES COLONIAL WATERBIRD MONITORING EFFORTS 2018: PRIORITY SITES AND SPECIES

Geospatial_Data_Presentation_Form: DOCUMENT

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: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: DIVISION OF FISH, WILDLIFE AND MARINE RESOURCES BUREAU

Publication_Date: 2016

Title: CONSERVATION PLAN FOR BALD EAGLES IN NEW YORK STATE

Geospatial_Data_Presentation_Form: HARDCOPY TEXT

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 2016

Ending_Date: 2016

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: MAZZOCCHI, IRENE (NY DEC)

Publication_Date: 2020

Title: ALL SPECIES COUNTS 2020, LAKE ONTARIO - SLR, ACTIVE COLONIES

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: 1974

Ending_Date: 2020

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: MAZZOCCHI, IRENE (NY DEC)

Publication_Date: 2020

Title: SUMMARY OF BLACK TERN NESTING PAIRS STATEWIDE SURVEY BY COUNTY AND SITE, 1989-1991, 1994, 1998, 2001, 2004, 2007, 2010, 2014, 2017, 2020

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: 1989

Ending_Date: 2020

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: MORGAN, MICHAEL (NY DEC)

Publication_Date: 2011

Title: LAKE ST LAWRENCE COMMON LOON NEST LOCATION

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: 2011

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: NY NATURAL HERITAGE PROGRAM (NYNHP)

Publication_Date: 2021

Title: NYNHP SPECIES INFO

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.nynhp.org/animals/

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: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2020

Title: OSPREY NESTING PLATFORM HIP

Geospatial_Data_Presentation_Form: HARDCOPY MAP

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: ANIMALS, PLANTS, AQUATIC LIFE; WWW.DEC.NY.GOV

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.dec.ny.gov/animals/271.html

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: RIVEREDGE ENVIRONMENTAL, INC.

Publication_Date: 2021

Title: LAKE ST. LAWRENCE COMMON TERN HABITAT IMPROVEMENT PROJECT: 2020 STATUS ASSESSMENT AND COLONY ENHANCEMENTS

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: EMAIL

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: ROSS, ANGIE - NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: PEREGRINE FALCON DISTRIBUTION AND SEASONALITY ALONG THE ST LAWRENCE RIVER

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: BIRDSPT INFORMATION

Source_Information

Source_Citation:

Originator: THE CORNELL LAB OF ORNITHOLOGY

Publication_Date: 2021

Title: EBIRD

Geospatial_Data_Presentation_Form: MAP

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

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 NYS DEC, U. of Minnesota, and Riveredge Environmental, 2) vector digital data sets provided by NYS DEC, NY NHP, SUNY - ESF, Division of Fish, Wildlife, and Marine Resources Bureau, and 3) published and unpublished reports, maps, and survey data from the above data providers and eBird.

The above digital and/or hardcopy sources were compiled by the project biologist to create the BIRDSPT data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: 1) information gathered during initial interviews and from hardcopy sources are compiled onto U.S. Geological Survey 1:40,000 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 BIRDSPT 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

202106

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

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. Lawrence River atlas, the number is 187), 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 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 (187), 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 (187), 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 site, or a term that describes relative abundance of birds at a particular site. The field may contain counts of individuals (Up to XX NESTS). In cases where no quantitative count data was available, the field may either be blank or contain descriptive terms such as "HIGH". 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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 St. Lawrence River classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for St. Lawrence 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. Lawrence 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 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 1988-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 shorelines classified according to the Environmental Sensitivity Index (ESI) classification system. See also the ESIP data layer, part of the larger St. Lawrence 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:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_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: 2008

Title: 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:

Single_Date/Time:

Calendar_Date: 2008

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL RESOURCES CANADA

Publication_Date: 1992

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-geeau/national-hydrographic-network/21361

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1988

Ending_Date: 1992

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIL INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 20130828

Title: Index of New York State Regulatory Freshwater Wetlands

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://cugir.library.cornell.edu/catalog/cugir-008187

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20130828

Source_Currentness_Reference: DATE OF PUBLICATION

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: 2004

Ending_Date: 2019

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: 2014

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: 2005

Ending_Date: 2014

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 Great Lakes St. Lawrence River shoreline and classifications were fully updated using the following sources and methods. The shorelines for the St. Lawrence 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, 2005-2014); the Ontario Ministry of Natural Resources (OMNRF) wetlands (2004-2019); the Natural Resources Canada, National Hydro Network (NHN, 1988-1992); and manual digitization at 1:4,000 from ESRI Basemap World Imagery (2010-2017). The most recent shoreline from all sources 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

202106

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

10300

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

2A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shelving Bedrock 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

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 Rocky Shores and Sheltered Scarps in Bedrock, Mud, or 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

2A

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shelving Bedrock 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

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 Rocky Shores and Sheltered Scarps in Bedrock, Mud, or 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

2A: Shelving Bedrock Shores

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shelving Bedrock 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

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 Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or 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

2A: Shelving Bedrock Shores

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shelving Bedrock 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

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 Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or 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

2A: Shelving Bedrock Shores

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Shelving Bedrock 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

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 Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or 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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 St. Lawrence River classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI data for St. Lawrence 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. Lawrence 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 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 1988-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. Lawrence 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: 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:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_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: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 20130828

Title: Index of New York State Regulatory Freshwater Wetlands

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://cugir.library.cornell.edu/catalog/cugir-008187

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20130828

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: 2004

Ending_Date: 2019

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: ESIP INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL 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-geeau/national-hydrographic-network/21361

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1988

Ending_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The Great Lakes St. Lawrence River shoreline habitats were classified based on NOAA CUSP; the New York State Department of Environmental Conservation (DEC) wetlands (2013); the OMNRF wetlands; and nadir aerial imagery from the following sources: Google Earth, BING Aerial, 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

202106

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

6299

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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 St. Lawrence River. Vector polygons in this data set represent fish distribution, concentration areas, 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. Lawrence 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. Lawrence 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:

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2004-2021 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 maps. See also the FISHPT data layer, part of the larger St. Lawrence River ESI database, for additional fish information. These data do not necessarily represent all fish occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 98, American eel, Anguilla rostrata; 145, White perch, Morone americana; 152, Yellow perch, Perca flavescens; 161, Lake sturgeon, Acipenser fulvescens; 162, Common carp, Cyprinus carpio; 167, Lake trout, Salvelinus namaycush; 169, Blackchin shiner, Notropis heterodon; 175, White sucker, Catostomus commersoni; 176, Yellow bullhead, Ameiurus natalis; 178, Rock bass, Ambloplites rupestris; 179, Largemouth bass, Micropterus salmoides; 180, Smallmouth bass, Micropterus dolomieu; 181, Black crappie, Pomoxis nigromaculatus; 182, Bluegill, Lepomis macrochirus; 184, Grass pickerel, Esox americanus vermiculatus; 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 grunnieus; 211, Brown bullhead, Ameiurus nebulosus; 212, Pumpkinseed, Lepomis gibbosus; 218, Bowfin, Amia calva; 231, Tadpole madtom, Noturus gyrinus; 292, Chain pickerel, Esox niger; 464, Longnose gar, Lepisosteus osseus; 1011, Forage fish, n/a; 1287, Eastern sand darter, Ammocrypta pellucida; 1291, Mooneye, Hiodon tergisus; 1299, Redhorses, Moxostoma; 1300, Pugnose shiner, Notropis anogenus; 1301, Margined madtom, Noturus insignis; 1302, Silver lamprey, Ichthyomyzon unicuspis.

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: JANA LANTRY AND LES RESSEGUIE - NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: FISH OF THE ST. LAWRENCE RIVER

Geospatial_Data_Presentation_Form: TABULAR 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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: MIKE MORGAN - NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: ST. LAWRENCE RIVER LAKE STURGEON SPAWNING BEDS

Geospatial_Data_Presentation_Form: HARDCOPY MAP

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: NEW YORK NATURAL HERITAGE PROGRAM, SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AND NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: ELEMENT OCCURRENCE SPATIAL DATA SET

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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK POWER AUTHORITY

Publication_Date: 2004

Title: ST. LAWRENCE - FDR POWER PROJECT AREAS OF ENVIRONMENTAL SENSITIVITY

Geospatial_Data_Presentation_Form: HARDCOPY MAP

Other_Citation_Details: UNPUBLISHED

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2004

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK STATE DEPARTMENT OF STATE

Publication_Date: 2014

Title: SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NEW YORK STATE DEPARTMENT OF STATE

Online_Linkage: https://dos.ny.gov/significant-coastal-fish-wildlife-habitats

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: FISH INFORMATION

Source_Information

Source_Citation:

Originator: SCOTT SCHLUETER (UNITED STATES FISH AND WILDLIFE SERVICE) AND JANA LANTRY (NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION)

Publication_Date: 2021

Title: FISH OF THE ST. LAWRENCE RIVER

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: SCOTT SCHLUETER - UNITED STATES FISH AND WILDLIFE SERVICE (USFWS)

Publication_Date: 2021

Title: FISH OF THE ST. LAWRENCE RIVER

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

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 the New York State Department of Environmental Conservation (NYSDEC), U.S. Fish and Wildlife Service (USFWS), and the State University of New York College of Environmental Science and Forestry (SUNY ESF); 2) hardcopy maps from NYSDEC and New York Power Authority (NYPA); and 3) vector digital data from New York Natural Heritage Program (NY NHP) and New York State Department of State. 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 NYSDEC and USFWS.

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 main stem of the St. Lawrence River was divided into three segments for fish general distributions: Thousand Islands to Brockville, Brockville to Lake St. Lawrence, and Lake St. Lawrence. These divisions are often used by local resource managers as well.

Concentration areas and tributaries – Concentrations areas of various species were mapped using expert knowledge collected in workshops and from the New York Department of State Significant Coastal Fish and Wildlife Habitats dataset. Experts also provided species lists and concentration areas present in the tributaries of the St. Lawrence River.

Spawning locations – All fish that spawn in the study area were mapped with spawning months included in the seasonalities for all locations in the study area, per expert recommendation. Fish spawning can occur throughout the system, and different species utilize different habitats for spawning. The user should refer to the table in the atlas introduction that shows the spawning habitat(s) for each mapped species. 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. Spawning months in this atlas include months when any sensitive reproductive life history stage is present (spawning, eggs, and larvae).

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

202106

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

16

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. Lawrence River atlas, the number is 187), 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, concentration areas, 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 (187), 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 (187), 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 of a species at a particular location. No quantitative data was available for fish, so the concentration field may either be blank or contain descriptive terms such as "HIGH".

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 St. Lawrence River. Vector points in this data set represent fish spawning and nursery 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. Lawrence 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. Lawrence 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:

2021

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2011-2021 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 expert knowledge. See also the FISH data layer, part of the larger St. Lawrence River ESI database, for additional fish information. These data do not necessarily represent all fish points occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 152, Yellow perch, Perca flavescens; 165, Lake whitefish, Coregonus clupeaformis; 167, Lake trout, Salvelinus namaycush; 180, Smallmouth bass, Micropterus dolomieu; 185, Northern pike, Esox lucius; 186, Muskellunge, Esox masquinongy; 188, Walleye, Stizostedion vitreum vitreum; 235, Cisco, Coregonus artedi; 237, Burbot, Lota lota.

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: FISH SPAWNING AND NURSERY SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ANN ARBOR, MI

Publisher: UNIVERSITY OF MICHIGAN, MICHIGAN DNR

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: JOHN FARRELL, STATE UNIVERSITY OF NEW YORK COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

Publication_Date: 2021

Title: FISH NURSERY SITES AND OCCURRENCE POINTS

Geospatial_Data_Presentation_Form: TABULAR 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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISHPT INFORMATION

Source_Information

Source_Citation:

Originator: JOHN FARRELL, STATE UNIVERSITY OF NEW YORK COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY

Publication_Date: 2021

Title: MUSKELLUNGE SPAWNING AND NURSERY SITES

Geospatial_Data_Presentation_Form: TABULAR 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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: FISHPT INFORMATION

Source_Information

Source_Citation:

Originator: SCOTT SCHLUETER (UNITED STATES FISH AND WILDLIFE SERVICE) AND JANA LANTRY (NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION)

Publication_Date: 2021

Title: FISH OF THE ST. LAWRENCE RIVER

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: FISHPT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data were used to depict fish distribution and seasonality for this data layer: 1) personal interviews with resource experts from the New York State Department of Environmental Conservation (NYSDEC), U.S. Fish and Wildlife Service (USFWS), and the State University of New York College of Environmental Science and Forestry (SUNY ESF); and 2) vector and tabular digital data from Great Lakes Aquatic Habitat Framework (GLAHF) and SUNY ESF. Spawning locations – Point locations of spawning and nursery sites for muskellunge, northern pike, and smallmouth bass were provided by John Farrell (SUNY ESF). Additional spawning point locations for burbot, cisco, lake trout, lake whitefish, smallmouth bass, walleye, and yellow perch were provided by Great Lakes Aquatic Habitat Framework (GLAHF). Spawning months in this atlas include months when any sensitive reproductive life history stage is present (spawning, eggs, and larvae).

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

202106

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

235

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. Lawrence River atlas, the number is 187), 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 and nursery 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 (187), 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 (187), 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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 [for] St. Lawrence River. Vector polygons in this data set represent threatened and endangered plant 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. Lawrence 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 occurrences. These data do not necessarily represent all habitat occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 59, Endangered plant, n/a; 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: NEW YORK NATURAL HERITAGE PROGRAM, SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AND NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: ELEMENT OCCURRENCE SPATIAL DATA SET

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 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 and seasonality for this data layer was Element Occurrence data provided by NY NHP, SUNY-ESF.

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

202106

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_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, HABITATS) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the St. Lawrence River atlas, the number is 187), 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

HABITATS

5.1.1.2 ENTITY TYPE DEFINITION

The HABITATS table contains attribute information for the vector polygons in this data set representing threatened and endangered plant 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 (187), 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 (187), 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_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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 [for] St. Lawrence River. Vector polygons in this data set represent turtle distribution and nesting 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. Lawrence 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 1997-2021 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 and tabular data on vulnerable herp species distributions. These data do not necessarily represent all herpetofauna occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 169, Blue-spotted salamander, Ambystoma laterale; 271, Mudpuppy, Necturus maculosus; 272, Sensitive herpetofauna, 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: NEW YORK NATURAL HERITAGE PROGRAM, SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AND NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: ELEMENT OCCURRENCE SPATIAL DATA SET

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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information

Source_Citation:

Originator: NEW YORK STATE DEPARTMENT OF STATE

Publication_Date: 2014

Title: SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NEW YORK STATE DEPARTMENT OF STATE

Online_Linkage: https://dos.ny.gov/significant-coastal-fish-wildlife-habitats

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2014

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information

Source_Citation:

Originator: NY NATURAL HERITAGE PROGRAM (NYNHP)

Publication_Date: 2021

Title: NYNHP SPECIES INFO

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.nynhp.org/animals/

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

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: EMBL_CROSS_1997_2019

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: 1997

Ending_Date: 2019

Source_Currentness_Reference: DATE OF SURVEY

Source_Citation_Abbreviation: NONE

Source_Contribution: HERP INFORMATION

Source_Information

Source_Citation:

Originator: THE CORNELL LAB OF ORNITHOLOGY

Publication_Date: 2021

Title: EBIRD

Geospatial_Data_Presentation_Form: MAP

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: HERP INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main sources of data used to depict herp distribution for this data layer were 1) vector digital data sets provided by NYS DEC,NY NHP, SUNY-ESF, and NYS Dept. of State, and 2) personal interviews with resource experts from NYS DEC and NY NHP, SUNY-ESF.

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

202106

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

5

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, 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. Lawrence River atlas, the number is 187), 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

HERP

5.1.1.2 ENTITY TYPE DEFINITION

The HERP table contains attribute information for the vector polygons in this data set representing turtle distribution and nesting 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 (187), 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 (187), 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_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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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. Lawrence River. This data set comprises a portion of the ESI data for St. Lawrence 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. Lawrence 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 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 1988-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 St. Lawrence River. See also the HYDROP data layer, part of the larger St. Lawrence 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:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA)

Publication_Date: 2008

Title: 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:

Single_Date/Time:

Calendar_Date: 2008

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL 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-geeau/national-hydrographic-network/21361

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1988

Ending_Date: 2020

Source_Currentness_Reference: DATE OF PUBLICATION

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: 2004

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 (RPI)

Publication_Date: 2020

Title: STUDY AREA 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:

Single_Date/Time:

Calendar_Date: 2020

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: 2014

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: 2005

Ending_Date: 2014

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. Lawrence River 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, 2005-2014); the Ontario Ministry of Natural Resources (OMNRF) wetlands (2004-2019); the Natural Resources Canada, National Hydro Network (NHN, 1988-1992); and manual digitization at 1:4,000 from ESRI Basemap World Imagery (2010-2017). The most recent shoreline from all sources 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

202106

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

3504

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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. Lawrence River. This data set comprises a portion of the ESI data for St. Lawrence 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. Lawrence 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 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 1988-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. Lawrence River. See also the HYDROL data layer, part of the larger St. Lawrence 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:

Range_of_Dates/Times:

Beginning_Date: 2014

Ending_Date: 2020

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROL INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL OCEANIC ATMOSPHERIC ADMINISTRATION (NOAA)

Publication_Date: 2008

Title: 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:

Single_Date/Time:

Calendar_Date: 2008

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: NATIONAL 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-geeau/national-hydrographic-network/21361

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1988

Ending_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: 2004

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 (RPI)

Publication_Date: 2020

Title: STUDY AREA 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:

Single_Date/Time:

Calendar_Date: 2020

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: HYDROP INFORMATION

Source_Information

Source_Citation:

Originator: US GEOLOGICAL SURVEY (USGS)

Publication_Date: 2014

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: 2005

Ending_Date: 2014

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. Lawrence River land and water polygonal interface was based on NOAA CUSP; the New York State Department of Environmental Conservation (DEC) wetlands (2013); the OMNRF wetlands; and nadir aerial imagery from the following sources: Google Earth, BING Aerial, 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

202106

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

3315

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

202106

1.1.4 Title

St. Lawrence River: INVERT (Invertebrate 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. Lawrence 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 [for] St. Lawrence River. Vector polygons in this data set represent invertebrate distribution and concentration areas. Species specific abundance, seasonality, status, life history, and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer.

This data set comprises a portion of the ESI data for St. Lawrence 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 INVERTPT data layer, part of the larger St. Lawrence River ESI database, for additional invertebrate 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:

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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 distribution areas. See also the INVERTPT data layer, part of the larger St. Lawrence River ESI database, for additional invertebrate information. These data do not necessarily represent all invertebrate occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 107, Squawfoot, Strophitus undulatus; 367, Eastern pondmussel, Ligumia nasuta; 544, Yellow lampmussel, Lampsilis cariosa; 554, Eastern elliptio, Elliptio complanata; 557, Eastern lampmussel, Lampsilis radiata; 632, Eastern floater, Pyganodon cataracta; 634, Triangle floater, Alasmidonta undulata; 681, Paper pondshell, Utterbackia imbecillis; 722, Eastern pearlshell, Margaritifera margaritifera; 739, Black sandshell, Ligumia recta; 757, Elktoe, Alasmidonta marginata; 767, Cylindrical papershell, Anodontoides ferussacianus; 768, Flutedshell, Lasmigona costata; 769, Fragile papershell, Potamilus fragilis; 770, Giant floater, Pyganodon grandis; 771, Pink heelsplitter, Potamilus alatus; 772, Plain pocketbook, Lampsilis cardium; 773, Spike, Eurynia dilatata; 1015, Mussels, n/a; 1074, Pyganodon species, Pyganodon ssp..

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: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: ST LAWRENCE MUSSELS NYSDEC 4 2021

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: INVERT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The main source of data used to depict freshwater mussel distribution and seasonality for this data layer was digital data provided by NYS DEC.

The above digital and/or hardcopy sources were compiled by the project biologist to create the INVERT data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: 1) information gathered during initial interviews and from hardcopy sources are compiled onto U.S. Geological Survey 1:40,000 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 INVERT 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

202106

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

6

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, INVERT) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the St. Lawrence River atlas, the number is 187), 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

INVERT

5.1.1.2 ENTITY TYPE DEFINITION

The INVERT table contains attribute information for the vector polygons in this data set representing invertebrate distribution and concentration areas. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

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 (187), element number (7), 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 (187), element number (7), 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 quantitative or qualitative concentration information was available for this atlas, so 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

202106

1.1.4 Title

St. Lawrence River: INVERTPT (Invertebrate 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. Lawrence 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 [for] St. Lawrence River. Vector points in this data set represent invertebrate distribution and concentration areas. Species specific abundance, seasonality, status, life history, and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer.

This data set comprises a portion of the ESI data for St. Lawrence 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 INVERT data layer, part of the larger St. Lawrence River ESI database, for additional invertebrate 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:

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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. See also the INVERT data layer, part of the larger St. Lawrence River ESI database, for additional invertebrate information. These data do not necessarily represent all invertebrate points occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 107, Squawfoot, Strophitus undulatus; 367, Eastern pondmussel, Ligumia nasuta; 544, Yellow lampmussel, Lampsilis cariosa; 554, Eastern elliptio, Elliptio complanata; 557, Eastern lampmussel, Lampsilis radiata; 632, Eastern floater, Pyganodon cataracta; 634, Triangle floater, Alasmidonta undulata; 722, Eastern pearlshell, Margaritifera margaritifera; 739, Black sandshell, Ligumia recta; 757, Elktoe, Alasmidonta marginata; 763, Rainbow, Cambarunio iris; 767, Cylindrical papershell, Anodontoides ferussacianus; 772, Plain pocketbook, Lampsilis cardium.

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: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: ST LAWRENCE MUSSELS NYSDEC 4 2021

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: INVERTPT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

The main source of data used to depict freshwater mussel occurrences for this data layer was digital data provided by NYS DEC.

The above digital and/or hardcopy sources were compiled by the project biologist to create the INVERTPT 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 INVERTPT 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

202106

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

21

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, INVERTPT) 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. Lawrence River atlas, the number is 187), 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

INVERTPT

5.1.1.2 ENTITY TYPE DEFINITION

The INVERTPT table contains attribute information for the vector points in this data set representing invertebrate distribution and concentration areas. Note that all attribute

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

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 (187), element number (37), 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 (187), element number (37), 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 quantitative or qualitative concentration information was available for this atlas, so 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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 management areas, Nature Conservancy properties, and state parks in St. Lawrence 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. Lawrence 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:

2020

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2018-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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. These data do not necessarily represent all Managed polygons in St. Lawrence 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: PROTECTED AREAS DATABASE US (PADUS)- (TRIBAL LANDS, MANAGEMENT AREAS)

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: MANAGED_POLY INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 20191115

Title: DEC LANDS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Online_Linkage: http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1114

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20081125

Ending_Date: 20191115

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: MANAGED_POLY INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE GEOGRAPHIC INFORMATION SYSTEMS CLEARINGHOUSE

Publication_Date: 201810

Title: NEW YORK STATE HISTORIC SITES AND PARK BOUNDARY

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE GEOGRAPHIC INFORMATION SYSTEMS CLEARINGHOUSE

Other_Citation_Details:

Online_Linkage: https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=430

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 201810

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

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

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

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

Four main sources were used to depict management areas for this data layer: 1) New York State Department of Environmental Conservation; 2) the Great Lakes Aquatic Habitat Framework (GLAHF); 3) The Nature Conservancy (TNC); and 4) New York State Geographic Information Systems (NYSGIS). Management area data depicting wildlife management areas, state forest areas, and other special management areas were provided by the New York State Department of Environmental Conservation (NYSDEC) and the Great Lakes Aquatic Habitat Framework (GLAHF). Boundaries of The Nature Conservancy (TNC) properties were obtained from the TNC Lands database. State park boundaries were downloaded from the New York State Geographic Information Systems (NYS GIS) Clearinghouse, representing boundary data for land owned by the New York State Office of Parks, Recreation, and Historic Preservation (NYS OPRHP).

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

202106

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

35

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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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

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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 boat ramps, lock and dam systems, marinas, and ports in St. Lawrence 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. Lawrence 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 NAV_MARINE_POLY data layer, part of the larger St. Lawrence River ESI database, for additional navigational/marine 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 2009-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 NAV_MARINE_POLY data layer, part of the larger St. Lawrence River ESI database, for additional navigational/marine information. These data do not necessarily represent all Navigational or marine points in St. Lawrence 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: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 20091020

Title: NEW YORK STATE BOAT LAUNCHES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Other_Citation_Details:

Online_Linkage: http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1268

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 20091020

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 20200301

Title: DAMS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Other_Citation_Details:

Online_Linkage: http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1130

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20091125

Ending_Date: 20200301

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: SNAG A SLIP

Publication_Date: 202007

Title: ST. LAWRENCE RIVER MARINAS

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Online_Linkage: https://www.snagaslip.com/great-lakes/st-lawrence-river

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: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: THE NATIONAL MAP OF THE UNITED STATES

Publication_Date: 201406

Title: PORTS LOCATED IN THE UNITED STATES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://www.sciencebase.gov/catalog/item/54c68cf1e4b043905e019b14

Source_Scale_Denominator: 1000,000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 201406

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: NAV_MARINE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: THOUSAND ISLANDS INTERNATIONAL TOURISM COUNCIL

Publication_Date: 202007

Title: BOATING (MARINAS)

Geospatial_Data_Presentation_Form: TABULAR DIGITAL DATA

Online_Linkage: https://visit1000islands.com/boating/

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: NAV_MARINE_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) New York State Department of Environmental Conservation (NYSDEC); 2) Snag-a-Slip webpage; 3) Thousand Islands Tourism Council; and 4) the National Map. New York State boat launch locations were provided by the New York State Department of Environmental Conservation (NYSDEC). Data showing the inventory of dams were provided by the New York State Department of Environmental Conservation (NYSDEC). Marinas were located from tabular data (names and addresses) provided by Snag-a-Slip and the Thousand Islands International Tourism Council websites. U.S. Ports were downloaded from the National Map viewer.

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

202106

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

58

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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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

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

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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence River: NAV_MARINE_POLY (Navigational or Marine 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. Lawrence 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 anchorages in St. Lawrence River. Vector polygons 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. Lawrence 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 NAV_MARINE_POINT data layer, part of the larger St. Lawrence River ESI database, for additional navigational/marine 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:

2017

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2017 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 NAV_MARINE_POINT data layer, part of the larger St. Lawrence River ESI database, for additional navigational/marine information. These data do not necessarily represent all Navigational or marine polygons in St. Lawrence 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: NOAA OCM

Publication_Date: 20170920

Title: ANCHORAGE AREAS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://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_POLY INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Locations where commercial vessels can be anchored offshore were provided by the NOAA's Office of Coastal Management (OCM).

The above digital and/or hardcopy sources were compiled by the project biologist to create the NAV_MARINE_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 NAV_MARINE_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

202106

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_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_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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), an element specific number (NAV_MARINE_POLY = 80), 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_POLY

5.1.1.2 ENTITY TYPE DEFINITION

The NAV_MARINE_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

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 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 (187), element number (80), 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 (187), element number (80), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 the international boundary in St. Lawrence 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. Lawrence 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 data layer, part of the larger St. Lawrence 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:

2010

1.3.1 Currentness Reference

The data were compiled during 2020-2021. The currentness date for this data is 2010 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 POLITICAL_POLY data layer, part of the larger St. Lawrence River ESI database, for additional political/jurisdictional information. These data do not necessarily represent all Political lines in St. Lawrence 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: NOAA OCS

Publication_Date: 2010

Title: US MARITIME LIMIS AND BOUNDARIES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

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

Source_Scale_Denominator: 63360

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2010

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: POLITICAL_LINE INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Spatial data representing the international border were provided by 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

202106

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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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. Lawrence 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. Lawrence 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 data layer, part of the larger St. Lawrence 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 POLITICAL_LINE data layer, part of the larger St. Lawrence River ESI database, for additional political/jurisdictional information. These data do not necessarily represent all Political polygons in St. Lawrence 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: PROTECTED AREAS DATABASE US (PADUS)- (TRIBAL LANDS, MANAGEMENT AREAS)

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: POLITICAL_POLY INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Tribal lands were derived from the US Protected Areas Database (PADUS) downloaded from the Great Lakes Aquatic Habitat Framework (GLAHF).

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

202106

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, 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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 artificial reefs, recreational fishing areas, and water intakes in St. Lawrence 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. Lawrence 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. Lawrence 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 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 2016-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 RESOURCE_POLY data layer, part of the larger St. Lawrence River ESI database, for additional resource management information. These data do not necessarily represent all Resource points in St. Lawrence 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: REEF LOCATIONS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place:

Publisher:

Other_Citation_Details:

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

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 202007

Ending_Date:

Source_Currentness_Reference: DATE OF ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 202008

Title: PUBLIC FISHING RECOMMENDED SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Other_Citation_Details:

Online_Linkage: http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1252

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 202008

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) BUREAU OF WATER RESOURCE MANAGEMENT

Publication_Date: 20161128

Title: NEW YORK STATE WATER WITHDRAWALS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Other_Citation_Details:

Online_Linkage: http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1265

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 20161128

Ending_Date: 20191106

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: RESOURCE_POINT INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Two main data sources were used to depict human-use resources for this data layer: 1) New York State Department of Environmental Conservation (NYSDEC); and 2) the Great Lakes Aquatic Habitat Framework (GLAHF). Artificial reef data were provided by the Great Lakes Aquatic Habitat Framework (GLAHF). Recreational fishing sites were provided by the New York State Department of Environmental Conservation (NYSDEC) showing locations of top streams, rivers, lakes and ponds for fishing in New York State. Also provided by NYSDEC were water intakes.

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

202106

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

63

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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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

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

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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 depicting sensitive communities categorized as essential habitats in St. Lawrence 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. Lawrence 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. Lawrence 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

2021

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 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 and digital data on human-use or management resources. See also the RESOURCE_POINT data layer, part of the larger St. Lawrence River ESI database, for additional resource management information. These data do not necessarily represent all Resource polygons in St. Lawrence 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: NEW YORK NATURAL HERITAGE PROGRAM, NICK CONRAD

Publication_Date: 2021

Title: NYNHP_ResearchPlanning_ESI_comms_2021.shp

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

One main data source was used to depict resource management areas for this data layer. Data derived from the New York Natural Heritage Program (NYNHP) via Nick Conrad showed sensitive communities that were categorized as essential habitat for this atlas.

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

202106

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, 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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 major crude oil pipelines in St. Lawrence 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. Lawrence 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_POLY and SOCECON_POINT data layers, part of the larger St. Lawrence 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 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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_POLY and SOCECON_POINT data layers, part of the larger St. Lawrence River ESI database, for additional socioeconomic information. These data do not necessarily represent all Socioeconomic lines in St. Lawrence 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: US ENERGY INFORMATION ADMINISTRATION (USEIA)

Publication_Date: 20200428

Title: NATURAL GAS INTERSTATE AND INTRASTATE PIPELINES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://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

Major crude oil pipelines were provided by the U.S. Energy Information Association (USEIA).

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

202106

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

58

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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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 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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 airports, abandoned vessels, beaches, and heliports in St. Lawrence 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. Lawrence 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_POLY and SOCECON_LINE data layers, part of the larger St. Lawrence 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 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 2016-2020 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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_POLY and SOCECON_LINE data layers, part of the larger St. Lawrence River ESI database, for additional socioeconomic information. These data do not necessarily represent all Socioeconomic points in St. Lawrence 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: 202007

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: 202007

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://www.google.com/maps

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: NOAA OCS

Publication_Date: 2016

Title: WRECKS AND OBSTRUCTIONS DATABASE - AWOIS WRECKS

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Online_Linkage: https://www.nauticalcharts.noaa.gov/data/wrecks-and-obstructions.html

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

Three main sources of data were used to depict human-use resources for this data layer: 1) U.S. Department of Transportation (USDOT) Federal Aviation Administration (FAA); 2) NOAA's Office of Coast Survey (NOAA OCS); and 3) Google maps. Locations of airports and heliports were downloaded from the United States Department of Transportation (USDOT) Federal Aviation Administration (FAA) – Aeronautical Information Services. 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, and various other uses were located via Google maps.

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

202106

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

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, 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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), 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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

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 (187), 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 (187), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence River: SOCECON_POLY (Socioeconomic 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. Lawrence 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 historical sites in St. Lawrence River. Vector polygons 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. Lawrence 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 and SOCECON_POINT data layers, part of the larger St. Lawrence 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 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 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 and SOCECON_POINT data layers, part of the larger St. Lawrence River ESI database, for additional socioeconomic information. These data do not necessarily represent all Socioeconomic polygons in St. Lawrence 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: NY STATE GEOGRAPHIC INFORMATION SYSTEMS CLEARINGHOUSE

Publication_Date: 201810

Title: NATIONAL REGISTER SITES

Geospatial_Data_Presentation_Form: VECTOR DIGITAL DATA

Publication_Information

Publication_Place: ALBANY, NY

Publisher: NY STATE GEOGRAPHIC INFORMATION SYSTEMS CLEARINGHOUSE

Other_Citation_Details:

Online_Linkage: https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=429

Source_Scale_Denominator: 24000

Type_of_Source_Media: ONLINE

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 201810

Source_Currentness_Reference: DATE OF PUBLICATION

Source_Citation_Abbreviation: NONE

Source_Contribution: SOCECON_POLY INFORMATION

2.5.2 Process Step

2.5.2.1 Process Description

Historical sites were downloaded from the New York State Geographic Information Systems (NYS GIS) Clearinghouse and depict properties listed on the National Register.

The above digital and/or hardcopy sources were compiled by the project biologist to create the SOCECON_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 SOCECON_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

202106

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

72

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_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. Lawrence River, the number is 187). ID is a unique combination of the atlas number (187), an element specific number (SOCECON_POLY = 90), 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_POLY

5.1.1.2 ENTITY TYPE DEFINITION

The SOCECON_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

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 (187), element number (90), 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 (187), element number (90), 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

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

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

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

HP

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Heliport

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

PT

5.1.2.4.1.2 ENUMERATED DOMAIN VALUE DEFINITION

Port

5.1.2.4.1.3 ENUMERATED DOMAIN VALUE DEFINITION SOURCE

NOAA ESI 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

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

202106

1.1.4 Title

St. Lawrence 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. Lawrence 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 bats in [for] St. Lawrence River. Vector polygons in this data set represent terrestrial mammal distribution. Species specific abundance, seasonality, status, life history, and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer.

This data set comprises a portion of the ESI data for St. Lawrence 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

-76.62500

1.5.1.2 East Bounding Coordinate

-74.62500

1.5.1.3 North Bounding Coordinate

45.12500

1.5.1.4 South Bounding Coordinate

44.00000

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. Lawrence 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. Lawrence 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, birds, birdspt, esil, esip, fish, fishpt, habitats, herp, hydrol, hydrop, invert, invertpt, managed_poly, nav_marine_point, nav_marine_poly, political_line, political_poly, resource_point, resource_poly, socecon_line, socecon_point, socecon_poly, 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 T/E terrestrial mammal occurrences. These data do not necessarily represent all terrestrial mammal occurrences in St. Lawrence River. The following species are included in this data set: (Species_ID, Common Name, Scientific Name [n/a if not applicable]): 302, Endangered bat, n/a; 303, Threatened bat, 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: NEW YORK NATURAL HERITAGE PROGRAM, SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AND NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Publication_Date: 2021

Title: ELEMENT OCCURRENCE SPATIAL DATA SET

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 ACCESS

Source_Citation_Abbreviation: NONE

Source_Contribution: T_MAMMAL INFORMATION

Source_Information

Source_Citation:

Originator: NY NATURAL HERITAGE PROGRAM (NYNHP)

Publication_Date: 2021

Title: NYNHP SPECIES INFO

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.nynhp.org/animals/

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

Source_Information

Source_Citation:

Originator: NY STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)

Publication_Date: 2021

Title: ANIMALS, PLANTS, AQUATIC LIFE; WWW.DEC.NY.GOV

Geospatial_Data_Presentation_Form: DOCUMENT

Other_Citation_Details: UNPUBLISHED

Online_Linkage: https://www.dec.ny.gov/animals/271.html

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 NYS NHP, SUNY-ESF.

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

202106

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_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, 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. Lawrence River atlas, the number is 187), 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

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 terrestrial mammal distribution. Note that all attribute information is stored in a

series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

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 (187), 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 (187), 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