

Rhode Island, Connecticut, New York, and New Jersey ESI: HYDRO (Hydrography Lines and Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: HYDRO (Hydrography Lines and Polygons)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series Information:

Series_Name: None

Issue_Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains vector lines and polygons representing coastal hydrography used in the creation of the Environmental Sensitivity Index (ESI) for Rhode Island, Connecticut, New York, and New Jersey. This data set comprises a portion of the ESI for Rhode Island, Connecticut, New York, and New Jersey. The HYDRO data layer contains all annotation used in producing the atlas. The annotation features are categorized into three subclasses in order to simplify the mapping and quality control procedures: GEOG or geographic features, SOC or socioeconomic features, and HYDRO or water features. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

Purpose:

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

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness_Reference:

These data were compiled during 1999-2001. The completeness dates for these data range from 1989 to 2001 and are documented in the Source_Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Hydrography

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The *Spatial_Data_Organization_Information* section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

A multi-stage error checking process, described in the above Attribute Accuracy Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies (such as dangles, unnecessary node, etc.), and ORACLE(r) to ARC/INFO(r) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness Report:

These data represent linear and polygonal hydrography for coastal Rhode Island, Connecticut, New York, and New Jersey.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

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

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: NJDEP

Publication Date: 1996

Title: Statewide Tidelands and Land Use/ Land Cover

Geospatial Data Presentation Form: Digital Complete Chains

Publication Information:

Publication Place: Trenton, New Jersey

Publisher: NJDEP

Source Scale Denominator: Unknown

Type of Source Media: CD-ROM

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1996

Source Currentness Reference: Date of publication

Source Citation Abbreviation: None

Source Contribution: Environmental Sensitivity Index Information

Source Information:

Source Citation:

Citation Information:

Originator: NJDEP

Publication Date: 1997

Title: Color Infrared Digital Imagery, Series 3, Vol. 5

Geospatial Data Presentation Form: Color Infrared Digital Imagery

Publication Information:

Publication Place: Trenton, New Jersey

Publisher: NJDEP

Source Scale Denominator: Unknown

Type of Source Media: CD-ROM

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1997

Source Currentness Reference: Date of publication

Source Citation Abbreviation: None

Source Contribution: Environmental Sensitivity Index Information

Source Information:

Source Citation:

Citation Information:

Originator: Marine Spill Response Corporation (MSRC)

Publication Date: 1994

Title: ESI Shoreline

Geospatial Data Presentation Form: Digital Complete Chains

Publication Information:

Publication Place: New Jersey

Publisher: MSRC

Source_Scale_Denominator: 24000
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1994
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Connecticut Department of Environmental Protection (CDEP)
Publication_Date: 1999
Title: Connecticut Digital Orthophoto Quarter Quadrangles
Geospatial_Data_Presentation_Form: Color Infrared
Publication_Information:
Publication_Place: Connecticut
Publisher: CDEP
Source_Scale_Denominator: 12000
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Connecticut Department of Environmental Protection (CDEP)
Publication_Date: 1997
Title: Tidal Wetlands
Geospatial_Data_Presentation_Form: Digital Complete Chains
Publication_Information:
Publication_Place: Connecticut
Publisher: CDEP
Source_Scale_Denominator: Unknown
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1997
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Rhode Island Department of Environmental Protection (RIDEP)
Publication_Date: Unpublished Material
Title: Narragansett Bay Coastal Habitats
Geospatial_Data_Presentation_Form: Digital Data
Source_Scale_Denominator: 24000
Type_of_Source_Media: Floppy Disk
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:

Originator: New York Department of Environmental Conservation (NYDEC)

Publication_Date: 1997

Title:

Significant Habitats and Habitat Complexes of the New York Bight Watershed

Geospatial_Data_Presentation_Form: Digital Complete Chains

Publication_Information:

Publication_Place: New York

Publisher: U.S. Fish and Wildlife Service

Source_Scale_Denominator: Unknown

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1997

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RIGIS

Publication_Date: 1989

Title: Wetlands

Geospatial_Data_Presentation_Form: Digital Complete Chains

Publication_Information:

Publication_Place: Providence, Rhode Island

Publisher: RIGIS

Source_Scale_Denominator: 24000

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1989

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: US Geological Survey

Publication_Date: Unknown

Title: Topographic Quadrangles

Geospatial_Data_Presentation_Form: Map

Publication_Information:

Publication_Place: Denver, CO or Reston, VA

Publisher: U.S. Geological Survey

Source_Scale_Denominator: 24000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: Varies

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Process_Step:

Process_Description:

The shoreline was derived primarily from the digital data provided by each state. In New Jersey, a digital shoreline was provided by the New Jersey Department of Environmental Protection (NJDEP). In New York, the shoreline was created in-house using a combination of New York State Tidal Wetlands (NYSTW) program data and older Marine Spill Response Corporation (MSRC) data. In Connecticut, the shoreline was digitized from Digital Orthophoto Quarter Quadrangles (DOQQ) provided by the Connecticut Department of Environmental Protection (CDEP). In Rhode Island, the digital shoreline was provided by the Narragansett Bay Estuary Program (NBEP, a program of the Rhode Island Department of Environmental Management) and the Rhode Island GIS (RIGIS) database of the University of Rhode Island. See the Lineage section for additional information on these digital sources. In some cases, additional shoreline changes were sketched during

overflights. These additional features were then digitized from the scanned and registered hardcopy maps. Also, additional hydrographic features were digitized directly from scanned USGS topographic maps. Hardcopy maps of this attributed shoreline and habitat polygons were plotted at 1:24,000 scale for verification of attributes.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 2268

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 2268

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 5451

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 654556

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Label Point

Point_and_Vector_Object_Count: 239

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 5485

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: HYDRO.AAT

Entity_Type_Definition:

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

Entity_Type_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: LINE

Attribute_Definition: Type of geographic feature.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: B

Enumerated_Domain_Value_Definition: Breakwater

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Study Area Extent

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: H

Enumerated_Domain_Value_Definition: Hydrography

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: I

Enumerated_Domain_Value_Definition: Index

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: P

Enumerated_Domain_Value_Definition: Pier

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: Shoreline

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SOURCE_ID

Attribute_Definition: Data source of the ESI arcs

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2

Enumerated_Domain_Value_Definition: Low-altitude overflights by Research Planning, Inc.

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 5

Enumerated_Domain_Value_Definition: Digitized from 1:24,000-USGS topographic quadrangle

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 7

Enumerated_Domain_Value_Definition: RPI index

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 8

Enumerated_Domain_Value_Definition: NJ Landuse/Landcover

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 9

Enumerated_Domain_Value_Definition: MSRC (NY Shoreline)

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 10

Enumerated_Domain_Value_Definition: NY Department of Environmental Conservation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 11

Enumerated_Domain_Value_Definition: CT Department of Environmental Protection

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 12

Enumerated_Domain_Value_Definition: RIGIS

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 13
Enumerated_Domain_Value_Definition: MSRC (Long Island Shoreline)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 14
Enumerated_Domain_Value_Definition: RIDEP
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 15
Enumerated_Domain_Value_Definition: NJ DOQQ's
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 16
Enumerated_Domain_Value_Definition: CT DOQQ's
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Detailed_Description:

Entity_Type:

Entity_Type_Label: HYDRO.PAT

Entity_Type_Definition:

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

Entity_Type_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: WATER_CODE

Attribute_Definition: Specifies a polygon as either water or land

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: L

Enumerated_Domain_Value_Definition: Land

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: W

Enumerated_Domain_Value_Definition: Water

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Detailed_Description:

Entity_Type:

Entity_Type_Label: ANNO.GEOG

Entity_Type_Definition:

The spatial data layer HYDRO contains label points representing annotation for geographic features.

Entity_Type_Definition_Source: Research Planning, Inc.

Detailed_Description:

Entity_Type:

Entity_Type_Label: ANNO.HYDRO

Entity_Type_Definition:

The spatial data layer HYDRO contains label points representing annotation for water features.

Entity_Type_Definition_Source: Research Planning, Inc.

Detailed_Description:

Entity_Type:

Entity_Type_Label: ANNO.SOC

Entity_Type_Definition:

The spatial data layer HYDRO contains label points representing annotation for socioeconomic features.

Entity_Type_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349
Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: ESI (Environmental Sensitivity Index Shoreline Types – Polygons and Lines)

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

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Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: ESI (Environmental Sensitivity Index Shoreline Types – Polygons and Lines)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains vector lines and polygons representing the shoreline and coastal habitats of Rhode Island, Connecticut, New York, and New Jersey, classified according to the Environmental Sensitivity Index (ESI) classification system. This data set comprises a portion of the ESI for Rhode Island, Connecticut, New York, and New Jersey. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

These data were compiled during 1999-2001. The currentness dates for these data range from 1996 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical_Consistency_Report:

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

Completeness_Report:

These data represent coastal shorelines and habitats classified according to the Environmental Sensitivity Index (ESI) classification system.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

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

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: NJDEP

Publication_Date: 1996

Title: Statewide Tidelands and Land Use/Land Cover

Geospatial_Data_Presentation_Form: Digital Complete Chains

Publication_Information:

Publication_Place: Trenton, New Jersey

Publisher: NJDEP

Source_Scale_Denominator: Unknown

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1996

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: NJDEP

Publication_Date: 1997

Title: Color Infrared Digital Imagery, Series 3, Vol. 5

Geospatial_Data_Presentation_Form: Color Infrared Digital Imagery

Publication_Information:

Publication_Place: Trenton, New Jersey

Publisher: NJDEP

Source_Scale_Denominator: Unknown

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1997

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Marine Spill Response Corporation (MSRC)

Publication_Date: 1994

Title: ESI Shoreline

Geospatial_Data_Presentation_Form: Digital Complete Chains

Publication_Information:

Publication_Place: New Jersey
Publisher: MSRC
Source_Scale_Denominator: 24000
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1994
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Connecticut Department of Environmental Protection (CDEP)
Publication_Date: 1999
Title: Connecticut Digital Orthophoto Quarter Quadrangles
Geospatial_Data_Presentation_Form: Color Infrared
Publication_Information:
Publication_Place: Connecticut
Publisher: CDEP
Source_Scale_Denominator: 12000
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Connecticut Department of Environmental Protection (CDEP)
Publication_Date: 1997
Title: Tidal Wetlands
Geospatial_Data_Presentation_Form: Digital Complete Chains
Publication_Information:
Publication_Place: Connecticut
Publisher: CDEP
Source_Scale_Denominator: Unknown
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1997
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Rhode Island Department of Environmental Protection (RIDEP)
Publication_Date: Unpublished Material
Title: Narragansett Bay Coastal Habitats
Geospatial_Data_Presentation_Form: Digital Data
Source_Scale_Denominator: 24000
Type_of_Source_Media: Floppy Disk
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Environmental Sensitivity Index Information
Source_Information:

Source_Citation:

Citation_Information:

Originator: New York Department of Environmental Conservation (NYDEC)

Publication_Date: 1997

Title:

Significant Habitats and Habitat Complexes of the New York Bight Watershed

Geospatial_Data_Presentation_Form: Digital Complete Chains

Publication_Information:

Publication_Place: New York

Publisher: U.S. Fish and Wildlife Service

Source_Scale_Denominator: Unknown

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1997

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RIGIS

Publication_Date: 1989

Title: Wetlands

Geospatial_Data_Presentation_Form: Digital Complete Chains

Publication_Information:

Publication_Place: Providence, Rhode Island

Publisher: RIGIS

Source_Scale_Denominator: 24000

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1989

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: US Geological Survey

Publication_Date: Unknown

Title: Topographic Quadrangles

Geospatial_Data_Presentation_Form: Map

Publication_Information:

Publication_Place: Denver, CO or Reston, VA

Publisher: U.S. Geological Survey

Source_Scale_Denominator: 24000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: Varies

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Environmental Sensitivity Index Information

Process_Step:

Process_Description:

The intertidal shoreline habitats of metropolitan New York and New Jersey were mapped during overflights and ground surveys conducted by an experienced coastal geologist in November and December 1999. Prior to the field study, some preliminary shoreline classifications and modifications were made using color Digital Orthophoto Quarter Quadrangles (DOQQs) provided by the New Jersey Department of Environmental Protection (NJ DEP). Images provided in the DOQQ dataset were photos of the coastal zone taken from 1995 to 1997. The ESI mapping overflights were conducted using H-65 helicopters operated by the U.S. Coast Guard, flying at elevations of 400-600 feet and slow air speed. During this work, the ESI ranking of observed intertidal

shoreline habitats was denoted directly onto the shoreline depicted on 1:24,000-scale USGS topographic maps. Where appropriate, revisions to the existing shoreline were made and, where necessary, multiple habitats were described for each shoreline segment. Basemaps used in the field were then scanned using a large format scanner. Shoreline classifications mapped during the surveys were transposed onto the digital shorelines provided by NJ DEP and, in the case of New York, created in-house, using a combination of New York State Tidal Wetlands (NYSTW) program data and older Marine Spill Response Corporation data. Original Connecticut ESI maps, published in 1984, were re-examined and fully updated. The intertidal shoreline habitats of Connecticut were mapped during overflights and ground surveys conducted by an experienced coastal geologist in November of 1999. Prior to the field study, some preliminary shoreline classifications were made using black-and-white 12,000 Digital Orthophoto Quarter Quadrangles (DOQQs) provided by the Connecticut Department of Environmental Protection. The vertical photography used in the DOQQs was taken in 1990-1991. The shoreline used in this atlas was digitized from these photos. Overflights were conducted using an H-60 Helicopter operated by the U.S. Coast Guard, flying at elevations of 400-600 feet and slow air speed. During this work, the ESI ranking of observed intertidal shoreline habitats was denoted directly onto the shoreline depicted on 1:24,000-scale USGS topographic maps. Where appropriate, revisions to the existing shoreline were made and, where necessary, multiple habitats were described for each shoreline segment. Basemaps used in the field were then scanned using a large format scanner, and shoreline classifications mapped during the surveys were transposed onto the digital shorelines provided by the Narragansett Bay Estuary Program (NBEP, a program of the Rhode Island Department of Environmental Management) and the RIGIS database of the University of Rhode Island.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 11558

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 11558

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 34185

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 1126409

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 28338

Spatial Reference Information:

Horizontal Coordinate System Definition:

Geographic:

Latitude Resolution: 0.00005

Longitude Resolution: 0.00005

Geographic Coordinate Units: Decimal degrees

Geodetic Model:

Horizontal Datum Name: North American Datum of 1983

Ellipsoid Name: Geodetic Reference System 1980

Semi-major Axis: 6378137

Denominator of Flattening Ratio: 298.257222

Entity and Attribute Information:

Detailed Description:

Entity Type:

Entity Type Label: ESI.AAT

Entity Type Definition:

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

Entity Type Definition Source: Research Planning, Inc.

Attribute:

Attribute Label: ESI

Attribute Definition:

The item ESI contains values representing the ESI shoreline type. In many cases shorelines are ranked with multiple codes, such as "6B/3A" (listed landward to seaward from left to right). The first code, "6B", is the most landward shoreline type and the second code, "3A", is the shoreline type closest to the water. Singular shoreline types are listed below. No multiple codes are listed, but all multiple codes included in the data set can be assembled from the codes described. The ESI code definition changes based on the associated ENVIR item code. For example, the definition of a line with an ESI of "4" and an ENVIR code of "E" (for Estuarine) is "Coarse-grained sand beaches", while the definition of a line with an ESI of "4" and an ENVIR code of "R" (for Riverine) is "Sandy bars and gently sloping banks". For each ESI code definition below, the associated ENVIR code is referenced in parentheses. The ESI rankings progress from low to high susceptibility to oil spills. To determine the sensitivity of a particular intertidal shoreline habitat, the following factors are integrated: 1) Shoreline type (substrate, grain size, tidal elevation, origin); 2) Exposure to wave and tidal energy; 3) Biological productivity and sensitivity; 4) Ease of cleanup. Prediction of the behavior and persistence of oil in intertidal habitats is based on an understanding of the dynamics of the coastal environments, not just the substrate type and grain size. The intensity of energy expended upon a shoreline by wave action, tidal currents, and river currents directly affects the persistence of stranded oil. The need for shoreline cleanup activities is determined, in part, by the slowness of natural processes in removal of oil stranded on the shoreline. The potential for biological injury and ease of cleanup of spilled oil are also important factors in the ESI ranking. Generally speaking, areas exposed to high levels of physical energy, such as wave action and tidal currents, and low biological activity rank low on the scale, whereas sheltered areas with associated high biological activity have the highest ranking.

Attribute Definition Source: Research Planning, Inc.

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: 1A

Enumerated Domain Value Definition: Exposed Rocky Cliffs (Estuarine)

Enumerated Domain Value Definition Source: Research Planning, Inc.

Enumerated Domain:

Enumerated Domain Value: 1B

Enumerated Domain Value Definition: Exposed, Solid Man-made Structures (Estuarine)

Enumerated Domain Value Definition Source: Research Planning, Inc.

Enumerated Domain:

Enumerated Domain Value: 2A

Enumerated Domain Value Definition:

Exposed, Wave-cut Platforms in Bedrock, Mud, or Clay; Rocky Shoals (Estuarine); Bedrock Ledges (Riverine)

Enumerated Domain Value Definition Source: Research Planning, Inc.

Enumerated Domain:

Enumerated Domain Value: 2B

Enumerated Domain Value Definition: Exposed Scarps and Steep Slopes in Clay (Estuarine)

Enumerated Domain Value Definition Source: Research Planning, Inc.

Enumerated Domain:

Enumerated Domain Value: 3A

- Enumerated_Domain_Value_Definition:* Fine- to Medium-grained Sand Beaches (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 3B
Enumerated_Domain_Value_Definition:
Scarps and Steep Slopes in Sand (Estuarine); Exposed, Eroding Banks in Unconsolidated Sediments (Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 4
Enumerated_Domain_Value_Definition:
Coarse-grained Sand Beaches (Estuarine); Sandy Bars and Gently Sloping Banks (Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 5
Enumerated_Domain_Value_Definition:
Mixed Sand and Gravel Beaches (Estuarine); Mixed Sand and Gravel Bars and Gently Sloping Banks (Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 6A
Enumerated_Domain_Value_Definition:
Gravel Beaches (Estuarine); Gravel Beaches and Gently Sloping Banks (Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 6B
Enumerated_Domain_Value_Definition: Riprap (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 7
Enumerated_Domain_Value_Definition: Exposed Tidal Flats (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 8A
Enumerated_Domain_Value_Definition:
Sheltered Rocky Shores and Sheltered Scarps in Bedrock, Mud, or Clay (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 8B
Enumerated_Domain_Value_Definition: Sheltered, Solid Man-made Structures (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 8C
Enumerated_Domain_Value_Definition: Sheltered Riprap (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 8F
Enumerated_Domain_Value_Definition: Vegetated, Steeply-sloping Bluffs (Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 9A
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 9B
Enumerated_Domain_Value_Definition: Vegetated Low Banks (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 10A
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marsh (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*
Enumerated_Domain_Value: 10B
Enumerated_Domain_Value_Definition: Freshwater Marshes (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
- Enumerated_Domain:*

Enumerated_Domain_Value: 10C
Enumerated_Domain_Value_Definition: Freshwater Swamps (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 10D
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands (Estuarine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: LINE
Attribute_Definition: Type of geographic feature.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: B
Enumerated_Domain_Value_Definition: Breakwater
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: F
Enumerated_Domain_Value_Definition: Flat
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: H
Enumerated_Domain_Value_Definition: Hydrography
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: I
Enumerated_Domain_Value_Definition: Index
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: M
Enumerated_Domain_Value_Definition: Marsh
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: P
Enumerated_Domain_Value_Definition: Pier
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: Shoreline
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SOURCE_ID
Attribute_Definition:
Data source of the ESI lines. 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.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: 2
Enumerated_Domain_Value_Definition: Low-altitude overflights by Research Planning, Inc.
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 5
Enumerated_Domain_Value_Definition: Digitized from 1:24,000-USGS topographic quadrangle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 7
Enumerated_Domain_Value_Definition: Research Planning, Inc. Index
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 8
Enumerated_Domain_Value_Definition: NJ Landuse/Landcover
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 9
Enumerated_Domain_Value_Definition: MSRC (NY Shoreline)

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 10

Enumerated_Domain_Value_Definition: NY Department of Environmental Conservation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 11

Enumerated_Domain_Value_Definition: CT Department of Environmental Protection

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 12

Enumerated_Domain_Value_Definition: RIGIS

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 14

Enumerated_Domain_Value_Definition: RI NDEP

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 15

Enumerated_Domain_Value_Definition: NJ DOQQ's

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 16

Enumerated_Domain_Value_Definition: CT DOQQ's

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ENVIR

Attribute_Definition: Type of regional environment

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Estuarine

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: R

Enumerated_Domain_Value_Definition: Riverine

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: U

Enumerated_Domain_Value_Definition: Unranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Detailed_Description:

Entity_Type:

Entity_Type_Label: ESI.PAT

Entity_Type_Definition:

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

Entity_Type_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ESI

Attribute_Definition:

The item ESI contains values representing the ESI polygon type. The ESI rankings progress from low to high susceptibility to oil spills. The ESI rankings of polygons are similar to the ESI rankings of shorelines (see the ESI attribute in the ESI.AAT section). For each ESI code definition below, the associated ENVIR code is referenced in parentheses.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 2A

Enumerated_Domain_Value_Definition:

Exposed, Wave-cut Platforms in Bedrock, Mud, or Clay; Rocky Shoals (Estuarine)

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 4

Enumerated_Domain_Value_Definition: Sandy Bars and Gently Sloping Banks (Riverine)

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 7
Enumerated_Domain_Value_Definition: Exposed Tidal Flats (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 9A
Enumerated_Domain_Value_Definition: Sheltered Tidal Flats (Estuarine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 10A
Enumerated_Domain_Value_Definition: Salt- and Brackish-water Marsh (Estuarine or Palustrine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 10B
Enumerated_Domain_Value_Definition: Freshwater Marshes (Estuarine, Palustrine, or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 10C
Enumerated_Domain_Value_Definition: Freshwater Swamps (Palustrine or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: 10D
Enumerated_Domain_Value_Definition: Scrub-shrub Wetlands (Estuarine, Palustrine, or Riverine)
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: WATER_CODE
Attribute_Definition: Specifies a polygon as either water or land
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: L
Enumerated_Domain_Value_Definition: Land
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: W
Enumerated_Domain_Value_Definition: Water
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ENVIR
Attribute_Definition: Type of regional environment
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Estuarine
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: P
Enumerated_Domain_Value_Definition: Palustrine
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: R
Enumerated_Domain_Value_Definition: Riverine
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349
Contact_Voice_Telephone: (206) 526-6400
Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: INDEX (Index Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: INDEX (Index Polygons)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains vector polygons representing the boundaries of the U.S. Geological Survey 1:24,000 topographic maps and other map and digital data boundaries used in the creation of the Environmental Sensitivity Index (ESI) for Rhode Island, Connecticut, New York, and New Jersey. This data set comprises a portion of the ESI data for Rhode Island, Connecticut, New York, and New Jersey. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

These data were compiled during 1999-2001. The currentness date for these data is 2001 and is documented in the *Source Information* section.

Status:

Progress: Complete

Maintenance and Update Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987
East_Bounding_Coordinate: -71.090936
North_Bounding_Coordinate: 41.8846228
South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None
Theme_Keyword: ESI
Theme_Keyword: Sensitivity maps
Theme_Keyword: Coastal resources
Theme_Keyword: Oil spill planning
Theme_Keyword: Coastal Zone Management
Theme_Keyword: Wildlife

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: Rhode Island
Place_Keyword: Connecticut
Place_Keyword: New York
Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical_Consistency_Report:

A multi-stage error checking process, described in the above Attribute_Accuracy_Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency

checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies (such as dangles, unnecessary node, etc.), and ORACLE(r) to ARC/INFO(r) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness_Report:

These data represent the boundaries of all the hardcopy cartographic products produced as part of the Environmental Sensitivity Index (ESI) for Rhode Island, Connecticut, New York, and New Jersey, as well as digital data extents. Primarily, 1:24,000 USGS topographic maps were used to provide boundaries for cartographic products. In some cases the polygons represent 1:24,000 U.S. Geological Survey (USGS) topographic maps that were re-tiled, moved, or extended to provide better cartographic coverage of the study area. Finally, polygons representing the outer extent of all digital data are included in this data layer.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

The index polygons in this data layer were generated in Arc/INFO from the coordinates of the USGS 1:24,000 topographic map corners. Some small amount of positional error may be present along the arcs forming the boundaries of these polygons, particularly away from the polygon corners. Some boundaries were developed from pre-existing digital and hardcopy sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: US Geological Survey

Publication_Date: Unknown

Title: Topographic Quadrangles

Geospatial_Data_Presentation_Form: Map

Publication_Information:

Publication_Place: Denver, CO or Reston, VA

Publisher: U.S. Geological Survey

Source_Scale_Denominator: 24000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: Varies

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Map index

Process_Step:

Process_Description:

The index polygons in this data layer were generated in Arc/INFO from the coordinates of the USGS map corners, or appropriate coordinates. Other lines, representing the outer extent of digital data, were derived from biological data layers included as part of the larger Environmental Sensitivity Index (ESI) data set for Rhode Island, Connecticut, New York, and New Jersey.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings
Point_and_Vector_Object_Count: 65
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Area point
Point_and_Vector_Object_Count: 65
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Complete chain
Point_and_Vector_Object_Count: 206
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Link
Point_and_Vector_Object_Count: 19663
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Node, planar graph
Point_and_Vector_Object_Count: 143

Spatial_Reference_Information:
Horizontal_Coordinate_System_Definition:
Geographic:
Latitude_Resolution: 0.00005
Longitude_Resolution: 0.00005
Geographic_Coordinate_Units: Decimal degrees
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 1980
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:
Detailed_Description:
Entity_Type:
Entity_Type_Label: INDEX.PAT
Entity_Type_Definition:
The INDEX.PAT table contains attribute information for the vector polygons representing the boundaries of the USGS 1:24,000 topographic maps and other map and digital data boundaries used in the creation of the Environmental Sensitivity Index (ESI) for Rhode Island, Connecticut, New York, and New Jersey.
Entity_Type_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: TILE-NAME
Attribute_Definition:
The TILE-NAME contains the map number according to the specified layout of the atlas. The values for each polygon are unique and range from 1 through 60.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: 60
Attribute:
Attribute_Label: TOPO-NAME
Attribute_Definition: Topographic map names
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: ANSONIA, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: ARTHUR KILL, N.Y. - N.J. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: ASBURY PARK , N.J. (1989)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: BLOCK ISLAND, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: BRANFORD, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: BRIDGEPORT, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: BRISTOL, R.I. - MASS. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: BROOKLYN, N.Y. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: CAROLINA, R.I. (1970), QUONOCONTAUG, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: CENTRAL PARK, N.Y. - N.J. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: CLINTON, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: CONEY ISLAND, N.Y. - N.J. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: EAST GREENWICH, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: EAST PROVIDENCE, R.I. - MASS. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: ELIZABETH, N.J. - N.Y. (1995)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: ESSEX, CT. (1977)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: FALL RIVERS, MASS. - R.I. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: FAR ROCKAWAY, N.Y. (1969)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: FLUSHING, N.Y. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: GLASTONBURY, CT. (1982)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: GLENVILLE, CT. - N.Y. (1971)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: GUILFORD, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: HADDAM, CT. (1971)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: HAMBURG, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: JAMAICA, N.Y. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: JERSEY CITY, N.Y. - N.J. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: KEYPORT, N.J. - N.Y. (1977)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: KINGSTON, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: LAKEWOOD, N.J. (1989)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: LONG BRANCH, N.J. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: MAMARONECK, N.Y. - CT. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: MIDDLE HADDAM, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: MIDDLETON, CT. (1992)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: MILFORD, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: MOUNT VERNON, N.Y. (1979)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:
Enumerated_Domain_Value: MYSTIC, CT. - N.Y. - R.I. (1984)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: NARRAGANSETT PIER, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: NEW HAVEN, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: NEW LONDON, CT. - N.Y. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: NEWPORT, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: Niantic, CT. - N.Y. (1983)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: NORWALK SOUTH, CT. (1984)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: OLD LYME, CT. (1976)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: PERTH AMBOY, N.J. - N.Y. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: PLAINFIELD, N.J. (1995), NEW BRUNSWICK, N.J. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: POINT PLEASANT, N.J. (1989)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: PROVIDENCE, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: PRUDENCE ISLAND, R.I. (1975)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: SAKONETT POINT, R.I. (1970)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: SANDY HOOK, N.J. - N.Y. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: SHERWOOD POINT, CT. - N.Y. (1971)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Enumerated_Domain:
Enumerated_Domain_Value: SOUTH AMBOY, N.J. - N.Y. (1981)
Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: STAMFORD, CT. (1984)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: THE NARROWS, N.Y. - N.J. (1981)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: TIVERTON, R.I. - MASS. (1977), WESTPORT, MASS. - R.I. (1977)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: UNCASVILLE, CT. (1984)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WATCH HILL, R.I. - CT. (1984)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WEEHAWKEN, N.J. - N.Y. (1995)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WICKFORD, R.I. (1995)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WOODMONT, CT. (1976)

Enumerated_Domain_Value_Definition: USGS 1:24,000 Topographic map name

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition:

SCALE contains the value of the denominator of the scale at which the map is plotted in the final map product.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 50,000

Enumerated_Domain_Value_Definition: Scale = 1:50,000

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: 55,000

Enumerated_Domain_Value_Definition: Scale = 1:55,000

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAPANGLE

Attribute_Definition:

MAPANGLE contains a value to rotate the final map product so that it is situated straight up and down

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: -1.069

Range_Domain_Maximum: 1.107

Attribute_Units_of_Measure: Degree

Attribute:

Attribute_Label: PAGESIZE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 11,17

Enumerated_Domain_Value_Definition: Page size = 11" by 17"

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NYNJ

Attribute_Definition:

The item NYNJ contains the map number for the New York/ New Jersey portion of the atlas. During the map production process, the value of NYNJ is plotted on the map product to order maps in a coherent manner. The values for each polygon are unique and range from 1 through 23.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 23

Attribute:

Attribute_Label: CT

Attribute_Definition:

The item CT contains the map number for the Connecticut portion of the atlas. During the map production process, the value of CT is plotted on the map product to order maps in a coherent manner. The values for each polygon are unique and range from 1 through 25.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 25

Attribute:

Attribute_Label: RI

Attribute_Definition:

The item RI contains the map number for the Rhode Island portion of the atlas. During the map production process, the value of RI is plotted on the map product to order maps in a coherent manner. The values for each polygon are unique and range from 1 through 16.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: 16

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.7.23 on Mon Apr 08 14:48:07 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: BIRDS (Bird Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: BIRDS (Bird Polygons)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series_Information:

Series_Name: None

Issue_Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for wading birds, shorebirds, waterfowl, raptors, diving birds, pelagic birds, passerine birds, gulls and terns in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector polygons in this data set represent locations of bird nesting, foraging, and rafting 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 NESTS (Nest Points) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional bird information.

Purpose:

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

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness_Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1959 to 2001 and are documented in the Source_Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Bird

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

listed in the Lineage section.

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and available hardcopy reports and digital data on bird nesting, foraging, and rafting concentration areas. Refer to the NESTS (Nest Points) data layer for additional nesting information. These data do not necessarily represent all bird occurrences in the states of Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 1, Common loon, *Gavia immer*; 3, Red-throated loon, *Gavia stellata*; 4, Red-necked grebe, *Podiceps grisegena*; 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*; 20, Northern shoveler, *Anas clypeata*; 21, Canvasback, *Aythya valisineria*; 22, Greater scaup, *Aythya marila*; 23, Lesser scaup, *Aythya affinis*; 24, Common goldeneye, *Bucephala clangula*; 26, Bufflehead, *Bucephala albeola*; 27, Oldsquaw, *Clangula hyemalis*; 28, Harlequin duck, *Histrionicus histrionicus*; 29, White-winged scoter, *Melanitta fusca*; 30, Surf scoter, *Melanitta perspicillata*; 32, Common merganser, *Mergus merganser*; 33, Red-breasted merganser, *Mergus serrator*; 34, American coot, *Fulica americana*; 38, Herring gull, *Larus argentatus*; 45, Common tern, *Sterna hirundo*; 54, Great blue heron, *Ardea herodias*; 56, Spotted sandpiper, *Actitis macularia*; 58, Greater yellowlegs, *Tringa melanoleuca*; 59, Lesser yellowlegs, *Tringa flavipes*; 60, Red knot, *Calidris canutus*; 62, Least sandpiper, *Calidris minutilla*; 63, Dunlin, *Calidris alpina*; 64, Short-billed dowitcher, *Limnodromus griseus*; 67, Sanderling, *Calidris alba*; 69, Semipalmated plover, *Charadrius semipalmatus*; 70, Killdeer, *Charadrius vociferous*; 73, Ruddy turnstone, *Arenaria interpres*; 76, Bald eagle, *Haliaeetus leucocephalus*; 77, Osprey, *Pandion haliaetus*; 86, Least tern, *Sterna antillarum*; 87, Little blue heron, *Egretta caerulea*; 88, Great egret, *Ardea alba*; 89, Snowy egret, *Egretta thula*; 90, Black-crowned night-heron, *Nycticorax nycticorax*; 91, Glossy ibis, *Plegadis falcinellus*; 92, Great black-backed gull, *Larus marinus*; 93, Cattle egret, *Bubulcus ibis*; 94, Tricolored heron, *Egretta tricolor*; 95, Roseate tern, *Sterna dougallii*; 97, Green heron, *Butorides virescens*; 98, Laughing gull, *Larus atricilla*; 103, Common eider, *Somateria mollissima*; 107, Peregrine falcon, *Falco peregrinus*; 120, Yellow-crowned night-heron, *Nyctanassa violacea*; 124, Redhead, *Aythya americana*; 125, Clapper rail, *Rallus longirostris*; 133, Black skimmer, *Rynchops niger*; 138, Forsters tern, *Sterna forsteri*; 141, American avocet, *Recurvirostra americana*; 147, Savannah sparrow, *Passerculus sandwichensis*; 148, Ruddy duck, *Oxyura jamaicensis*; 150, Black rail, *Laterallus jamaicensis*; 152, American oystercatcher, *Haematopus palliatus*; 153, Piping plover, *Charadrius melodus*; 155, Willet, *Catoptrophorus semipalmatus*; 156, Semipalmated sandpiper, *Calidris pusilla*; 162, Gadwall, *Anas strepera*; 167, Northern gannet, *Morus bassanus*; 169, American wigeon, *Anas americana*; 178, Least bittern, *Ixobrychus exilis*; 179, Pied-billed grebe, *Podilymbus podiceps*; 180, Ring-necked duck, *Aythya collaris*; 181, Northern harrier, *Circus cyaneus*; 182, American kestrel, *Falco sparverius*; 184, King rail, *Rallus elegans*; 185, American bittern, *Botaurus lentiginosus*; 186, American black duck, *Anas rubripes*; 187, Virginia rail, *Rallus limicola*; 188, Sora, *Porzana carolina*; 189, Yellow rail, *Coturnicops noveboracensis*; 190, Blue-winged teal, *Anas discors*; 191, Wood duck, *Aix sponsa*; 192, Common moorhen, *Gallinula chloropus*; 195, American woodcock, *Scolopax minor*; 197, Black (common) scoter, *Melanitta nigra*; 198, Hooded merganser, *Lophodytes cucullatus*; 212, Purple gallinule, *Porphyryula martinica*; 216, Belted kingfisher, *Ceryle alcyon*; 217, Mute swan, *Cygnus olor*; 218, Red-shouldered hawk, *Buteo lineatus*; 223, Upland sandpiper, *Bartramia longicauda*; 224, Sedge wren, *Cistothorus platensis*; 230, Red-tailed hawk, *Buteo jamaicensis*; 234, Purple sandpiper, *Calidris maritime*; 271, Rails; 277, Seaside sparrow, *Ammodramus maritimus*; 278, Saltmarsh sharp-tailed sparrow, *Ammodramus caudacutus*; 299, Scaup, *Aythya* spp.; 300, Goldeneye, *Bucephala* spp.; 301, Mergansers; 302, Scoters, *Melanitta* spp.; 316, Endangered shorebird; 385, Common barn owl, *Tyto alba*; 595, Horned lark, *Eremophila alpestris*; 596, Purple martin, *Progne subis*; 597, Ipswich sparrow, *Passerculus sandwichensis* prin; 600, Long-eared owl, *Asio otus*; 603, Black-capped petrel, *Pterodroma hasitata*; 604, Eastern screech owl, *Otus asio*; 1001, Gulls; 1002, Shorebirds; 1003, Waterfowl; 1004, Wading birds; 1005, Raptors; 1006, Diving birds; 1008, Terns; 1014, Diving ducks; 1019, Sea ducks.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Raithel, C. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title:

Waterbird nesting sites; shorebird, wading bird, and terrapin distribution in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Allin, C. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title: Waterfowl concentration areas in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Bird information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP

Publication_Date: 2000

Title: Colonial waterbird nesting sites in RI/CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RI Resource Protection Project

Publication_Date: 1992

Title: Colonial waterbird nesting sites in RI

Geospatial_Data_Presentation_Form: Digital points

Publication_Information:

Publication_Place: <<http://www.edc.uri.edu/rirpp/Text/gisdata.htm>>

Publisher: RI Resource Protection Project

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1991

Ending_Date: 1992

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: RIDEM, DF&W, Wakefield

Publication Date: 2000

Title: Bird concentration areas in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: Hebert, C. (USFWS, Charleston)

Publication Date: 2000

Title: Colonial waterbird nesting sites in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: Blodgett, B. (DFWELE/DFW, MA)

Publication Date: Unpublished Material

Title: Nesting seasonality for birds in New England

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1997

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: Conway, R.A.

Publication Date: 1992

Title: Field Checklist of RI Birds

Geospatial Data Presentation Form: Hardcopy text

Publication Information:

Publication Place: Smithfield, RI.

Publisher: Bull. No. 1, Audubon Society of RI, Smithfield, RI. 18p.

Type of Source Media: Paper

Source Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1979

Ending Date: 1992

Source Currentness Reference: Dates of surveys

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation_Information:

Originator: Dixon, J. (CTDEP, Burlington)

Publication_Date: Unpublished Material

Title: Shorebird, wading bird, and terrapin concentration areas in CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP

Publication_Date: 1998

Title: Colonial waterbird nesting sites in RI/CT

Geospatial_Data_Presentation_Form: Digital polys

Publication_Information:

Publication_Place: Hartford, Connecticut

Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Floppy disk

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1980

Ending_Date: 1998

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP (OLISP, Hartford)

Publication_Date: 1999

Title: Waterfowl concentration areas in CT

Geospatial_Data_Presentation_Form: Digital polys

Publication_Information:

Publication_Place: Hartford, Connecticut

Publisher: Data contact: Stacey Kingsbury (CTDEP, Hartford), 860/424-3584

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Floppy disk

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1959

Ending_Date: 1999

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Merola, P. (CTDEP)

Publication_Date: Unpublished Material

Title: Waterfowl seasonality information for CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Victoria, J. (CTDEP, N. Franklin)
Publication_Date: Unpublished Material
Title: Bird and wildlife distribution and seasonality for CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDEP (Wildlife Division)
Publication_Date: 2000
Title: Marsh nesting birds distribution in CT
Geospatial_Data_Presentation_Form: Hardcopy maps
Publication_Information:
Publication_Place: Burlington, Connecticut
Publisher: Data contact: Jenny Dixon (CTDEP, Burlington), 860/675-8130
Source_Scale_Denominator: 24000
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Del Puerto, M. (NYSDEC, LIC)
Publication_Date: Unpublished Material
Title: Bird, terrapin, and plant concentration areas in NY
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Levine, E.
Publication_Date: 1998
Title: Bull's Birds of New York State
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Ithaca, NY
Publisher: Comstock Publishing Associates, 622 p.
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1974

Ending_Date: 1998
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Burger, J. (Rutgers Univ.)
Publication_Date: Unpublished Material
Title:
Shorebird, wading bird, horseshoe crab, and terrapin concentration areas in NJ
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: McReynolds, D. (NYSDEC, LIC)
Publication_Date: Unpublished Material
Title: Double-crested cormorant nesting areas
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Jenkins, D. (NJDEP, Trenton)
Publication_Date: Unpublished Material
Title: Nesting birds in NJ
Geospatial_Data_Presentation_Form: Hardcopy maps
Source_Scale_Denominator: 24000
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Clark, K. (NJDEP)
Publication_Date: Unpublished Material
Title: Shorebird distribution and seasonality in NJ
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: NJDEP (FG&W, Trenton)

Publication Date: 2000

Title: Mid-Winter Waterfowl Surveys for NJ

Geospatial Data Presentation Form: Digital table

Publication Information:

Publication Place: Woodbine, NJ

Publisher: Data contact: Ted Nichols (NJDEP, Woodbine), 609-628-3218

Type of Source Media: Floppy disk

Source Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1992

Ending Date: 2000

Source Currentness Reference: Date of surveys

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: Nichols, T. (NJDEP, Woodbine)

Publication Date: Unpublished Material

Title: Waterfowl seasonality information for NJ

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: NJDEP (FG&W, Trenton)

Publication Date: 1997

Title: Spring Waterfowl Surveys for NJ

Geospatial Data Presentation Form: Digital table

Publication Information:

Publication Place: Woodbine, NJ

Publisher: Data contact: Ted Nichols (NJDEP, Woodbine), 609-628-3218

Type of Source Media: Floppy disk

Source Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1995

Ending Date: 1997

Source Currentness Reference: Dates of surveys

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: NJDEP Office of Nat. Lands Mgt.

Publication Date: 1999

Title: Natural Heritage Priority Sites

Geospatial Data Presentation Form: Digital polys

Publication Information:

Publication Place: <<http://www.state.nj.us/dep/gis/>>

Publisher: NJ DEP

Source Scale Denominator: 24000; 63360

Type of Source Media: Online

Source Time Period of Content:

Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1986
Ending_Date: 1999

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None
Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Gateway Nat. Rec. Area, Sandy Hook

Publication_Date: 1996

Title:

Oil and Hazardous Substance Spill Contingency Plan Critical Resource Map

Geospatial_Data_Presentation_Form: Hardcopy maps

Publication_Information:

Publication_Place: New York

Publisher: Data contact: Bruce Lane (GNRA, Sandy Hook) 732-872-5931

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1996

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Hackensack Meadowlands DCEC

Publication_Date: 2000

Title: Birds of the Hackensack Meadowlands

Geospatial_Data_Presentation_Form: Hardcopy text

Publication_Information:

Publication_Place: New Jersey

Publisher:

Data contact: Anne Galli (Hackensack Meadowlands DCEC), 201/460-8300

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Bevier, L.

Publication_Date: 1994

Title: The Atlas of Breeding Birds of CT

Geospatial_Data_Presentation_Form: Hardcopy text

Publication_Information:

Publication_Place: Hartford, CT

Publisher:

State Geological and Natural History Survey of CT, Hartford, 461 p.

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1982

Ending_Date: 1986

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: NJDEP Office of Nat. Lands Mgt.

Publication Date: Unpublished Material

Title: Seasonality for NJ Natural Heritage Program data

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: USFWS

Publication Date: Unpublished Material

Title: Bird concentration areas

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2001

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: McLaughlin, A. (USFWS)

Publication Date: Unpublished Material

Title: Waterfowl concentration areas

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2001

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: USFWS & URI

Publication Date: Unpublished Material

Title: Bird seasonality information for RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2001

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Bird Information

Source Information:

Source Citation:

Citation Information:

Originator: Paton, P. (URI/NRS)

Publication Date: Unpublished Material

Title: Shorebird nesting locations

Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Alderson, C. (NYS DEC)
Publication_Date: Unpublished Material
Title: Bird and reptile concentration areas in NY
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Bird Information

Process_Step:

Process_Description:

Three main sources of data were used to depict bird distribution and seasonality for this data layer: 1) personal interviews with resource experts from Rhode Island Department of Environmental Management (RI DEM), Connecticut Department of Environmental Protection (CT DEP), New York State Department of Environmental Conservation (NYS DEC), New Jersey Department of Environmental Protection (NJ DEP), Rutgers University, U.S. Fish and Wildlife Service (USFWS), and University of Rhode Island (URI); 2) a 1992 Rhode Island Resource Protection Project (RIRPP) digital colonial waterbird nesting site coverage, a 1998 CT DEP colonial waterbird nesting site coverage, a 1999 CT DEP waterfowl coverage, 1999 and 2000 NJ DEP Natural Heritage Program coverages, and 1997 spring and 2000 mid-winter NJ DEP waterfowl coverages; and 3) various hardcopy maps, reports, and books provided or suggested by resource experts at the various state agencies. Information gathered during initial interviews and from hardcopy maps and reports was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Digital data was either used exactly as it was provided, or information from the coverages was transposed by hand onto the topographic quadrangles if the format that it was received in was not compatible with the ESI data format. Following the data compilation phase, two sets of completed maps were sent out to the resources agencies for review, and edits were made based on recommendations by the resource experts. Concentration information varied, and therefore for some species and locations, descriptive terms such as "very high," "high," "common," or "abundant" were used, while for others, numerical counts of nests or individuals were used. In many cases, concentration information was provided by resource experts. The 1998 CT DEP colonial waterbird nesting site coverage included counts of nests and nesting pairs at nests surveyed between 1972-1998. The 1997 and 2000 NJ DEP waterfowl data included counts of individual migrating/wintering waterfowl species that were surveyed during those two years within polygonal transects. The maximum count recorded for each species over multiple survey dates was used for all nesting sites and waterfowl transects as to err on the side of protection. In some cases, no quantitative abundance data were available.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

*Spatial_Data_Organization_Information:**Direct_Spatial_Reference_Method:* Vector*Point_and_Vector_Object_Information:**SDTS_Terms_Description:**SDTS_Point_and_Vector_Object_Type:* GT-polygon composed of rings*Point_and_Vector_Object_Count:* 5958*SDTS_Terms_Description:**SDTS_Point_and_Vector_Object_Type:* Area point*Point_and_Vector_Object_Count:* 5958*SDTS_Terms_Description:**SDTS_Point_and_Vector_Object_Type:* Complete chain*Point_and_Vector_Object_Count:* 12463*SDTS_Terms_Description:**SDTS_Point_and_Vector_Object_Type:* Link*Point_and_Vector_Object_Count:* 901546*SDTS_Terms_Description:**SDTS_Point_and_Vector_Object_Type:* Node, planar graph*Point_and_Vector_Object_Count:* 9302*Spatial_Reference_Information:**Horizontal_Coordinate_System_Definition:**Geographic:**Latitude_Resolution:* 0.00005*Longitude_Resolution:* 0.00005*Geographic_Coordinate_Units:* Decimal degrees*Geodetic_Model:**Horizontal_Datum_Name:* North American Datum of 1983*Ellipsoid_Name:* Geodetic Reference System 1980*Semi-major_Axis:* 6378137*Denominator_of_Flattening_Ratio:* 298.257222*Entity_and_Attribute_Information:**Overview_Description:**Entity_and_Attribute_Overview:*

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, BIRDS) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIRDS.PAT

Entity_Type_Definition:

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

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (1), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 710106131

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71000626

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (1), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 nests, pairs, or 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 nesting pairs (XX PAIRS), counts of actual nests (XX NESTS), or counts of individuals (XX BIRDS). In cases where no quantitative count was available, the field may either be blank, or contain descriptive terms such as "very high," "high," "common," or "abundant." Counts were derived from a variety of surveys, and may range in date from 1972-2000.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

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

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species
Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: amphibian
Enumerated_Domain_Value_Definition: Amphibian
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bird
Enumerated_Domain_Value_Definition: Bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bivalve
Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP

Attribute_Definition: September

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in September

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT

Attribute_Definition: October

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in October

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV

Attribute_Definition: November

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in November

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC

Attribute_Definition: December

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in December

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern.

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.7.23 on Mon Apr 08 13:39:03 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: NESTS (Nest Points)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: NESTS (Nest Points)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series Information:

Series_Name: None

Issue_Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for nesting birds in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector points in this data set represent locations of nesting birds. 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 (Bird Polygons) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional bird information.

Purpose:

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

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness_Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1900 to 2001 and are documented in the Source_Information section

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Nest

Theme_Keyword: Bird

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

listed in the Lineage section.

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and available hardcopy reports and digital data on bird nesting locations. Refer to the BIRDS (Bird Polygons) data layer for additional bird nesting information. These data do not necessarily represent all nesting colonies present in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 45, Common tern, *Sterna hirundo*; 76, Bald eagle, *Haliaeetus leucocephalus*; 77, Osprey, *Pandion haliaetus*; 86, Least tern, *Sterna antillarum*; 88, Great egret, *Ardea alba*; 89, Snowy egret, *Egretta thula*; 95, Roseate tern, *Sterna dougallii*; 107, Peregrine falcon, *Falco peregrinus*; 120, Yellow-crowned night-heron, *Nyctanassa violacea*; 140, Threatened raptor; 147, Savannah sparrow, *Passerculus sandwichensis*; 152, American oystercatcher, *Haematopus palliatus*; 153, Piping plover, *Charadrius melodus*; 155, Willet, *Catoptrophorus semipalmatus*; 178, Least bittern, *Ixobrychus exilis*; 179, Pied-billed grebe, *Podilymbus podiceps*; 181, Northern harrier, *Circus cyaneus*; 185, American bittern, *Botaurus lentiginosus*; 190, Blue-winged teal, *Anas discors*; 224, Sedge wren, *Cistothorus platensis*; 277, Seaside sparrow, *Ammodramus maritimus*; 278, Saltmarsh sharp-tailed sparrow, *Ammodramus caudatus*; 310, Rare passerine bird; 313, Rare raptor; 314, Endangered raptor; 316, Endangered shorebird; 317, Rare tern; 318, Threatened tern; 319, Rare wading bird; 385, Common barn owl, *Tyto alba*; 427, Eastern meadowlark, *Sturnella magna*; 595, Horned lark, *Eremophila alpestris*; 596, Purple martin, *Progne subis*; 597, Ipswich sparrow, *Passerculus sandwichensis prin*; 598, Grasshopper sparrow, *Ammodramus savannarum*; 599, Whip-poor-will, *Caprimulgus vociferus*; 601, Yellow-breasted chat, *Icteria virens*; 602, Brown thrasher, *Toxostoma rufum*; 606, Rare diving bird; 607, Threatened diving bird; 608, Threatened wading bird; 1001, Gulls; 1003, Waterfowl; 1004, Wading birds; 1005, Raptors.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Raithel, C. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title:

Waterbird nesting sites; shorebird, wading bird, and terrapin distribution in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Nesting Information

Source Information:

Source Citation:

Citation Information:

Originator: RI Resource Protection Project

Publication_Date: 1992

Title: Colonial waterbird nesting sites in RI

Geospatial_Data_Presentation_Form: Digital points

Publication_Information:

Publication_Place: Rhode Island

Publisher: <<http://www.edc.uri.edu/rirpp/Text/gisdata.htm>>

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1991

Ending_Date: 1992

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Nesting Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Suprock, L. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title: Osprey nesting sites in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Nesting Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RIDEM, DF&W, Wakefield

Publication_Date: Unpublished Material

Title: Bird concentration areas in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Nesting Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Hebert, C. (USFWS, Charleston)

Publication_Date: Unpublished Material

Title: Colonial waterbird nesting sites in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Nesting Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RI Natural Heritage Program

Publication_Date: 2000

Title: Natural Heritage Data - selected points in RI; washover sites

Geospatial_Data_Presentation_Form: Hardcopy maps

Publication_Information:

Publication Place: Providence, RI
Publisher: Data contact: Rick Enser (RIDEM, Providence), 401/222-6605
Type of Source Media: Date of communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: to 2000
Source Currentness Reference: Dates of surveys
Source Citation Abbreviation: None
Source Contribution: Nesting Information
Source Information:
Source Citation:
Citation Information:
Originator: Blodgett, B. (DFWELE/DFW, MA)
Publication Date: Unpublished Material
Title: Nesting seasonality for birds in New England
Geospatial Data Presentation Form: Expert knowledge
Type of Source Media: Date of communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: 1997
Source Currentness Reference: Date of communication
Source Citation Abbreviation: None
Source Contribution: Nesting Information
Source Information:
Source Citation:
Citation Information:
Originator: RI Resource Protection Project
Publication Date: 1995
Title: Osprey nesting sites in RI
Geospatial Data Presentation Form: Digital points
Publication Information:
Publication Place: Rhode Island
Publisher: <<http://www.edc.uri.edu/rirpp/Text/gisdata.htm>>
Source Scale Denominator: 24000
Type of Source Media: Date of communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: 1995
Source Currentness Reference: Date of publication
Source Citation Abbreviation: None
Source Contribution: Nesting Information
Source Information:
Source Citation:
Citation Information:
Originator: Dixon, J. (CTDEP, Burlington)
Publication Date: Unpublished Material
Title: Shorebird, wading bird, and terrapin concentration areas in CT
Geospatial Data Presentation Form: Expert knowledge
Type of Source Media: Date of communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: 2000
Source Currentness Reference: Date of communication
Source Citation Abbreviation: None
Source Contribution: Nesting Information
Source Information:
Source Citation:
Citation Information:
Originator: Merola, P. (CTDEP)
Publication Date: Unpublished Material
Title: Waterfowl seasonality information for CT
Geospatial Data Presentation Form: Expert knowledge

Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Victoria, J. (CTDEP, N. Franklin)
Publication_Date: Unpublished Material
Title: Bird and wildlife distribution and seasonality for CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Jenkins, D. (NJDEP, Trenton)
Publication_Date: Unpublished Material
Title: Nesting birds in NJ
Geospatial_Data_Presentation_Form: Hardcopy maps
Source_Scale_Denominator: 24000
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Walsh, J. et al.
Publication_Date: 1999
Title: Birds of New Jersey
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Bernardsville, NJ
Publisher: New Jersey Audubon Society, Bernardsville, NJ, 704 p.
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1900
Ending_Date: 1999
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Hackensack Meadowlands DCEC
Publication_Date: 2000
Title: Birds of the Hackensack Meadowlands
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:

Publication_Place: New Jersey
Publisher:
Data contact: Anne Galli (Hackensack Meadowlands DCEC), 201/460-8300
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDEP (EGIC, Hartford)
Publication_Date: 1999
Title: Natural Diversity Database for CT
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Connecticut
Publisher: Data contact: Karen Zyko; CTDEP, EGIC; 860/424-3540
Source_Scale_Denominator: 24000
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Bevier, L.
Publication_Date: 1994
Title: The Atlas of Breeding Birds of CT
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Hartford, CT
Publisher:
State Geological and Natural History Survey of CT, Hartford, 461 p.
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1982
Ending_Date: 1986
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYSDEC Natural Heritage Program
Publication_Date: 2000
Title: NY Natural Heritage Program Data
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Latham, NY
Publisher: Data contact: Nick Conrad (NYNHP, Latham), 518/783-3922
Source_Scale_Denominator: 24000
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000

Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NJDEP Office of Nat. Lands Mgt.
Publication_Date: Unpublished Material
Title: Seasonality for NJ Natural Heritage Program data
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Nesting Information

Process_Step:

Process_Description:

Three main sources of data were used to depict bird nesting locations for this data layer: 1) personal interviews with resource experts from Rhode Island Department of Environmental Management (RI DEM), U.S. Fish and Wildlife Service (USFWS), Connecticut Department of Environmental Protection (CT DEP), and New Jersey Department of Environmental Protection (NJ DEP); 2) digital point coverages, including: a 1992 Rhode Island Resource Protection Project (RIRPP) digital point coverage of colonial waterbird nesting sites, a 1995 RIRPP digital point coverage of osprey nesting sites, a 1999 CT DEP Natural Diversity Database (NDDDB) digital point coverage of rare bird species nesting sites, and a 2000 New York State Department of Environmental Conservation (NYS DEC) NHP digital point coverage of rare bird nesting sites; and 3) hardcopy maps and reports, including: Rhode Island Natural Heritage Program (NHP) hardcopy maps of rare bird species nesting sites, and NJ DEP maps of nesting birds in NJ. Information gathered during initial interviews and from hardcopy maps and reports was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Digital data was either used exactly as it was provided, or information from the coverages was transposed by hand onto the topographic quadrangles if the format that it was received in was not compatible with the ESI data format. Following the data compilation phase, two sets of completed maps were sent out to the resource agencies for review, and edits were made based on recommendations by the resource experts. Various publications were used to supplement the information on species composition, seasonality, and concentration that was provided by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity Point

Point_and_Vector_Object_Count: 328

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005
Longitude_Resolution: 0.00005
Geographic_Coordinate_Units: Decimal degrees
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 1980
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, NESTS) 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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 layers 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: NESTS.PAT

Entity_Type_Definition:

The NESTS.PAT table contains attribute information for the vector points representing seabird colony locations. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (5), and record number.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710500001

Range_Domain_Maximum: 710500328

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000020

Range_Domain_Maximum: 71000341

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (5), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 nests for each species present at a particular nesting site, or a term that describes relative abundance of nesting birds at a

particular location. The field may contain counts of nesting pairs (XX), or a descriptive term, such as "HIGH."
In cases where no quantitative count or qualitative description was available, the field is blank. Counts were derived from the last surveyed date at each location, and were provided by resource experts.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg.

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

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the

last two characters are SEASON_ID (eg. ELEMENT = BIRD, SPECIES_ID = 1 and SEASON_ID

= 1; EL_SPE_SEA = B0000101).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Species scientific name for the entire ESI data set
 Enumerated_Domain_Value_Definition: Free text
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT
Attribute_Definition: Major categories of biological data
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: BIRD
 Enumerated_Domain_Value_Definition: Birds
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: FISH
 Enumerated_Domain_Value_Definition: Fish
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: HABITAT
 Enumerated_Domain_Value_Definition: Habitats and plants
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: INVERT
 Enumerated_Domain_Value_Definition: Invertebrates
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: M_MAMMAL
 Enumerated_Domain_Value_Definition: Marine Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: REPTILE
 Enumerated_Domain_Value_Definition: Reptiles and Amphibians
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: T_MAMMAL
 Enumerated_Domain_Value_Definition: Terrestrial Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: amphibian
 Enumerated_Domain_Value_Definition: Amphibian
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: bird
 Enumerated_Domain_Value_Definition: Bird
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: bivalve
 Enumerated_Domain_Value_Definition: Bivalve
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = BIRD and SPECIES_ID = 1; EL_SPE = B00001).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in October

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV

Attribute_Definition: November

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in November

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC

Attribute_Definition: December

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in December

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = BIRD, SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = B0000101).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = BIRD, SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = B0000101).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Any character
 Enumerated_Domain_Value_Definition: Two-letter state abbreviation
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F
Attribute_Definition: State and Federal status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: F
 Enumerated_Domain_Value_Definition: Federally listed
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: S
 Enumerated_Domain_Value_Definition: State listed
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: S/F
 Enumerated_Domain_Value_Definition: State and federally listed
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E
Attribute_Definition: Threatened and endangered status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: E
 Enumerated_Domain_Value_Definition: Endangered on state or federal list
 Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: T
 Enumerated_Domain_Value_Definition: Threatened on state or federal list
 Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: C
 Enumerated_Domain_Value_Definition: Species of special concern
 Enumerated_Domain_Value_Definition_Source:
 Rhode Island Department of Environmental Management, Connecticut Department of
 Environmental Protection, New York State Department of Environmental Conservation, New
 Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:
 Publication date of source material used to assign state and federal status values for each species, if used.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Numeric
 Enumerated_Domain_Value_Definition: mmyyyy
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE
Attribute_Definition:
 Concatenation of ELEMENT and SPECIES_ID. This item links the STATUS data table to the BIORES and
 SPECIES data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = BIRD and SPECIES_ID = 1; EL_SPE = B00001).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: FISH (Fish Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: FISH (Fish Polygons)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for marine, estuarine, and anadromous fish species in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector polygons in this data set represent fish 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 FISHL (Fish Lines) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional fish information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1972 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Fish

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge, and available hardcopy reports and digital data on fish distribution. Refer to the FISHL data layer for additional information on anadromous fish species. These data do not represent all fish occurrences in Rhode Island, Connecticut, and the New York/New Jersey Metropolitan Area. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 65, Bluefish, *Pomatomus saltatrix*; 84, Rainbow smelt, *Osmerus mordax*; 85, Alewife, *Alosa pseudoharengus*; 86, Blueback herring, *Alosa aestivalis*; 87, American shad, *Alosa sapidissima*; 88, Winter flounder, *Pleuronectes americanus*; 89, Cunner, *Tautoglabrus adspersus*; 97, Tautog, *Tautoga onitis*; 98, American eel, *Anguilla rostrata*; 101, Shortnose sturgeon, *Acipenser brevirostrum*; 102, Atlantic sturgeon, *Acipenser oxyrinchus*; 104, Striped bass, *Morone saxatilis*; 105, Hickory shad, *Alosa mediocris*; 108, Summer flounder, *Paralichthys dentatus*; 110, Black sea bass, *Centropristis striata*; 113, Bay anchovy, *Anchoa mitchilli*; 115, Atlantic menhaden, *Brevoortia tyrannus*; 138, Weakfish, *Cynoscion regalis*; 144, Atlantic salmon, *Salmo salar*; 145, White perch, *Morone americana*; 146, Atlantic herring, *Clupea harengus*; 147, Atlantic mackerel, *Scomber scombrus*; 150, Scup (porgy), *Stenotomus chrysops*; 156, American sand lance, *Ammodytes americanus*; 158, Butterfish, *Peprilus triacanthus*; 160, Windowpane flounder, *Scophthalmus aquosus*; 163, Gizzard shad, *Dorosoma cepedianum*; 237, Burbot, *Lota lota*; 283, Killifish, *Fundulus* spp.; 335, Silversides; 500, Sea lamprey, *Petromyzon marinus*; 501, Brown trout (sea run), *Salmo trutta* (sea run); 1016, Skates; 1022, Anadromous fish.

*Positional Accuracy:**Horizontal Positional Accuracy:**Horizontal Positional Accuracy Report:*

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the *Lineage* and *Process Description* sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

*Lineage:**Source Information:**Source Citation:**Citation Information:**Originator:* RIDEM, Marine Fisheries, Wakefield*Publication Date:* Unpublished Material*Title:* Marine and estuarine fish and invertebrate concentrations in RI*Geospatial Data Presentation Form:* Expert knowledge*Type of Source Media:* Personal communication*Source Time Period of Content:**Time Period Information:**Single Date/Time:**Calendar Date:* 2000*Source Currentness Reference:* Date of communication*Source Citation Abbreviation:* None*Source Contribution:* Fish Information*Source Information:**Source Citation:**Citation Information:**Originator:* Lapin, W. & P. Edwards (RIDEM)*Publication Date:* Unpublished Material*Title:* Anadromous fish runs in RI*Geospatial Data Presentation Form:* Expert knowledge*Type of Source Media:* Personal communication*Source Time Period of Content:**Time Period Information:**Single Date/Time:*

Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Temple, J. & R. Satchwill,, (RIDEM)
Publication_Date: Unpublished Material
Title: Coastal pond fish in RI
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Stone et. al
Publication_Date: 1994
Title:
Distribution and Abundance of Fishes and Invertebrates in Mid-Atlantic Estuaries
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Silver Spring, MD
Publisher: ELMR Rep. No. 12. NOAA/NOS, SEAD
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1994
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Lynch, T. (RIDEM, Wakefield)
Publication_Date: Unpublished Material
Title:
Fish and marine mammals in RI; commercial fishing; historical sites
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Howell, P. (CTDEP, Old Lyme)
Publication_Date: Unpublished Material
Title: Inshore finfish and horseshoe crab concentration areas in CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000

Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: Simpson, D. (CTDEP, Old Lyme)
 Publication_Date: Unpublished Material
 Title: Fish concentration areas in CT
 Geospatial_Data_Presentation_Form: Expert knowledge
 Type_of_Source_Media: Personal communication
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
 Source_Currentness_Reference: Date of communication
 Source_Citation_Abbreviation: None
 Source_Contribution: Fish Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: CTDEP (Marine Fisheries, Old Lyme)
 Publication_Date: Unpublished Material
 Title: Fish and invertebrate concentration areas in CT
 Geospatial_Data_Presentation_Form: Expert knowledge
 Type_of_Source_Media: Personal communication
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
 Source_Currentness_Reference: Date of communication
 Source_Citation_Abbreviation: None
 Source_Contribution: Fish Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: CTDEP (Marine Fisheries, Old Lyme)
 Publication_Date: Unpublished Material
 Title: Anadromous fish runs in CT
 Geospatial_Data_Presentation_Form: Hardcopy map
 Type_of_Source_Media: Paper
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 1993
 Source_Currentness_Reference: Date of survey
 Source_Citation_Abbreviation: None
 Source_Contribution: Fish Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: Gephard, S. (CTDEP, Old Lyme)
 Publication_Date: Unpublished Material
 Title: Anadromous fish seasonality for CT
 Geospatial_Data_Presentation_Form: Expert knowledge
 Type_of_Source_Media: Personal communication
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
 Source_Currentness_Reference: Date of communication
 Source_Citation_Abbreviation: None
 Source_Contribution: Fish Information
Source_Information:
 Source_Citation:
 Citation_Information:

Originator: CTDEP (EGIC, Hartford)
Publication_Date: 1997
Title: Shortnose sturgeon distribution
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: Hartford, Connecticut
Publisher: Data contact: Karen Zyko (CTDEP, EGIC), 860/424-3540
Source_Scale_Denominator: Unknown
Type_of_Source_Media: Floppy disk
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1997
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Young, B. (NYSDEC, E. Setauket)
Publication_Date: Unpublished Material
Title: Fish and invertebrate distribution and seasonality in NY
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Zich, H.E.
Publication_Date: 1977
Title: New Jersey Anadromous Fish Inventory
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Lebanon, NJ
Publisher: NJDEP DFG&S, Bureau of Fisheries
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1972
Ending_Date: 1976
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Byrne, D. (NJDEP, Port Republic)
Publication_Date: Unpublished Material
Title:
Fish and invertebrate distribution and seasonality information for NJ
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information

Source Information:

Source Citation:

Citation Information:

Originator: CTDEP (EGIC, Hartford)

Publication Date: 1999

Title: Natural Diversity Database for CT

Geospatial Data Presentation Form: Digital points

Publication Information:

Publication Place: Connecticut

Publisher: Data contact: Karen Zyko; CTDEP, EGIC; 860/424-3540

Source Scale Denominator: 24000

Type of Source Media: Email

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1999

Source Currentness Reference: Date of publication

Source Citation Abbreviation: None

Source Contribution: Fish Information

Source Information:

Source Citation:

Citation Information:

Originator: NYSDEC Natural Heritage Program

Publication Date: 2000

Title: NY Natural Heritage Program Data

Geospatial Data Presentation Form: Digital points

Publication Information:

Publication Place: Latham, NY

Publisher: Data contact: Nick Conrad (NYNHP, Latham), 518/783-3922

Source Scale Denominator: 24000

Type of Source Media: Email

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of publication

Source Citation Abbreviation: None

Source Contribution: Fish Information

Source Information:

Source Citation:

Citation Information:

Originator: NYSDEC Natural Heritage Program

Publication Date: Unpublished Material

Title: Seasonality for NY Natural Heritage Program data

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Fish Information

Source Information:

Source Citation:

Citation Information:

Originator: Oviatt, C. (URI GSO)

Publication Date: Unpublished Material

Title:

Eelgrass, macroalgae, invertebrate, marine mammal and fish distribution for RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2001

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Fish Information

Process_Step:

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 Rhode Island Department of Environmental Management (RI DEM), Connecticut Department of Environmental Protection (CT DEP), New York State Department of Environmental Conservation (NYS DEC), New Jersey Department of Environmental Protection (NJ DEP), and University of Rhode Island (URI); and 2) various hardcopy reports and books. Information gathered during initial interviews and from hardcopy maps and reports was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. A 1997 CT DEP digital polygon coverage was used to depict shortnose sturgeon (S/F endangered) distribution in the Connecticut River. Following the data compilation phase, two sets of completed maps were sent out to the resource agencies for review, and edits were made based on recommendations by the resource experts. Various publications were used to supplement the information on species composition, seasonality, and concentration that was provided by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 1857

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 1857

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 3854

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 690211

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 3389

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

*Entity_and_Attribute_Information:**Overview_Description:**Entity_and_Attribute_Overview:*

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, FISH) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

*Detailed_Description:**Entity_Type:**Entity_Type_Label:* FISH.PAT*Entity_Type_Definition:*

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

Entity_Type_Definition_Source: Research Planning, Inc.*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 (71), element number (2), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA*Attribute_Domain_Values:**Range_Domain:**Range_Domain_Minimum:* 710200002*Range_Domain_Maximum:* 710201867*Attribute:**Attribute_Label:* RARNUM*Attribute_Definition:*

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

Attribute_Definition_Source: NOAA*Attribute_Domain_Values:**Range_Domain:**Range_Domain_Minimum:* 71000628*Range_Domain_Maximum:* 71000830*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 BIORRES 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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (2), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORRES

Entity_Type_Definition:

The data table BIORRES 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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORRES 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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 species at a particular location. The descriptive terms "VERY HIGH," "HIGH," "MEDIUM," and "LOW" were used to describe the relative abundance of particular fish species at specific locations. The descriptive terms "MAJOR" and "POSSIBLE" were used to describe the importance of, and the possibility of the occurrence of, anadromous runs, respectively. In cases where no qualitative description was available, the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME
Attribute_Definition: Species common name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Species common name for the entire ESI data set
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC
Attribute_Definition: Species scientific name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Species scientific name for the entire ESI data set.
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: waterfowl
Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wetland
Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: whale
Enumerated_Domain_Value_Definition: Whale
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP
Attribute_Definition: Natural Heritage Program global ranking
Attribute_Definition_Source: Network of Natural Heritage Program
Attribute_Domain_Values:
Codeset_Domain:
Codeset_Name: NHP Global Conservation Status Rank
Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition: Date of NHP listing
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: 0
Enumerated_Domain_Value_Definition: Not ranked
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Numeric
Enumerated_Domain_Value_Definition: mmyyyy
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE
Attribute_Definition:
Concatenation of ELEMENT and SPECIES_ID. This item links records in the SPECIES data table to records in the BIORRES and STATUS data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT
Attribute_Definition: Major categories of biological data
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N
Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: X
 Enumerated_Domain_Value_Definition: Present in November
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: X
 Enumerated_Domain_Value_Definition: Present in December
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
 Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the SEASONAL data table to records in the BIORES and BREED data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: E#####
 Enumerated_Domain_Value_Definition:
 Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
 Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BREED data table to records in the BIORES and SEASONAL data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: E#####
 Enumerated_Domain_Value_Definition:
 Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH
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: Research Planning, Inc.
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/mating; if

ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating.

This attribute is not used for HABITAT or T_MAMMAL.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of

Environmental Protection, New York State Department of Environmental Conservation, New

Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg.

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

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: FISHL (Fish Lines)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: FISHL (Fish Lines)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for anadromous fish species in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector arcs in this data set represent species occurrences in streams. 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, and, New York, and New Jersey. 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 (Fish Polygons) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional fish information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1972 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Fish

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and available hardcopy maps and reports on anadromous fish species distribution. Refer to the FISH (Fish Polygons) data layer for additional anadromous fish species occurrence data. These data do not represent all anadromous fish species occurrences in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 65, Bluefish, Pomatomus saltatrix; 84, Rainbow smelt, Osmerus mordax; 85, Alewife, Alosa pseudoharengus; 86, Blueback herring, Alosa aestivalis; 87, American shad, Alosa sapidissima; 88, Winter flounder, Pleuronectes americanus; 97, Tautog, Tautoga onitis; 98, American eel, Anguilla rostrata; 104, Striped bass, Morone saxatilis; 110, Black sea bass, Centropristis striata; 113, Bay anchovy, Anchoa mitchilli; 115, Atlantic menhaden, Brevoortia tyrannus; 138, Weakfish, Cynoscion regalis; 145, White perch, Morone americana; 147, Atlantic mackerel, Scomber scombrus; 156, American sand lance, Ammodytes americanus; 163, Gizzard shad, Dorosoma cepedianum; 283, Killifish, Fundulus spp.; 335, Silversides; 500, Sea lamprey, Petromyzon marinus; 501, Brown trout (sea run), Salmo trutta (sea run).

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Lapin, W. & P. Edwards (RIDEM)

Publication Date: Unpublished Material

Title: Anadromous fish runs in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Fish Information

Source Information:

Source Citation:

Citation Information:

Originator: Stone et. al

Publication Date: 1994

Title:

Distribution and Abundance of Fishes and Invertebrates in Mid-Atlantic Estuaries

Geospatial Data Presentation Form: Hardcopy text

Publication Information:

Publication Place: Silver Spring, MD

Publisher: ELMR Rep. No. 12. NOAA/NOS, SEAD, Silver Spring, MD. 280 p.

Type of Source Media: Paper

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar_Date: 1994
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDEP (Marine Fisheries, Old Lyme)
Publication_Date: Unpublished Material
Title: Anadromous fish runs in CT
Geospatial_Data_Presentation_Form: Hardcopy map
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1993
Source_Currentness_Reference: Date of survey
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Gephard, S. (CTDEP, Old Lyme)
Publication_Date: Unpublished Material
Title: Anadromous fish seasonality for CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Zich, H.E.
Publication_Date: 1977
Title: New Jersey Anadromous Fish Inventory
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Lebanon, NJ
Publisher: NJDEP DFG&S, Bureau of Fisheries
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1972
Ending_Date: 1976
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Fish Information

Process_Step:

Process_Description:

Two main sources of data were used for this data layer: 1) personal interviews with resource experts from Rhode Island Department of Environmental Management (RI DEM), Connecticut Department of Environmental Protection (CT DEP), New York State Department of Environmental Conservation (NYS DEC), and New Jersey Department of Environmental Protection (NJ DEP); and 2) hardcopy maps and reports. Information on the distribution of anadromous fish species in streams was gathered during a set of interviews and from maps and reports that were provided by resource experts, and was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Occurrences of anadromous fish species were mapped as lines that represented the extent of their distribution in each stream. Following the data compilation phase, two sets of completed maps were sent out to the resource agencies for review, and edits were made based on recommendations by the resource experts. Various publications were used to supplement the information on species composition, seasonality, and concentration that was provided by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete Chain

Point_and_Vector_Object_Count: 212

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 43198

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 319

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, FISHL) 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: FISHL.AAT

Entity_Type_Definition:

The FISHL.AAT table contains attribute information for the vector lines representing anadromous fish runs in Rhode Island, Connecticut, New York, and New Jersey. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (22; 20 because it is a line feature, plus 2, the element value for FISH), and record number.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 712200001

Range_Domain_Maximum: 712200224

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000628

Range_Domain_Maximum: 71000702

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (22; 20 because it is a line feature, plus 2, the element value for FISH), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 species at a particular location. The descriptive terms "HIGH" and "LOW" were used to describe the relative abundance of particular anadromous fish species at specific locations. In cases where a qualitative description was not available, the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg.

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

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species scientific name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: M_MAMMAL
 Enumerated_Domain_Value_Definition: Marine Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: REPTILE
 Enumerated_Domain_Value_Definition: Reptiles and Amphibians
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: T_MAMMAL
 Enumerated_Domain_Value_Definition: Terrestrial Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
 Attribute_Label: SUBELEMENT
 Attribute_Definition: Element subgroup delineating a logical grouping of species.
 Attribute_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: amphibian
 Enumerated_Domain_Value_Definition: Amphibian
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: bird
 Enumerated_Domain_Value_Definition: Bird
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: bivalve
 Enumerated_Domain_Value_Definition: Bivalve
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: cephalopod
 Enumerated_Domain_Value_Definition: Cephalopod
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: crab
 Enumerated_Domain_Value_Definition: Crab
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: diadromous
 Enumerated_Domain_Value_Definition: Diadromous fish
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: diving
 Enumerated_Domain_Value_Definition: Diving bird
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: e_nursery
 Enumerated_Domain_Value_Definition: Estuarine nursery fish
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: e_resident
 Enumerated_Domain_Value_Definition: Estuarine resident fish
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
 Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: waterfowl
Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wetland
Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: whale
Enumerated_Domain_Value_Definition: Whale
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: NHP
Attribute_Definition: Natural Heritage Program global ranking
Attribute_Definition_Source: Network of Natural Heritage Program
Attribute_Domain_Values:
Codeset_Domain:
Codeset_Name: NHP Global Conservation Status Rank
Codeset_Source: Natural Heritage Program

Attribute:
Attribute_Label: DATE_PUB
Attribute_Definition: Date of NHP listing
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: 0
Enumerated_Domain_Value_Definition: Not ranked
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP

Attribute_Definition: September

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in September

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT

Attribute_Definition: October

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in October

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV

Attribute_Definition: November

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in November

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC

Attribute_Definition: December

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in December

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED2 = laying; if ELEMENT is

"FISH" then BREED2 = eggs; if ELEMENT is "INVERT" then BREED2 = eggs; if ELEMENT is "REPTILE" then BREED2 = hatching; if ELEMENT is "M_MAMMAL" then BREED2 = calving. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and Plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Two-letter state abbreviation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: S_F
Attribute_Definition: State and Federal status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: F
Enumerated_Domain_Value_Definition: Federally listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: State listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: S/F
Enumerated_Domain_Value_Definition: State and federally listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: T_E
Attribute_Definition: Threatened and endangered status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.7.23 on Mon Apr 08 14:36:21 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: INVERT (Invertebrate Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: INVERT (Invertebrate Polygons)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for marine, estuarine, and terrestrial invertebrate species in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector polygons in this data set represent invertebrate 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 (Invertebrate Points) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1983 to 2001 and are documented in the *Source Information* section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Invertebrate

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and available hardcopy maps and digital data on invertebrate distribution. Refer to the INVERTPT (Invertebrate Points) data layer for additional information on rare invertebrate species. These data do not represent all invertebrate occurrences in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 19, Blue mussel, *Mytilus edulis*; 25, Softshell clam, *Mya arenaria*; 42, Northern quahog (hard clam), *Mercenaria mercenaria*; 43, Eastern oyster, *Crassostrea virginica*; 44, Horseshoe crab, *Limulus polyphemus*; 45, American lobster, *Homarus americanus*; 49, Blue crab, *Callinectes sapidus*; 73, Longfin squid, *Loligo pealeii*; 287, Atlantic surfclam, *Spisula solidissima*; 373, Claybanks tiger beetle, *Cicindela limbalis*; 374, Saltmarsh tiger beetle, *Cicindela marginata*; 375, Puritan tiger beetle, *Cicindela puritana*.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: RIDEM, Marine Fisheries, Wakefield

Publication Date:

Unpublished Material 2000

Title: Marine and estuarine fish and invertebrate concentrations in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Invertebrate Information

Source Information:

Source Citation:

Citation Information:

Originator: Angel, T. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title: Lobster concentration areas in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Invertebrate Information

Source Information:

Source_Citation:

Citation_Information:

Originator: Ganz, A. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title: Shellfish concentration areas and commercial fishing in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Stone et. al

Publication_Date: 1994

Title:

Distribution and Abundance of Fishes and Invertebrates in Mid-Atlantic Estuaries

Geospatial_Data_Presentation_Form: Hardcopy text

Publication_Information:

Publication_Place: Silver Spring, MD

Publisher: ELMR Rep. No. 12. NOAA/NOS, SEAD, Silver Spring, MD. 280 p.

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1994

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Howell, P. (CTDEP, Old Lyme)

Publication_Date: Unpublished Material

Title: Inshore finfish and horseshoe crab concentration areas in CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP (Marine Fisheries, Old Lyme)

Publication_Date: Unpublished Material

Title: Fish and invertebrate concentration areas in CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Gottschall, K. (CTDEP, Old Lyme)
Publication_Date: Unpublished Material
Title: Lobster concentration areas in CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Victoria, J. (CTDEP, N. Franklin)
Publication_Date: Unpublished Material
Title: Bird and protected species distribution and seasonality for CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Johnson, M. & K. Gottschall (CTDEP)
Publication_Date: Unpublished Material
Title: Lobster concentration areas in CT
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDOA &CTDEP
Publication_Date: 2000
Title: Oyster concentration areas in CT
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: Hartford, CT
Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034
Source_Scale_Denominator: Unknown
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1984
Ending_Date: 1989
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDOA &CTDEP

Publication_Date: Unpublished Material
Title: Softshell clam concentration areas in CT
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
 Publication_Place: Hartford, CT
 Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034
Source_Scale_Denominator: Unknown
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1984
 Ending_Date: 1989
 Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: CTDOA &CTDEP
 Publication_Date: 2000
 Title: Hard clam concentration areas in CT
 Geospatial_Data_Presentation_Form: Digital polys
 Publication_Information:
 Publication_Place: Hartford, CT
 Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034
 Source_Scale_Denominator: Unknown
 Type_of_Source_Media: Email
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1984
 Ending_Date: 1989
 Source_Currentness_Reference: Dates of surveys
 Source_Citation_Abbreviation: None
 Source_Contribution: Invertebrate Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: Young, B. (NYSDEC, E. Setauket)
 Publication_Date: Unpublished Material
 Title: Fish and invertebrate distribution and seasonality in NY
 Geospatial_Data_Presentation_Form: Expert knowledge
 Type_of_Source_Media: Personal communication
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
 Source_Currentness_Reference: Date of communication
 Source_Citation_Abbreviation: None
 Source_Contribution: Invertebrate Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: NYSDEC (Marine Res., E. Setauket)
 Publication_Date: Unpublished Material
 Title: Loster and crab concentration areas in NY
 Geospatial_Data_Presentation_Form: Expert knowledge
 Type_of_Source_Media: Personal communication
 Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
 Source_Currentness_Reference: Date of communication
 Source_Citation_Abbreviation: None
 Source_Contribution: Invertebrate Information

Source Information:

Source Citation:

Citation Information:

Originator: Barnes, D. & B. Cunningham (NYSDEC)

Publication Date: Unpublished Material

Title: Shellfish concentration areas and aquaculture sites in NY

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Invertebrate Information

Source Information:

Source Citation:

Citation Information:

Originator: Davidson, M. (NYSDEC, E. Setauket)

Publication Date: Unpublished Material

Title: Surf clam concentration areas in NY

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1999

Source Currentness Reference: Date of survey

Source Citation Abbreviation: None

Source Contribution: Invertebrate Information

Source Information:

Source Citation:

Citation Information:

Originator: Burger, J. (Rutgers Univ.)

Publication Date: Unpublished Material

Title:

Shorebird, wading bird, horseshoe crab, and terrapin concentration areas in NJ

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Invertebrate Information

Source Information:

Source Citation:

Citation Information:

Originator: Brockman, J. (Univ. of FL)

Publication Date: Unpublished Material

Title: Horseshoe crab seasonality

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Invertebrate Information

Source Information:

Source Citation:

Citation Information:

Originator: Byrne, D. (NJDEP, Port Republic)

Publication Date: Unpublished Material

Title:
Fish and invertebrate distribution and seasonality information for NJ
Geospatial Data Presentation Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: 2000
Source Currentness Reference: Date of communication
Source Citation Abbreviation: None
Source Contribution: Invertebrate Information
Source Information:
Source Citation:
Citation Information:
Originator: Normant, J. (NJDEP, Port Republic)
Publication Date: Unpublished Material
Title: Invertebrate and habitat distribution and information for NJ
Geospatial Data Presentation Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: 2000
Source Currentness Reference: Date of communication
Source Citation Abbreviation: None
Source Contribution: Invertebrate Information
Source Information:
Source Citation:
Citation Information:
Originator: NJDEP (Bureau of Shellfisheries)
Publication Date: 1986
Title: Shellfish and eelgrass concentration areas in NJ
Geospatial Data Presentation Form: Hardcopy maps
Publication Information:
Publication Place: Port Republic, NJ
Publisher:
Data contact: Jeff Normant, (NJDEP, Port Republic), 609-748-2040
Source Scale Denominator: Various
Type_of_Source_Media: Paper
Source Time Period of Content:
Time Period Information:
Range of Dates/Times:
Beginning Date: 1983
Ending Date: 1989
Source Currentness Reference: Dates of surveys
Source Citation Abbreviation: None
Source Contribution: Invertebrate Information
Source Information:
Source Citation:
Citation Information:
Originator: Kline, N. (USFWS)
Publication Date: Unpublished Material
Title: Rare terrestrial plant and invertebrate locations in RI
Geospatial Data Presentation Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source Time Period of Content:
Time Period Information:
Single Date/Time:
Calendar Date: 2000
Source Currentness Reference: Date of communication
Source Citation Abbreviation: None
Source Contribution: Invertebrate Information
Source Information:
Source Citation:
Citation Information:
Originator: Oviatt, C. (URI GSO)

Publication_Date: Unpublished Material

Title:

Elgrass, macroalgae, invertebrate, marine mammal and fish distribution for RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2001

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information

Process_Step:

Process_Description:

Three main sources of data were used to depict invertebrate distribution for this data layer: 1) personal interviews with resource experts from Rhode Island Department of Environmental Management (RI DEM), Connecticut Department of Environmental Protection (CT DEP), New York State Department of Environmental Conservation (NYS DEC), Rutgers University, New Jersey Department of Environmental Protection (NJ DEP), U.S. Fish and Wildlife Service (USFWS), and University of Rhode Island Graduate School of Oceanography (URI GSO); 2) three 2000 Connecticut Department of Agriculture (CT DOA) oyster, softshell clam, and hard clam digital polygon coverages; and 3) hardcopy maps provided by RI DEM Marine Fisheries and NJ DEP Bureau of Shellfisheries. Information gathered during a set of interviews and from hardcopy maps was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. The 2000 CT DOA digital shellfish coverages were incorporated into the ESI data structure and plotted onto the hardcopy maps. Following the data compilation phase, two sets of completed maps were sent to the resource agencies for review, and edits were made based on recommendations by the resource experts. Other publications were also used to supplement the information on species composition and seasonality that was provided by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 2932

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 2932

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 7380

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 856368

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 5888

Spatial_Reference_Information:

*Horizontal_Coordinate_System_Definition:**Geographic:**Latitude_Resolution:* 0.00005*Longitude_Resolution:* 0.00005*Geographic_Coordinate_Units:* Decimal degrees*Geodetic_Model:**Horizontal_Datum_Name:* North American Datum of 1983*Ellipsoid_Name:* Geodetic Reference System 1980*Semi-major_Axis:* 6378137*Denominator_of_Flattening_Ratio:* 298.257222*Entity_and_Attribute_Information:**Overview_Description:**Entity_and_Attribute_Overview:*

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, INVERT) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

*Detailed_Description:**Entity_Type:**Entity_Type_Label:* INVERT.PAT*Entity_Type_Definition:*

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

Entity_Type_Definition_Source: Research Planning, Inc.*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 (71), element number (7), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA*Attribute_Domain_Values:**Range_Domain:**Range_Domain_Minimum:* 710700002*Range_Domain_Maximum:* 710703362*Attribute:**Attribute_Label:* RARNUM*Attribute_Definition:*

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000880

Range_Domain_Maximum: 71001130

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (7), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 species at a particular location. The descriptive terms "ABUNDANT," "MODERATE," "MOD/ABUND," "VERY HIGH," "HIGH," and "MEDIUM" were used to describe the relative abundance of particular invertebrate species at specific locations. In cases where no qualitative description was available, the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set
Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species scientific name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N
Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the SEASONAL data table to records in the BIORES and BREED data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BREED data table to records in the BIORES and SEASONAL data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH
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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Numeric
Enumerated_Domain_Value_Definition: mmyyyy
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: integer
Enumerated_Domain_Value_Definition: Any integer
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: INVERTPT (Invertebrate Points)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: INVERTPT (Invertebrate Points)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for rare terrestrial invertebrates in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector points in this data set represent invertebrate species occurrences. 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 (Invertebrate Polygons) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional invertebrate information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1994 to 2001 and are documented in the Source Information section

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Invertebrate

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical_Consistency_Report:

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

Completeness_Report:

These data represent a synthesis of Natural Heritage Program (NHP) digital point data on invertebrate species locations. Refer to the INVERT (Invertebrate Polygons) data layer for additional rare invertebrate species occurrence data. These data do not represent all rare invertebrate species occurrences in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 366, Woodland pondsnail, *Stagnicola catascopium*; 367, Eastern pondmussel, *Ligumia nasuta*; 368, Virginia river snail, *Elimia virginica*; 369, Turret snail, *Valvata tricarinata*; 370, Maritime sunflower borer, *Papaipema maritima*; 371, Mottled duskywing, *Erynnis martialis*; 372, Goldenrod stem borer, *Papaipema duovata*; 375, Puritan tiger beetle, *Cicindela puritana*; 376, Tiger beetle, *Cicindela tranquebarica*; 377, Tidewater mucket, *Leptodea ochracea*; 378, Rare insect.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the *Lineage* and *Process_Description* sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Stone et. al
Publication_Date: 1994
Title:

Distribution and Abundance of Fishes and Invertebrates in Mid-Atlantic Estuaries

Geospatial_Data_Presentation_Form: Hardcopy text

Publication_Information:

Publication_Place: Silver Spring, MD
Publisher: ELMR Rep. No. 12. NOAA/NOS, SEAD.

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:
Calendar_Date: 1994

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Victoria, J. (CTDEP, N. Franklin)
Publication_Date: Unpublished Material
Title: Bird and protected species distribution and seasonality for CT
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:
Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDEP (EGIC, Hartford)
Publication_Date: 1999
Title: Natural Diversity Database for CT
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Connecticut
Publisher: Data contact: Karen Zyko; CTDEP, EGIC; 860/424-3540
Source_Scale_Denominator: 24000
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYSDEC Natural Heritage Program
Publication_Date: 2000
Title: NY Natural Heritage Program Data
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Latham, NY
Publisher: Data contact: Nick Conrad (NYNHP, Latham), 518/783-3922
Source_Scale_Denominator: 24000
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYSDEC Natural Heritage Program
Publication_Date: Unpublished Material
Title: Seasonality for NY Natural Heritage Program data
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Invertebrate Information
Process_Step:
Process_Description:
Connecticut and New York State Natural Heritage Program (NHP) occurrence data for rare terrestrial invertebrate species were used for this data layer. The data were converted into the ESI data format and plotted onto draft maps. Following the data compilation phase, two sets of draft maps were sent to the resource agencies for review, and edits were made based on recommendations by the resource experts.
Process_Date: 200109
Process_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: NOAA, Office of Response and Restoration
Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349
Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity Point

Point_and_Vector_Object_Count: 27

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: INVERTPT.PAT

Entity_Type_Definition:

The INVERTPT.PAT table contains attribute information for the vector points representing native stream and threatened/endangered invertebrate species in Rhode Island, Connecticut, New York, and New Jersey. Note that all attribute information is stored in a series of relational files, described below. See the [Browse_Graphic](#) section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (37; 30 because it is a point feature, plus 7, the element value for INVERT), and record number.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 713700001

Range_Domain_Maximum: 713700027

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000923

Range_Domain_Maximum: 71000935

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (37; 30 because it is a point feature, plus 7, the element value for INVERT), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 species at a particular location. No concentration information was available for the invertebrate points data layer.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species scientific name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous

Enumerated_Domain_Value_Definition: Diadromous fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_nursery

Enumerated_Domain_Value_Definition: Estuarine nursery fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: e_resident

Enumerated_Domain_Value_Definition: Estuarine resident fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: dolphin

Enumerated_Domain_Value_Definition: Dolphin

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: fish

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: freshwater

Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: waterfowl
Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wetland
Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: whale
Enumerated_Domain_Value_Definition: Whale
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: NHP
Attribute_Definition: Natural Heritage Program global ranking
Attribute_Definition_Source: Network of Natural Heritage Program
Attribute_Domain_Values:
Codeset_Domain:
Codeset_Name: NHP Global Conservation Status Rank
Codeset_Source: Natural Heritage Program
Attribute:
Attribute_Label: DATE_PUB
Attribute_Definition: Date of NHP listing
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: 0
Enumerated_Domain_Value_Definition: Not ranked
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Numeric
Enumerated_Domain_Value_Definition: mmyyyy
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: EL_SPE
Attribute_Definition:
Concatenation of ELEMENT and SPECIES_ID. This item links records in the SPECIES data table to records in the BIORES and STATUS data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION
Attribute_Definition: Additional citation information
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE
Attribute_Definition: Scale denominator of the source
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: integer
Enumerated_Domain_Value_Definition: Any integer
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Numeric
Enumerated_Domain_Value_Definition: yyyy
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT
Attribute_Definition: Major categories of biological data
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: BIRD
Enumerated_Domain_Value_Definition: Birds
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and Plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Two-letter state abbreviation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: S_F
Attribute_Definition: State and Federal status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: F
Enumerated_Domain_Value_Definition: Federally listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: State listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: S/F
Enumerated_Domain_Value_Definition: State and federally listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: T_E
Attribute_Definition: Threatened and endangered status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on state or federal list
Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on state or federal list
Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.7.23 on Thu Apr 11 15:52:25 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: M_MAMMAL (Marine Mammal Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: M_MAMMAL (Marine Mammal Polygons)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series Information:

Series_Name: None

Issue_Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for seals, whales, and dolphins in coastal Rhode Island, Connecticut, and the New York/New Jersey Metropolitan Area. Vector polygons in this data set represent marine mammal distribution and seal haul-out 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, and the New York/New Jersey Metropolitan Area. 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 M_MAMPT (Marine Mammal Points) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1999 to 2001 and are documented in the Source_Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Marine Mammal

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

listed in the Lineage section.

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and available hardcopy reports on marine mammal distribution. Refer to the M_MAMPT (Marine Mammal Points) data layer for additional seal haul-out information. These data do not represent all marine mammal occurrences in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 2, Harbor seal, Phoca vitulina; 6, Harbor porpoise, Phocoena phocoena; 11, Fin whale, Balaenoptera physalus; 12, Minke whale, Balaenoptera acutorostrata; 13, Humpback whale, Megaptera novaeangliae; 14, Gray seal, Halichoerus grypus; 17, Bottlenose dolphin, Tursiops truncatus; 60, Saddle-backed dolphin, Delphinus delphis; 81, Northern right whale, Eubalaena glacialis; 84, Hooded seal, Cystophora cristata; 85, Harp seal, Pagophilus groenlandicus; 86, Atlantic white-sided dolphin, Lagenorhynchus acutus.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Valliere, A. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title: Marine mammal concentration areas in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Date of communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Marine Mammal Information

Source Information:

Source Citation:

Citation Information:

Originator: Satchwill, R. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title: Marine mammal concentration areas in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Date of communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Marine Mammal Information

Source Information:

Source_Citation:

Citation_Information:

Originator: Early, G. (NE Aquarium, Boston)

Publication_Date: Unpublished Material

Title: Marine mammal and sea turtle seasonality and distribution in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Marine Mammal Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Powell, C. (RIDEM, Wickford)

Publication_Date: Unpublished Material

Title: Fish and marine mammal distribution and seasonality in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Marine Mammal Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Tefft, B. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title: Bird and marine mammal concentration areas in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Marine Mammal Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Nawojchik, R. (Mystic Aquarium)

Publication_Date: Unpublished Material

Title: Marine mammal and sea turtle seasonality and distribution in CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Marine Mammal Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Durham, K. (Riverhead Foundation)

Publication_Date: Unpublished Material

Title: Marine mammal and sea turtle distribution and seasonality in NY

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Wynne, K. & M. Schwartz
Publication_Date: 1999
Title: Marine Mammals & Turtles of the U.S. Atlantic & Gulf of Mexico
Geospatial_Data_Presentation_Form: Hardcopy text
Publication_Information:
Publication_Place: Narragansett, RI
Publisher: Rhode Island Sea Grant, Narragansett, RI, 114 p.

Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Schoelkopf, R. (MMSA, Brigantine)
Publication_Date: Unpublished Material
Title: Marine mammal and sea turtle distribution and seasonality in NJ
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Schroeder, C. (URI GSO)
Publication_Date: Unpublished Material
Title: Seal haulout sites and marine mammal concentration areas in RI
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Oviatt, C. (URI GSO)
Publication_Date: Unpublished Material
Title:
Eelgrass, macroalgae, invertebrate, marine mammal and fish distribution for RI
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:

Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYS DEC
Publication_Date: Unpublished Material
Title: Seal haul-out sites
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Process_Step:
Process_Description:
The main source of data used to depict marine mammal distribution for this data layer was personal interviews with resource experts from Rhode Island Department of Environmental Management (RIDEM), New England Aquarium, Mystic Aquarium, Riverhead Foundation, Marine Mammal Stranding Center, University of Rhode Island Graduate School of Oceanography (URI GSO), and New York State Department of Environmental Conservation (NYS DEC). Information gathered during a set of interviews was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Following the data compilation phase, two sets of maps were sent to resource agencies for review, and edits were made based on recommendations by the resource experts. Various publications were used to supplement the information on species composition, seasonality, and concentration that was provided by the resource experts.
Process_Date: 200109
Process_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: NOAA, Office of Response and Restoration
Contact_Person: Jill Petersen
Contact_Address:
Address_Type: Physical address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349
Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings
Point_and_Vector_Object_Count: 1142
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Area point
Point_and_Vector_Object_Count: 1142
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Complete chain
Point_and_Vector_Object_Count: 2265
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Link
Point_and_Vector_Object_Count: 512814
SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph
Point_and_Vector_Object_Count: 2170

Spatial Reference Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute Information:

Overview Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, M_MAMMAL) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the Rhode Island, Connecticut, New York, and New Jersey atlas, it is 71), 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, T_E, 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.

Detailed Description:

Entity_Type:

Entity_Type_Label: M_MAMMAL.PAT

Entity_Type_Definition:

The M_MAMMAL.PAT table contains attribute information for the vector polygons representing marine mammal distribution. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (4), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710400002

Range_Domain_Maximum: 710401150

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71001131

Range_Domain_Maximum: 71001184

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (4), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values and contains non-numerical terms that are used to describe the relative abundance of particular marine mammal species. The descriptive terms "UNCOMMON," "LOW," "MEDIUM," and "HIGH" were used to describe the relative abundance of marine mammal species at a particular location. In cases where no quantitative count or qualitative description was available, the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME
Attribute_Definition: Species common name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Species common name for the entire ESI data set
 Enumerated_Domain_Value_Definition: Free text
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC
Attribute_Definition: Species scientific name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Species scientific name for the entire ESI data set
 Enumerated_Domain_Value_Definition: Free text
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT
Attribute_Definition: Major categories of biological data
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: BIRD
 Enumerated_Domain_Value_Definition: Birds
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
 Enumerated_Domain_Value: FISH
 Enumerated_Domain_Value_Definition: Fish
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
 Enumerated_Domain_Value: HABITAT
 Enumerated_Domain_Value_Definition: Habitats and plants
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
 Enumerated_Domain_Value: INVERT
 Enumerated_Domain_Value_Definition: Invertebrates
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
 Enumerated_Domain_Value: M_MAMMAL
 Enumerated_Domain_Value_Definition: Marine Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
 Enumerated_Domain_Value: REPTILE
 Enumerated_Domain_Value_Definition: Reptiles and Amphibians
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
 Enumerated_Domain_Value: T_MAMMAL
 Enumerated_Domain_Value_Definition: Terrestrial Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: amphibian
 Enumerated_Domain_Value_Definition: Amphibian
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: bird
Enumerated_Domain_Value_Definition: Bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bivalve
Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP

Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: X
 Enumerated_Domain_Value_Definition: Present in September
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: X
 Enumerated_Domain_Value_Definition: Present in October
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: X
 Enumerated_Domain_Value_Definition: Present in November
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: X
 Enumerated_Domain_Value_Definition: Present in December
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
 Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the SEASONAL data table to records in the BIORES and BREED data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: E#####
 Enumerated_Domain_Value_Definition:
 Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
 Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BREED data table to records in the BIORES and SEASONAL data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: E#####
 Enumerated_Domain_Value_Definition:
 Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the

last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and
SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

Life history stage or activity type, where: if ELEMENT is "BIRD" then BREED3 = hatching; if ELEMENT is "FISH" then BREED3 = larvae; if ELEMENT is "INVERT" then BREED3 = larvae; if ELEMENT is "REPTILE" then BREED3 = interesting; if ELEMENT is "M_MAMMAL" then BREED3 = pupping. This

attribute is not used for HABITAT or T_MAMMAL elements

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of

Environmental Protection, New York State Department of Environmental Conservation, New

Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

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

Generated by [mp](#) version 2.7.23 on Thu Apr 11 15:49:46 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: M_MAMPT (Marine Mammal Points)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: M_MAMPT (Marine Mammal Points)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series Information:

Series_Name: None

Issue_Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for seal haul-out sites in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector points in this data set represent seal haul-out 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 M_MAMMAL (Marine Mammal Polygons) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional information.

Purpose:

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

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness_Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1992 to 2001 and are documented in the Source_Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Marine Mammal

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge on seal haul-out sites. Refer to the M_MAMMAL (Marine Mammal Polygons) data layer for additional seal haul-out site information. These data do not represent all seal haul-out sites in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 2, Harbor seal, *Phoca vitulina*; 14, Gray seal, *Halichoerus grypus*; 1002, Seals.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Valliere, A. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title: Marine mammal concentration areas in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Date of communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Marine Mammal Information

Source Information:

Source Citation:

Citation Information:

Originator: Satchwill, R. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title: Marine mammal concentration areas in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Date of communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Marine Mammal Information

Source Information:

Source Citation:

Citation Information:

Originator: Powell, C. (RIDEM, Wickford)

Publication Date: Unpublished Material

Title: Fish and marine mammal distribution and seasonality in RI

Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: RI Resource Protection Project
Publication_Date: 1996
Title: Seal haulout sites in RI
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Rhode Island, <<http://www.edc.uri.edu/rirpp/Text/gisdata.htm>>
Publisher: RI Resource Protection Project
Source_Scale_Denominator: 40000
Type_of_Source_Media: Date of communication
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1992
Ending_Date: 1996
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Marine Mammal Information
Process_Step:
Process_Description:
Two main sources were used to depict seal haul-out sites for this data layer: 1) Personal interviews with resource experts from Rhode Island Department of Environmental Management (RI DEM), and 2) a 1996 Rhode Island Resource Protection Project (RIRPP) digital point coverage of seal haul-out sites. Information gathered during a set of interviews was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. The 1996 RIRPP digital point coverage was incorporated into the ESI data structure and plotted onto a set of draft maps, along with the information compiled onto the topographic quads. Following the data compilation phase, two sets of draft maps were sent to the resource agencies for review, and edits were made based on recommendations by the resource experts.
Process_Date: 200109
Process_Contact:
Contact_Information:
Contact_Organization_Primary:
Contact_Organization: NOAA, Office of Response and Restoration
Contact_Person: Jill Petersen
Contact_Address:
Address_Type: Physical address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349
Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: Vector
Point_and_Vector_Object_Information:
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Entity Point
Point_and_Vector_Object_Count: 8

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, M_MAMPT) 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: M_MAMPT.PAT

Entity_Type_Definition:

The M_MAMPT.PAT table contains attribute information for the vector points representing haul-out sites. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (34; 30 because it is a point feature, plus 4, the element value for M_MAMMAL), and record number.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 713400001

Range_Domain_Maximum: 713400008

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71001141

Range_Domain_Maximum: 71001149

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (34; 30 because it is a point feature, plus 4, the element value for M_MAMMAL), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 marine mammal species at a particular location. No quantitative or qualitative concentration information is available for marine mammal point locations, therefore the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

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

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N
Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the SEASONAL data table to records in the BIORES and BREED data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BREED data table to records in the BIORES and SEASONAL data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH
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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Numeric
Enumerated_Domain_Value_Definition: mmyyyy
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: integer
Enumerated_Domain_Value_Definition: Any integer
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: T_MAMMAL (Terrestrial Mammal Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: T_MAMMAL (Terrestrial Mammal Polygons)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

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National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for small mammal species in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector polygons in this data set represent terrestrial mammals. 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1999 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Terrestrial mammal

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical_Consistency_Report:

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

Completeness_Report:

These data represent a synthesis of expert knowledge and available digital data on small mammal concentration areas. These data do not represent all terrestrial mammal concentration areas in Rhode Island, Connecticut, and the New York/New Jersey Metropolitan Area. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 37, Muskrat, *Ondatra zibethicus*; 136, Endangered small mammal.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the *Lineage* and *Process_Description* sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator: Victoria, J. (CTDEP, N. Franklin)

Publication_Date: Unpublished Material

Title: Bird and protected species distribution and seasonality for CT

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Terrestrial Mammal Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP (EGIC, Hartford)

Publication_Date: 1999

Title: Natural Diversity Database for CT

Geospatial_Data_Presentation_Form: Digital points

Publication_Information:

Publication_Place: Connecticut

Publisher: Data contact: Karen Zyko; CTDEP, EGIC; 860/424-3540

Source_Scale_Denominator: 24000

Type_of_Source_Media: Email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1999

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Terrestrial Mammal Information

Process_Step:

Process_Description:

Two main sources of data were used to depict terrestrial mammal distribution for this data layer: 1) personal

interviews with resource experts from the Connecticut Department of Environmental Protection (CT DEP); and 2) the 1999 CT DEP Natural Diversity Database (NDDDB) rare species digital point coverage. Information gathered during initial interviews and from hardcopy maps and reports was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Digital point location data were used as provided, except that small buffers were placed around the points so that the data could be included in the ESI terrestrial mammal polygon coverage. Following the data compilation phase, two sets of completed maps were sent out to the resource agencies for review, and edits were made based on recommendations by the resource experts. Various publications were used to supplement the information on species composition, seasonality, and concentration that was provided by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 36

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 36

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 40

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 4375

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 40

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

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

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The

geographic data layer containing biological resource information (in this case 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed Description:

Entity Type:

Entity Type Label: T_MAMMAL.PAT

Entity Type Definition:

The T_MAMMAL.PAT table contains attribute information for the vector polygons 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.

Entity Type Definition Source: Research Planning, Inc.

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 (71), element number (9), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute Definition Source: NOAA

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 710900004

Range Domain Maximum: 710900039

Attribute:

Attribute Label: RARNUM

Attribute Definition:

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

Attribute Definition Source: NOAA

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 71001209

Range Domain Maximum: 71001211

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: Research Planning, Inc.

Attribute:

Attribute Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (9), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

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

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: cephalopod

Enumerated_Domain_Value_Definition: Cephalopod

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: crab

Enumerated_Domain_Value_Definition: Crab

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diadromous

Enumerated_Domain_Value_Definition: Diadromous fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: diving

Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: waterfowl
Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wetland
Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: whale
Enumerated_Domain_Value_Definition: Whale
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: NHP
Attribute_Definition: Natural Heritage Program global ranking
Attribute_Definition_Source: Network of Natural Heritage Program
Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP

Attribute_Definition: September

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in September

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT

Attribute_Definition: October

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in October

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV

Attribute_Definition: November

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in November

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC

Attribute_Definition: December

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in December

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S
Enumerated_Domain_Value_Definition: State listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: S/F
Enumerated_Domain_Value_Definition: State and federally listed
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: T_E
Attribute_Definition: Threatened and endangered status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E
Enumerated_Domain_Value_Definition: Endangered on state or federal list
Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T
Enumerated_Domain_Value_Definition: Threatened on state or federal list
Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: C
Enumerated_Domain_Value_Definition: Species of special concern
Enumerated_Domain_Value_Definition_Source:
Rhode Island Department of Environmental Management, Connecticut Department of
Environmental Protection, New York State Department of Environmental Conservation, New
Jersey Department of Environmental Protection

Attribute:
Attribute_Label: DATE_PUB
Attribute_Definition:
Publication date of source material used to assign state and federal status values for each species, if used.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Numeric
Enumerated_Domain_Value_Definition: mmyyyy
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: EL_SPE
Attribute_Definition:
Concatenation of ELEMENT and SPECIES_ID. This item links the STATUS data table to the BIORES and
SPECIES data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg.
ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: REPTILES (Reptile and Amphibian Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: REPTILES (Reptile and Amphibian Polygons)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for threatened/endangered sea turtles, diamondback terrapins, and rare reptiles/amphibians in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector polygons in this data set represent concentration and nesting areas for terrapins and rare species, and general distribution areas for sea turtles. 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 2000 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Reptiles

Theme_Keyword: Amphibians

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

listed in the Lineage section.

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and digital coverages on reptile/amphibian distribution and concentration areas in Rhode Island, Connecticut, New York, and New Jersey. These data do not represent all reptile/amphibian occurrences in coastal Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 2, Green sea turtle, Chelonia mydas; 4, Kemp's ridley sea turtle, Lepidochelys kempii; 5, Leatherback sea turtle, Dermochelys coriacea; 6, Loggerhead sea turtle, Caretta caretta; 7, Diamondback terrapin, Malaclemys terrapin; 108, Rare reptile/amphibian; 109, Endangered reptile/amphibian.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Raithel, C. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title:

Waterbird nesting sites; shorebird, wading bird, and terrapin distribution in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Reptile Information

Source Information:

Source Citation:

Citation Information:

Originator: Dixon, J. (CTDEP, Burlington)

Publication Date: Unpublished Material

Title: Shorebird, wading bird, and terrapin concentration areas in CT

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Reptile Information

Source Information:

Source Citation:

Citation_Information:

Originator: Nawojchik, R. (Mystic Aquarium)
Publication_Date: Unpublished Material
Title: Marine mammal and sea turtle seasonality and distribution in CT
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Reptile Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Victoria, J. (CTDEP, N. Franklin)
Publication_Date: Unpublished Material
Title: Bird and protected species distribution and seasonality for CT
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Reptile Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Del Puerto, M. (NYSDEC, LIC)
Publication_Date: Unpublished Material
Title: Bird, terrapin, and plant concentration areas in NY
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Reptile Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Schoelkopf, R. (MMSA, Brigantine)
Publication_Date: Unpublished Material
Title: Marine mammal and sea turtle distribution and seasonality in NJ
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Reptile Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Burger, J. (Rutgers Univ.)
Publication_Date: Unpublished Material
Title:

Shorebird, wading bird, horseshoe crab, and terrapin concentration areas in NJ
Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Reptile Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Alderson, C. (NYS DEC)
Publication_Date: Unpublished Material
Title: Bird and reptile concentration areas in NY
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Reptile Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: RI Natural Heritage Program
Publication_Date: 2000
Title: Natural Heritage Data - selected points in RI; washover sites
Geospatial_Data_Presentation_Form: Hardcopy maps
Publication_Information:
Publication_Place: Providence, RI
Publisher: Data contact: Rick Enser (RIDEM, Providence), 401/222-6605
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: to 2000
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Reptile Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYSDEC Natural Heritage Program
Publication_Date: Unpublished Material
Title: NY Natural Heritage Program Data
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Latham, NY
Publisher: Data contact: Nick Conrad (NYNHP, Latham), 518/783-3922
Source_Scale_Denominator: 24000
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Reptile Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYSDEC Natural Heritage Program
Publication_Date: Unpublished Material
Title: Seasonality for NY Natural Heritage Program data

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Reptile Information

Process_Step:

Process_Description:

Three main sources of data were used to depict reptile/amphibian distribution for this data layer: 1) personal interviews with resource experts from Rhode Island Department of Environmental Management (RI DEM), New England Aquarium, Connecticut Department of Environmental Protection (CT DEP), Mystic Aquarium, New York State Department of Environmental Conservation (NYS DEC), Riverhead Foundation, Marine Mammal Stranding Center, and Rutgers University; and 2) a digital NYS DEC Natural Heritage Program (NHP) rare species coverage; and 3) Rhode Island Natural Heritage Program (NHP) rare species hardcopy maps. Information gathered during initial interviews and from hardcopy maps and reports was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Digital point location data were used as provided, except that small buffers were placed around the points so that the data could be included in the ESI reptile polygon coverage. Following the data compilation phase, two sets of completed maps were sent out to the resource agencies for review, and edits were made based on recommendations by the resource experts. Various publications were used to supplement the information on species composition, seasonality, and concentration that was provided by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 838

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 838

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 1553

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 348647

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 1508

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005
Geographic_Coordinate_Units: Decimal degrees
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 1980
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, REPTILES) 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: REPTILES.PAT

Entity_Type_Definition:

The REPTILES.PAT table contains attribute information for the vector polygons representing reptile/amphibian distribution. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (6), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710600002

Range_Domain_Maximum: 710600643

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71001185

Range_Domain_Maximum: 71001208

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 BIORRES 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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (6), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

Detailed_Description:

Entity_Type:

Entity_Type_Label: BIORRES

Entity_Type_Definition:

The data table BIORRES 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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

An identifier that links records in the BIORRES 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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: CONC

Attribute_Definition:

The field CONC refers to "concentration," abundance, or density values and contains non-numerical terms that

are used to describe the relative abundance of reptiles/amphibians. The descriptive term "VERY RARE" was used to describe the relative abundance of sea turtles at particular locations. In cases where qualitative descriptions were not available, the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg.

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

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the

last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and

SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Species scientific name for the entire ESI data set
 Enumerated_Domain_Value_Definition: Free text
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT
Attribute_Definition: Major categories of biological data
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: BIRD
 Enumerated_Domain_Value_Definition: Birds
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: FISH
 Enumerated_Domain_Value_Definition: Fish
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: HABITAT
 Enumerated_Domain_Value_Definition: Habitats and plants
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: INVERT
 Enumerated_Domain_Value_Definition: Invertebrates
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: M_MAMMAL
 Enumerated_Domain_Value_Definition: Marine Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: REPTILE
 Enumerated_Domain_Value_Definition: Reptiles and Amphibians
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: T_MAMMAL
 Enumerated_Domain_Value_Definition: Terrestrial Mammals
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT
Attribute_Definition: Element subgroup delineating a logical grouping of species.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: amphibian
 Enumerated_Domain_Value_Definition: Amphibian
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: bird
 Enumerated_Domain_Value_Definition: Bird
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: bivalve
 Enumerated_Domain_Value_Definition: Bivalve
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in October

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV

Attribute_Definition: November

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in November

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC

Attribute_Definition: December

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in December

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y
Enumerated_Domain_Value_Definition: Life-history stage or activity present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N
Enumerated_Domain_Value_Definition: Life-history stage or activity not present
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Any character
 Enumerated_Domain_Value_Definition: Two-letter state abbreviation
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F
Attribute_Definition: State and Federal status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: F
 Enumerated_Domain_Value_Definition: Federally listed
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: S
 Enumerated_Domain_Value_Definition: State listed
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: S/F
 Enumerated_Domain_Value_Definition: State and federally listed
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E
Attribute_Definition: Threatened and endangered status.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: E
 Enumerated_Domain_Value_Definition: Endangered on state or federal list
 Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: T
 Enumerated_Domain_Value_Definition: Threatened on state or federal list
 Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: C
 Enumerated_Domain_Value_Definition: Species of special concern
 Enumerated_Domain_Value_Definition_Source:
 Rhode Island Department of Environmental Management, Connecticut Department of
 Environmental Protection, New York State Department of Environmental Conservation, New
 Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:
 Publication date of source material used to assign state and federal status values for each species, if used.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Numeric
 Enumerated_Domain_Value_Definition: mmyyyy
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE
Attribute_Definition:
 Concatenation of ELEMENT and SPECIES_ID. This item links the STATUS data table to the BIORES and
 SPECIES data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: HABITATS (Habitat and Plant Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: HABITATS (Habitat and Plant Polygons)

Edition: First

Geospatial Data Presentation Form: Vector digital data

Series Information:

Series Name: None

Issue Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains sensitive biological resource data for eelgrass, macroalgae, submerged aquatic vegetation, and rare terrestrial plants in coastal Rhode Island, Connecticut, and New York, and New Jersey. Vector polygons in this data set represent habitat 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 the HABPT (Habitat and Plant Points) data layer, a part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional habitat information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 1986 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Habitats

Theme_Keyword: Plants

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

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

Completeness Report:

These data represent a synthesis of expert knowledge and digital polygon coverages on eelgrass, macroalgae, submerged aquatic vegetation, and rare terrestrial plant distribution. Refer to the HABPT (Habitat and Plant Points) data layer for additional rare terrestrial plant information. These data do not represent the total eelgrass, macroalgae, submerged aquatic vegetation, and rare terrestrial plant distribution in Rhode Island, Connecticut, New York, and New Jersey. The following species are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 1, Eelgrass, *Zostera marina*; 59, Endangered plant; 145, Seabeach amaranth, *Amaranthus pumilus*; 187, Sea-beach knotweed, *Polygonum glaucum*; 213, Submersed aquatic vegetation; 214, Rare plant; 502, Eastern gamagrass, *Tripsarum dactyloides*; 503, Sea pink, *Sabatia stellaris*; 600, Whorled milkwort, *Polygala verticillata*; 1035, Sea level fen; 1036, Macroalgae; 1037, Freshwater tidal marsh; 1038, Maritime holly forest.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: CRMC/RIDEM, Wakefield

Publication Date: 1999

Title: Seagrass survey data in RI

Geospatial Data Presentation Form: Hardcopy maps

Publication Information:

Publication Place: Rhode Island

Publisher: Data contact: Laura Ernst; CRMC; 401/783-7350

Source Scale Denominator: Unknown

Type of Source Media: Paper

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1999

Source Currentness Reference: Date of survey

Source Citation Abbreviation: None

Source Contribution: Habitat Information

Source Information:

Source Citation:

Citation Information:

Originator: Powell, C. (RIDEM, Wickford)

Publication Date: Unpublished Material

Title:

Fish, marine mammal, and eelgrass distribution and seasonality in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Applied Science Associates
Publication_Date: 1991
Title: Eelgrass and macroalgae beds in RI
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: Narragansett, RI
Publisher:
Data contact: Applied Science Associates; Narragansett, RI; <http://www.appsci.com>
Source_Scale_Denominator: 4800
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1991
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Narragansett Bay Estuary Program
Publication_Date: 1996
Title: Eelgrass beds in Narragansett Bay
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: Narragansett, RI, <http://www.edc.uri.edu/eelgrass/gisdata.html>
Publisher: Narragansett Bay Estuary Program
Source_Scale_Denominator: 40000
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1996
Source_Currentness_Reference: Date of survey
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: University of CT & CTDEP
Publication_Date: 1993
Title: Eelgrass beds in CT
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: Hartford, CT
Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034
Source_Scale_Denominator: 24000
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1992
Ending_Date: 1993
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:

Originator: The Nature Conservancy - CT chapter
Publication_Date: 1997
Title: Submerged aquatic vegetation in CT
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: Hartford, CT
Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034
Source_Scale_Denominator: Unknown
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1994
Ending_Date: 1995
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Normant, J. (NJDEP, Port Republic)
Publication_Date: Unpublished Material
Title: Invertebrate and habitat distribution and information for NJ
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NJDEP (Bureau of Shellfisheries)
Publication_Date: 1986
Title: Shellfish and eelgrass concentration areas in NJ
Geospatial_Data_Presentation_Form: Hardcopy maps
Publication_Information:
Publication_Place: Port Republic, NJ
Publisher:
Data contact: Jeff Normant, (NJDEP, Port Republic), 609-748-2040
Source_Scale_Denominator: Various
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1983
Ending_Date: 1986
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NJDEP Office of Nat. Lands Mgt.
Publication_Date: 1999
Title: Natural Heritage Priority Sites
Geospatial_Data_Presentation_Form: Digital polys
Publication_Information:
Publication_Place: New Jersey, <<http://www.state.nj.us/dep/gis/>>
Publisher: NJDEP Office of Nat. Lands Mgt.
Source_Scale_Denominator: 24000; 63360
Type_of_Source_Media: Online
Source_Time_Period_of_Content:

Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1986
Ending_Date: 1999

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Habitat Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Gateway Nat. Rec. Area, Sandy Hook

Publication_Date: 1996

Title:

Oil and Hazardous Substance Spill Contingency Plan Critical Resource Map

Geospatial_Data_Presentation_Form: Hardcopy maps

Publication_Information:

Publication_Place: New York

Publisher: Data contact: Bruce Lane (GNRA, Sandy Hook) 732-872-5931

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1996

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Habitat Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Kline, N. (USFWS)

Publication_Date: Unpublished Material

Title: Rare terrestrial plant and invertebrate locations in RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Habitat Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Oviatt, C. (URI GSO)

Publication_Date: Unpublished Material

Title:

Eelgrass, macroalgae, invertebrate, marine mammal and fish distribution for RI

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2001

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Habitat Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RI DEM Division of Fish & Wildlife

Publication_Date: 2000

Title:

1999-2000 RI DEM Department of Fish and Wildlife Eelgrass Points

Geospatial_Data_Presentation_Form: Digital points

Publication_Information:

Publication_Place: Rhode Island, <<http://www.edc.uri.edu/eelgrass/gisdata.html>>

Publisher: RI DEM Division of Fish & Wildlife

Source_Scale_Denominator: Unknown

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2000

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Habitat Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: URI (GSO/NRS)

Publication_Date: 2000

Title: Eelgrass polygons for Ninigret Pond

Geospatial_Data_Presentation_Form: Digital polys

Publication_Information:

Publication_Place: Rhode Island, <<http://www.edc.uri.edu/eelgrass/gisdata.html>>

Publisher: URI, Mike Traber: 401/874-6619

Source_Scale_Denominator: Various

Type_of_Source_Media: Online; email

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2000

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Habitat Information

Process_Step:

Process_Description:

Three main sources of data were used to depict habitat distribution for this data layer: 1) digital polygon coverages, including: a 1991 Applied Science Associates (ASA) eelgrass and macroalgae coverage, a 1996 Narragansett Bay Estuary Project (NBEP) eelgrass coverage, a 1993 University of CT/CT DEP eelgrass coverage, a 1997 Nature Conservancy (TNC CT Chapter) submerged aquatic vegetation coverage, and 2000 University of Rhode Island (URI) Graduate School of Oceanography (GSO) and Natural Resource Sciences (NRS) eelgrass coverages for Ninigret Pond; 2) hardcopy maps provided by the RI Department of Environmental Management Coastal Resource Management Council (RI DEM CRMC) and the New Jersey Department of Environmental Protection (NJ DEP) Bureau of Shellfisheries; and 3) interviews with resource experts from RI DEM, New York State Department of Environmental Conservation (NYS DEC), NJ DEP, U.S. Fish and Wildlife Service (USFWS), and URI. Information on eelgrass, macroalgae, submerged aquatic vegetation, and terrestrial plants was gathered during a set of interviews and from hardcopy maps provided by various resource agencies and was compiled onto U.S. Geological Survey (USGS) 1:24,000 topographic quadrangles. These data were incorporated with the digital coverages listed above. Following the initial data compilation phase, two sets of completed maps were sent to the resource agencies for review, and edits were made to the compiled data based on recommendations by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial Data Organization Information:

Direct Spatial Reference Method: Vector

Point and Vector Object Information:

SDTS Terms Description:

SDTS Point and Vector Object Type: GT-polygon composed of rings

Point and Vector Object Count: 1494

SDTS Terms Description:

SDTS Point and Vector Object Type: Area point

Point and Vector Object Count: 1494

SDTS Terms Description:

SDTS Point and Vector Object Type: Complete chain

Point and Vector Object Count: 1938

SDTS Terms Description:

SDTS Point and Vector Object Type: Link

Point and Vector Object Count: 131287

SDTS Terms Description:

SDTS Point and Vector Object Type: Node, planar graph

Point and Vector Object Count: 1656

Spatial Reference Information:

Horizontal Coordinate System Definition:

Geographic:

Latitude Resolution: 0.00005

Longitude Resolution: 0.00005

Geographic Coordinate Units: Decimal degrees

Geodetic Model:

Horizontal Datum Name: North American Datum of 1983

Ellipsoid Name: Geodetic Reference System 1980

Semi-major Axis: 6378137

Denominator of Flattening Ratio: 298.257222

Entity and Attribute Information:

Overview Description:

Entity and Attribute Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, HABITATS) is linked to the Biological Resources table (BIORES) using the unique ID and the lookup table BIO_LUT, or it can be linked directly using RARNUM. The ID is a unique combination of the atlas number (for the Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: HABITATS.PAT

Entity_Type_Definition:

The HABITATS.PAT table contains attribute information for the vector polygons representing algae, seagrass, and native/rare terrestrial 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.

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (3), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710300006

Range_Domain_Maximum: 710302198

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000833

Range_Domain_Maximum: 71000879

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (3), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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. The CONC field may contain counts of individual plants (XX plants). In some cases, estimates of the number of plants present in particular locations were used. In cases where no quantitative description was available, the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg.

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

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the

last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and

SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species scientific name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:
Attribute_Label: SUBELEMENT
Attribute_Definition:
Species Element subgroup delineating a logical grouping of species.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: amphibian
Enumerated_Domain_Value_Definition: Amphibian
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bird
Enumerated_Domain_Value_Definition: Bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: bivalve
Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: shorebird

Enumerated_Domain_Value_Definition: Shorebird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: sm_mammal

Enumerated_Domain_Value_Definition: Small mammal

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: turtle

Enumerated_Domain_Value_Definition: Turtle

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: upland

Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wading

Enumerated_Domain_Value_Definition: Wading bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: JAN

Attribute_Definition: January

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in January

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: FEB

Attribute_Definition: February

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in February

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR

Attribute_Definition: March

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in March

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR

Attribute_Definition: April

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in April

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY

Attribute_Definition: May

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in May

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN

Attribute_Definition: June

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in June

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL

Attribute_Definition: July

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in July

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG

Attribute_Definition: August

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in August

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP

Attribute_Definition: September

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in September

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT

Attribute_Definition: October

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in October

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV

Attribute_Definition: November

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in November

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC

Attribute_Definition: December

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: X

Enumerated_Domain_Value_Definition: Present in December

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = 'BIRD', SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = 'B0000101').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH

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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = 'BIRD' and SPECIES_ID = 1; EL_SPE = 'B00001').

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.7.23 on Thu Apr 11 15:55:39 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: HABPT (Habitat and Plant Points)

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

Metadata:

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

Identification Information:

Citation:

Citation Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: HABPT (Habitat and Plant Points)

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Geospatial Data Presentation Form: Vector digital data

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Description:

Abstract:

This data set contains sensitive biological resource data for rare terrestrial plants in coastal Rhode Island, Connecticut, New York, and New Jersey. Vector points in this data set represent rare plant species occurrences. 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 Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 the HABITATS (Habitat and Plant Polygons) data layer, a part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional habitat information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1999

Ending Date: 2001

Currentness Reference:

The biological data were compiled during 1999-2001. The currentness dates for these data range from 2000 to 2001 and are documented in the Source Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Habitat

Theme_Keyword: Plant

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: New Jersey

Place_Keyword: Connecticut

Place_Keyword: New York

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

listed in the Lineage section.

Logical Consistency Report:

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

Completeness Report:

These data represent rare terrestrial plant species locations. Refer to the HABITATS (Habitat and Plant Polygons) data layer for additional native/rare terrestrial plant species occurrence data. These data do not represent all native/terrestrial plant species occurrences in Rhode Island, Connecticut, New York, and New Jersey. The following habitats are included in this data set (Species_ID, Common Name, Scientific Name, if applicable): 59, Endangered plant; 60, Threatened plant; 214, Rare plant; 254, Rare community.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

Some spatial components of the biological data sets are 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 basemaps with a scale of 1:24,000. Many of the spatial components of the biological data sets are developed from pre-existing digital sources and reflect the positional accuracy of these original data. See the Lineage and Process_Description sections for more information on the original data source and how these data were integrated or manipulated to create the final data set. 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.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: RI Natural Heritage Program

Publication Date: 2000

Title: Natural Heritage Data - selected points in RI; washover sites

Geospatial Data Presentation Form: Hardcopy maps

Publication Information:

Publication Place: Providence, RI

Publisher: Data contact: Rick Enser (RIDEM, Providence), 401/222-6605

Type of Source Media: Paper

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: to 2000

Source Currentness Reference: Dates of surveys

Source Citation Abbreviation: None

Source Contribution: Habitat Information

Source Information:

Source Citation:

Citation Information:

Originator: NYSDEC Natural Heritage Program

Publication Date: 2000

Title: NY Natural Heritage Program Data

Geospatial Data Presentation Form: Digital points

Publication Information:

Publication Place: Latham, NY

Publisher: Data contact: Nick Conrad (NYNHP, Latham), 518/783-3922

Source Scale Denominator: 24000

Type of Source Media: Email

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: CTDEP, Env. Geog. Info Center
 Publication_Date: Unpublished Material
 Title: Seasonality info for CT Natural Diversity Database
 Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Source_Information:
 Source_Citation:
 Citation_Information:
 Originator: NYSDEC Natural Heritage Program
 Publication_Date: Unpublished Material
 Title: Seasonality for NY Natural Heritage Program data
 Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
 Time_Period_Information:
 Single_Date/Time:
 Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Habitat Information
Process_Step:
 Process_Description:
 Natural Heritage Program (NHP) occurrence data from the states of Rhode Island, Connecticut, and New York were the primary sources used to depict plants for this data layer. Individual species names were used for each occurrence in Connecticut, while a descriptive term, such as "endangered plant" or "rare plant" was used in New York, due to the sensitive nature of the data.
 Process_Date: 200109
 Process_Contact:
 Contact_Information:
 Contact_Organization_Primary:
 Contact_Organization: NOAA, Office of Response and Restoration
 Contact_Person: Jill Petersen
 Contact_Address:
 Address_Type: Physical address
 Address: 7600 Sand Point Way, N.E.
 City: Seattle
 State_or_Province: Washington
 Postal_Code: 98115-6349
 Contact_Voice_Telephone: (206) 526-6944
 Contact_Facsimile_Telephone: (206) 526-6329
 Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:
 Direct_Spatial_Reference_Method: Vector
 Point_and_Vector_Object_Information:
 SDTS_Terms_Description:
 SDTS_Point_and_Vector_Object_Type: Entity Point
 Point_and_Vector_Object_Count: 404

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005

Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983

Ellipsoid_Name: Geodetic Reference System 1980

Semi-major_Axis: 6378137

Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, six relational attribute or data tables, BIORES, BREED, SEASONAL, SOURCES, SPECIES, and STATUS, are used to store the complex biological data in the ESI data structure. The geographic data layer containing biological resource information (in this case, HABPT) 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 Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71), 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, T_E, 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 layers 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.

Detailed_Description:

Entity_Type:

Entity_Type_Label: HABPT.PAT

Entity_Type_Definition:

The HABPT.PAT table contains attribute information for the vector points representing native/rare terrestrial plant species in Rhode Island, Connecticut, New York, and New Jersey. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure

Entity_Type_Definition_Source: Research Planning, Inc.

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 (71), element number (33; 30 because it is a point feature, plus 3, the element value for HABITATS), and record number.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 713300001

Range_Domain_Maximum: 713300404

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000856

Range_Domain_Maximum: 71000870

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: Research Planning, Inc.

Attribute:

Attribute_Label: RARNUM

Attribute_Definition:

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

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71001211

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 (71), element number (33; 30 because it is a point feature, plus 3, the element value for HABITATS), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 710100002

Range_Domain_Maximum: 713700027

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: Research Planning, Inc.

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: 071000001

Range_Domain_Maximum: 071001211

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: Research Planning, Inc.

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 terrestrial plants at a particular location. No quantitative or qualitative concentration information is available for plant point locations, therefore the field is blank.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = BIRD and SPECIES_ID = 1; EL_SPE = B00001).
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = BIRD, SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = B0000101).
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 a list of layer-specific species.

Entity_Type_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 1

Range_Domain_Maximum: N

Attribute:

Attribute_Label: NAME

Attribute_Definition: Species common name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species common name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: GEN_SPEC

Attribute_Definition: Species scientific name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Species scientific name for the entire ESI data set

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SUBELEMENT

Attribute_Definition: Element subgroup delineating a logical grouping of species.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: amphibian

Enumerated_Domain_Value_Definition: Amphibian

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bird

Enumerated_Domain_Value_Definition: Bird

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: bivalve

Enumerated_Domain_Value_Definition: Bivalve
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: cephalopod
Enumerated_Domain_Value_Definition: Cephalopod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: crab
Enumerated_Domain_Value_Definition: Crab
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diadromous
Enumerated_Domain_Value_Definition: Diadromous fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: diving
Enumerated_Domain_Value_Definition: Diving bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_nursery
Enumerated_Domain_Value_Definition: Estuarine nursery fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: e_resident
Enumerated_Domain_Value_Definition: Estuarine resident fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: dolphin
Enumerated_Domain_Value_Definition: Dolphin
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: fish
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: freshwater
Enumerated_Domain_Value_Definition: Freshwater fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gastropod
Enumerated_Domain_Value_Definition: Gastropod
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: gull_tern
Enumerated_Domain_Value_Definition: Gull or tern
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: insect
Enumerated_Domain_Value_Definition: Insect
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: lobster
Enumerated_Domain_Value_Definition: Lobster

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_benthic
Enumerated_Domain_Value_Definition: Marine benthic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: m_pelagic
Enumerated_Domain_Value_Definition: Marine pelagic fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: passerine
Enumerated_Domain_Value_Definition: Passerine or passerine-like bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pelagic
Enumerated_Domain_Value_Definition: Pelagic bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: pinniped
Enumerated_Domain_Value_Definition: Pinniped
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: plant
Enumerated_Domain_Value_Definition: Plant
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: raptor
Enumerated_Domain_Value_Definition: Raptor
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sav
Enumerated_Domain_Value_Definition: Submersed aquatic vegetation
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: shorebird
Enumerated_Domain_Value_Definition: Shorebird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: sm_mammal
Enumerated_Domain_Value_Definition: Small mammal
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: turtle
Enumerated_Domain_Value_Definition: Turtle
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: upland
Enumerated_Domain_Value_Definition: Upland habitat, plant community, or plant species
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: wading
Enumerated_Domain_Value_Definition: Wading bird
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: waterfowl

Enumerated_Domain_Value_Definition: Waterfowl

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: wetland

Enumerated_Domain_Value_Definition: Wetland habitat, plant community, or plant species

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: whale

Enumerated_Domain_Value_Definition: Whale

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NHP

Attribute_Definition: Natural Heritage Program global ranking

Attribute_Definition_Source: Network of Natural Heritage Program

Attribute_Domain_Values:

Codeset_Domain:

Codeset_Name: NHP Global Conservation Status Rank

Codeset_Source: Natural Heritage Program

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition: Date of NHP listing

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: 0

Enumerated_Domain_Value_Definition: Not ranked

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = BIRD and SPECIES_ID = 1; EL_SPE = B00001).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: FISH
Enumerated_Domain_Value_Definition: Fish
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: HABITAT
Enumerated_Domain_Value_Definition: Habitats and plants
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: INVERT
Enumerated_Domain_Value_Definition: Invertebrates
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: M_MAMMAL
Enumerated_Domain_Value_Definition: Marine Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: REPTILE
Enumerated_Domain_Value_Definition: Reptiles and Amphibians
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: T_MAMMAL
Enumerated_Domain_Value_Definition: Terrestrial Mammals
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
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: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N
Attribute:
Attribute_Label: JAN
Attribute_Definition: January
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in January
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.
Attribute:
Attribute_Label: FEB
Attribute_Definition: February
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:

Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in February
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAR
Attribute_Definition: March
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in March
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: APR
Attribute_Definition: April
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in April
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MAY
Attribute_Definition: May
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in May
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUN
Attribute_Definition: June
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in June
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: JUL
Attribute_Definition: July
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in July
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: AUG
Attribute_Definition: August
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in August
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SEP
Attribute_Definition: September
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:

Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in September
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: OCT
Attribute_Definition: October
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in October
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NOV
Attribute_Definition: November
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in November
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DEC
Attribute_Definition: December
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: X
Enumerated_Domain_Value_Definition: Present in December
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the SEASONAL data table to records in the BIORES and BREED data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = BIRD, SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = B0000101).
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE_SEA
Attribute_Definition:
Concatenation of ELEMENT, SPECIES_ID, and SEASON_ID. This item links records in the BREED data table to records in the BIORES and SEASONAL data tables.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: E#####
Enumerated_Domain_Value_Definition:
Where E is the first character of ELEMENT, the next five characters are SPECIES_ID, and the last two characters are SEASON_ID (eg. ELEMENT = BIRD, SPECIES_ID = 1 and SEASON_ID = 1; EL_SPE_SEA = B0000101).
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: MONTH
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: Research Planning, Inc.

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/mating; if ELEMENT is "REPTILE" then BREED1 = nesting; if ELEMENT is "M_MAMMAL" then BREED1 = mating. This attribute is not used for HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED2

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED3

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute:

Attribute_Label: BREED4

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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 "REPTILE" then BREED5 = adults. This attribute is not used for BIRD, M_MAMMAL, HABITAT or T_MAMMAL elements.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Y

Enumerated_Domain_Value_Definition: Life-history stage or activity present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: N

Enumerated_Domain_Value_Definition: Life-history stage or activity not present

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 or federal 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: Research Planning, Inc.

Attribute:

Attribute_Label: ELEMENT

Attribute_Definition: Major categories of biological data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: BIRD

Enumerated_Domain_Value_Definition: Birds

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: FISH

Enumerated_Domain_Value_Definition: Fish

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: HABITAT

Enumerated_Domain_Value_Definition: Habitats and Plants

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: INVERT

Enumerated_Domain_Value_Definition: Invertebrates

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: M_MAMMAL

Enumerated_Domain_Value_Definition: Marine Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: REPTILE

Enumerated_Domain_Value_Definition: Reptiles and Amphibians

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T_MAMMAL

Enumerated_Domain_Value_Definition: Terrestrial Mammals

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Two-letter state abbreviation

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: S_F

Attribute_Definition: State and Federal status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: F

Enumerated_Domain_Value_Definition: Federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S

Enumerated_Domain_Value_Definition: State listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: S/F

Enumerated_Domain_Value_Definition: State and federally listed

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: T_E

Attribute_Definition: Threatened and endangered status.

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E

Enumerated_Domain_Value_Definition: Endangered on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: T

Enumerated_Domain_Value_Definition: Threatened on state or federal list

Enumerated_Domain_Value_Definition_Source: U.S. Fish and Wildlife Service

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: C

Enumerated_Domain_Value_Definition: Species of special concern

Enumerated_Domain_Value_Definition_Source:

Rhode Island Department of Environmental Management, Connecticut Department of Environmental Protection, New York State Department of Environmental Conservation, New Jersey Department of Environmental Protection

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: EL_SPE

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: E#####

Enumerated_Domain_Value_Definition:

Where E is the first character of ELEMENT and the next five characters are SPECIES_ID (eg. ELEMENT = BIRD and SPECIES_ID = 1; EL_SPE = B00001).

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Rhode Island, Connecticut, New York, and New Jersey ESI: MGT (Management Area Polygons)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: MGT (Management Area Polygons)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series_Information:

Series_Name: None

Issue_Identifier: Rhode Island, Connecticut, New York, and New Jersey

Publication_Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains management area data for National Estuarine Research Reserves, wildlife refuges, wildlife management areas, state/regional parks, state forests, national monuments, and national recreation areas in Rhode Island, Connecticut, New York, and New Jersey. Vector polygons in this data set represent management areas. Location-specific type and source information are stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. 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 (Socioeconomic Resource Points and Lines) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional human-use information.

Purpose:

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

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness_Reference:

These data were compiled during 1999-2001. The currentness dates for these data range from 1976 to 2001 and are documented in the *Source_Information* section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Management

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

listed in the Lineage section.

Logical Consistency Report:

A multi-stage error checking process, described in the above Attribute Accuracy Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies (such as dangles, unnecessary node, etc.), and ORACLE(r) to ARC/INFO(r) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness Report:

These data represent a synthesis of hardcopy and digital boundaries for management areas. Refer to the SOCECON (Socioeconomic Resource Points and Lines) data layer for additional human-use information. These data do not represent all management areas in Rhode Island, Connecticut, New York, and New Jersey.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

The MGT data set was developed from pre-existing digital and hardcopy sources and largely reflects the positional accuracy of these original data. It is difficult to estimate the positional accuracy of such data, except to state that hardcopy data are compiled on basemaps with a scale of 1:24,000. See the Lineage and Process Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: RIGIS

Publication Date: 1988

Title: Narragansett Bay NERR boundaries

Geospatial Data Presentation Form: Digital arcs

Publication Information:

Publication Place: Narragansett, RI

Publisher: <<http://inlet.geol.sc.edu/N/AR/landcover.jpg>>

Source Scale Denominator: unknown

Type of Source Media: Online

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 1988

Source Currentness Reference: Date of publication

Source Citation Abbreviation: None

Source Contribution: Management Information

Source Information:

Source Citation:

Citation Information:

Originator: USFWS

Publication Date: 2000

Title: National Wildlife Refuge boundaries for RI

Geospatial Data Presentation Form: Digital arcs

Publication Information:

Publication Place: Rhode Island

Publisher: <<ftp://164.159.102.219/pub/refuges/metadata/metadata.html>>

Source Scale Denominator: 24000

Type of Source Media: Online

Source Time Period of Content:

Time Period Information:

Range of Dates/Times:

Beginning Date: 1997

Ending Date: 2000

Source Currentness Reference: Dates of surveys

Source Citation Abbreviation: None

Source Contribution: Management Information

Source Information:

Source Citation:

Citation Information:

Originator: RIGIS

Publication Date: 1989

Title: Protected Open Space in RI

Geospatial_Data_Presentation_Form: Digital arcs

Publication_Information:

Publication_Place: Rhode Island

Publisher: <<http://www.edc.uri.edu/rigis-spf/Statewide/state.html>>

Source_Scale_Denominator: 24000

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1979

Ending_Date: 1988

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Management Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RIGIS

Publication_Date: 1995

Title: Wildlife Management Areas in RI

Geospatial_Data_Presentation_Form: Digital polys

Publication_Information:

Publication_Place: Rhode Island

Publisher: <<http://www.edc.uri.edu/rigis-spf/Statewide/state.html>>

Source_Scale_Denominator: 24000

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1976

Ending_Date: 1993

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Management Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: NYS DEC

Publication_Date: 2000

Title: State lands in NY

Geospatial_Data_Presentation_Form: Digital arcs

Publication_Information:

Publication_Place: Long Island City, NY

Publisher:

Data contact: Mike Reff (NYSDEC, Long Island City), 718/482-4880

Source_Scale_Denominator: 24000

Type_of_Source_Media: Email

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Management Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP

Publication_Date: 1997

Title: CT Federal and State Properties

Geospatial_Data_Presentation_Form: Digital arcs

Publication_Information:

Publication_Place: Hartford, CT

Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034

Source_Scale_Denominator: 24000

Type_of_Source_Media: CD-ROM

Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1990
Ending_Date: 1997
Source_Currentness_Reference: Date of Publication
Source_Citation_Abbreviation: None
Source_Contribution: Management Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: DeLorme
Publication_Date: 2001
Title: New Jersey Atlas & Gazetteer
Geospatial_Data_Presentation_Form: Hardcopy maps
Publication_Information:
Publication_Place: Yarmouth, ME
Publisher: DeLorme, Yarmouth, ME. 88 p.
Source_Scale_Denominator: 77000
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Management Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NJ DEP Fish, Game & Wildlife
Publication_Date: 1999
Title: New Jersey's Wild Places and Open Spaces
Geospatial_Data_Presentation_Form: Hardcopy map
Publication_Information:
Publication_Place: King of Prussia, PA.
Publisher: Franklin Maps, King of Prussia, PA.
Source_Scale_Denominator: 1 in. = 4.5 mi
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1999
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Management Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: DeLorme
Publication_Date: 1999
Title: New York State Atlas & Gazetteer
Geospatial_Data_Presentation_Form: Hardcopy maps
Publication_Information:
Publication_Place: Yarmouth, ME
Publisher: DeLorme, Yarmouth, ME. 104 p.
Source_Scale_Denominator: 150000
Type_of_Source_Media: Paper
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1998
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Management Information
Source_Information:

Source_Citation:

Citation_Information:

Originator: NJDEP

Publication_Date: 1999

Title:

State and Federally Owned, Protected Open Space and Recreation Areas in NJ

Geospatial_Data_Presentation_Form: Digital arcs

Publication_Information:

Publication_Place: New Jersey

Publisher: <<http://www.state.nj.us/dep/gis/>>

Source_Scale_Denominator: 12000

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1999

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Management Information

Process_Step:

Process_Description:

Two main sources of data were used to depict management areas for this data layer: 1) various hardcopy maps, including: DeLorme Atlas and Gazetteers for Rhode Island, Connecticut, New York, and New Jersey; a 1999 New Jersey's Wild Places and Open Spaces map; and U.S. Geological Survey (USGS) topographic quadrangles; and 2) digital data, including: a 1988 Rhode Island GIS (RIGIS) digital boundary for the Narragansett Bay National Estuarine Research Reserve (NERR); 2000 U.S. Fish and Wildlife Service (USFWS) digital boundaries for National Wildlife Refuges (NWRs) in Rhode Island; a 1989 RIGIS digital coverage of Protected Open Space in Rhode Island; a 1995 RIGIS digital coverage of Wildlife Management Areas (WMAs) in Rhode Island; a 2000 New York State Department of Environmental Conservation (NYS DEC) digital coverage of State Lands in New York; a 1997 Connecticut Department of Environmental Protection (CT DEP) digital coverage of CT Federal and State Properties; and a 1999 New Jersey Department of Environmental Protection (NJ DEP) digital coverage of State and Federally Owned, Protected Open Space and Recreation Areas in NJ. Management areas were digitized directly off of USGS topographic quadrangles, or boundaries were approximated from hardcopy maps when digital boundaries were not available in the various state GIS management coverages that were used. Resource experts confirmed the accuracy of the boundaries during review sessions. Geographic boundaries for most management areas were provided by the various digital coverages described above.

Process_Date: 200109

Process_Contact:

Contact_Information:

Contact_Organization_Primary:

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Person: Jill Petersen

Contact_Address:

Address_Type: Physical address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: GT-polygon composed of rings

Point_and_Vector_Object_Count: 461

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Area point

Point_and_Vector_Object_Count: 461

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 576

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link
Point_and_Vector_Object_Count: 38581
SDTS_Terms_Description:
SDTS_Point_and_Vector_Object_Type: Node, planar graph
Point_and_Vector_Object_Count: 530

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005
Longitude_Resolution: 0.00005
Geographic_Coordinate_Units: Decimal degrees

Geodetic_Model:

Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 1980
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, two relational attribute or data tables, SOC_DAT and SOURCES, are used to store the complex socioeconomic data in the ESI data structure. The geographic data layer containing socioeconomic resource information (in this case, MGT) is linked to the Socioeconomic Resources table (SOC_DAT) using the unique ID and the lookup table SOC_LUT, or it can be linked directly using HUNUM. HUNUM is a unique reference number concatenated with the atlas number (for the Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71). ID is a unique combination of the atlas number (71), an element-specific number (MGT = 11), and a unique record number. SOC_DAT and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure.

Detailed_Description:

Entity_Type:

Entity_Type_Label: MGT.PAT

Entity_Type_Definition:

The MGT.PAT table contains attribute information for the vector polygons representing marine sanctuaries, national parks, marine sanctuaries, special management areas, state/regional parks, and wildlife refuges. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure.

Entity_Type_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: MA

Enumerated_Domain_Value_Definition: MANAGEMENT AREA

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MS

Enumerated_Domain_Value_Definition: MARINE SANCTUARY

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: NP

Enumerated_Domain_Value_Definition: NATIONAL PARK

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: P

Enumerated_Domain_Value_Definition: PARK

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WR

Enumerated_Domain_Value_Definition: WILDLIFE REFUGE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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 (71), element number (11), and record number. ID values of 9999 are holes in the polygon and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 711100002

Range_Domain_Maximum: 711100513

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links directly to the SOC_DAT table. HUNUM values of 0 are holes in the polygon and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000106

Range_Domain_Maximum: 71000381

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: Research Planning, Inc.

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_LUT data table to records in the SOC_DAT data table. HUNUM values of 0 are holes in the polygon and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71000381

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 (71), element number (11), and record number. ID values of 9999 are holes in the polygon and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 711000001

Range_Domain_Maximum: 711100513

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: Research Planning, Inc.

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_DAT data table to records in the SOC_LUT data table. HUNUM values of 0 are holes in the polygon and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71000381

Attribute:

Attribute_Label: TYPE

Attribute_Definition: Identifies the feature type

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AIRPORT

Enumerated_Domain_Value_Definition: AIRPORT

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: AQUACULTURE

Enumerated_Domain_Value_Definition: AQUACULTURE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Enumerated_Domain:

Enumerated_Domain_Value: BEACH

Enumerated_Domain_Value_Definition: BEACH

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: BOAT RAMP

Enumerated_Domain_Value_Definition: BOAT RAMP

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Enumerated_Domain:

Enumerated_Domain_Value: COAST GUARD

Enumerated_Domain_Value_Definition: COAST GUARD

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: COMMERCIAL FISHING

Enumerated_Domain_Value_Definition: COMMERCIAL FISHING

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Enumerated_Domain:

Enumerated_Domain_Value: FERRY

Enumerated_Domain_Value_Definition: FERRY

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Enumerated_Domain:

Enumerated_Domain_Value: HISTORICAL SITE

Enumerated_Domain_Value_Definition: HISTORICAL SITE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MANAGEMENT AREA

Enumerated_Domain_Value_Definition: MANAGEMENT AREA

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MARINA

Enumerated_Domain_Value_Definition: MARINA

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MARINE SANCTUARY

Enumerated_Domain_Value_Definition: MARINE SANCTUARY

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL PARK

Enumerated_Domain_Value_Definition: NATIONAL PARK

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: PARK

Enumerated_Domain_Value_Definition: REGIONAL OR STATE PARK

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Enumerated_Domain:

Enumerated_Domain_Value: WASH OVER

Enumerated_Domain_Value_Definition: WASH OVER
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: WATER INTAKE
Enumerated_Domain_Value_Definition: WATER INTAKE
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: WILDLIFE REFUGE
Enumerated_Domain_Value_Definition: WILDLIFE REFUGE
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Attribute:

Attribute_Label: NAME
Attribute_Definition: The feature name
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: CONTACT
Attribute_Definition: Contact person or entity
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PHONE
Attribute_Definition: Contact telephone number
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: G_SOURCE
Attribute_Definition:
Geographic source integer identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: A_SOURCE
Attribute_Definition:
Attribute source integer identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: OWNER
Attribute_Definition: Person or entity that owns the feature
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.

Attribute_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: integer
 Enumerated_Domain_Value_Definition: Any integer
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD
Attribute_Definition:
 Date(s) of data collection that the source material is based upon.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value: Numeric
 Enumerated_Domain_Value_Definition: yyyy
 Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

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

Contact_Address:

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

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

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

Contact_Position: GIS Manager

Contact_Address:

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

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Generated by [mp](#) version 2.7.23 on Mon Apr 08 16:58:54 2002

Rhode Island, Connecticut, New York, and New Jersey ESI: SOCECON (Socioeconomic Resource Points and Lines)

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

Metadata:

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

Identification Information:

Citation:

Citation_Information:

Originator:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Publication_Date: 200203

Title:

Rhode Island, Connecticut, New York, and New Jersey ESI: SOCECON (Socioeconomic Resource Points and Lines)

Edition: First

Geospatial_Data_Presentation_Form: Vector digital data

Series Information:

Series_Name: None

Issue_Identification: Rhode Island, Connecticut, New York, and New Jersey

Publication Information:

Publication_Place: Seattle, Washington

Publisher:

National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington

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, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Description:

Abstract:

This data set contains human-use resource data for bridges, state borders, airports, aquaculture sites, beaches, boat ramps, commercial fishing sites, Coast Guard, ferries, historical sites, marinas, water intakes, and wash over sites in Rhode Island, Connecticut, New York, and New Jersey. Vector points in this data set represent human-use site locations. This data set comprises a portion of the Environmental Sensitivity Index (ESI) data for Rhode Island, Connecticut, New York, and New Jersey. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. See also the MGT (Management Area Polygons) data layer, part of the larger Rhode Island, Connecticut, New York, and New Jersey ESI database, for additional human-use information.

Purpose:

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

Time Period of Content:

Time Period Information:

Range_of_Dates/Times:

Beginning_Date: 1999

Ending_Date: 2001

Currentness Reference:

These data were compiled during 1999-2001. The currentness dates for these data range from 1953 to 2001 and are documented in the Source_Information section.

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None Scheduled

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -74.538987

East_Bounding_Coordinate: -71.090936

North_Bounding_Coordinate: 41.8846228

South_Bounding_Coordinate: 39.993476

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: ESI

Theme_Keyword: Sensitivity maps

Theme_Keyword: Coastal resources

Theme_Keyword: Oil spill planning

Theme_Keyword: Coastal Zone Management

Theme_Keyword: Wildlife

Theme_Keyword: Socioeconomic

Place:

Place_Keyword_Thesaurus: None

Place_Keyword: Rhode Island

Place_Keyword: Connecticut

Place_Keyword: New York

Place_Keyword: New Jersey

Access_Constraints: None

Use_Constraints:

DO NOT USE MAPS FOR NAVIGATIONAL PURPOSES. Besides the above warning, there are no use constraints on these data. 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. Acknowledgment of the originators, publishers, contributors, and sources listed would be appreciated in products derived from these data.

Browse_Graphic:

Browse_Graphic_File_Name: [datafig.jpg](#)

Browse_Graphic_File_Description:

Relationships between spatial data layers and attribute data tables for the Rhode Island, Connecticut, New York, and New Jersey ESI data.

Browse_Graphic_File_Type: JPEG

Data_Set_Credit:

This project was supported by the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service, Office of Response and Restoration, Hazardous Materials Response Division, Seattle, Washington; State of Rhode Island, Department of Environmental Management, Providence, Rhode Island; and The Port Authority of New York & New Jersey.

Native_Data_Set_Environment:

The software packages used to develop the atlas are Environmental Systems Research Institute's ARC/INFO(r) (version 8.0.2) and ORACLE(r) RDBMS (version 8.0.5.0.0). The hardware configuration is Hewlett Packard workstations (models 715/50 and 712/80i with 4 X-terminals) with UNIX operating system (HP-UX Release A.10.20), and PC's with Windows Operating System (NT4.0/2000). The Spatial_Data_Organization_Information section refers only to the source files in the ARC export format. The following files are included in that data set: birds.e00, bio_lut.e00, biofile.e00, biores.e00, breed.e00, breed_dt.e00, esi.e00, fish.e00, fishl.e00, habitats.e00, habpt.e00, hydro.e00, index.e00, invert.e00, invertpt.e00, m_mammal.e00, m_mampt.e00, mgt.e00, nests.e00, reptiles.e00, seasonal.e00, soc_dat.e00, soc_lut.e00, socecon.e00, sources.e00, species.e00, status.e00, t_mammal.e00. Associated relational and desktop data tables provided in Arc export and text format are bio_lut, biofile, biores, breed, breed_dt, seasonal, soc_dat, soc_lut, socecon, sources, species, and status.

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

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

Logical Consistency Report:

A multi-stage error checking process, described in the above Attribute Accuracy Report, is used to verify both attribute accuracy and logical consistency throughout data production. This process includes multiple automated logical consistency checks that test the files for missing or duplicate data, rules for proper coding, GIS topological consistencies (such as dangles, unnecessary node, etc.), and ORACLE(r) to ARC/INFO(r) consistencies. A final review is made by the GIS manager, where the data are written to CD-ROM and the metadata are written. After the data are delivered to NOAA, they are again subjected to a number of quality and consistency checks.

Completeness Report:

These data represent a synthesis of expert knowledge and available hardcopy documents on bridges, state borders, airports, aquaculture sites, beaches, boat ramps, commercial fishing sites, Coast Guard, ferries, historical sites, marinas, water intakes, and wash over sites. Refer to the MGT (Management Area Polygons) data layer for additional human-use information. These data do not represent all human-use sites in Rhode Island, Connecticut, New York, and New Jersey.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report:

The SOCECON data set was developed from pre-existing digital and hardcopy sources and largely reflects the positional accuracy of these original data. It is difficult to estimate the positional accuracy of such data, except to state that hardcopy data are compiled on basemaps with a scale of 1:24,000. See the Lineage and Process Description sections for more information on the original source data and how these data were integrated or manipulated to create the final data set.

Lineage:

Source Information:

Source Citation:

Citation Information:

Originator: Ganz, A. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title: Shellfish concentration areas and commercial fishing in RI

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source Currentness Reference: Date of communication

Source Citation Abbreviation: None

Source Contribution: Socioeconomic Information

Source Information:

Source Citation:

Citation Information:

Originator: RI Natural Heritage Program

Publication Date: 2000

Title: Natural Heritage Data - selected points in RI; washover sites

Geospatial Data Presentation Form: Hardcopy maps

Publication Information:

Publication Place: Providence, RI

Publisher: Data contact: Rick Enser (RIDEM, Providence), 401/222-6605

Type of Source Media: Paper

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: to 2000

Source Currentness Reference: Dates of surveys

Source Citation Abbreviation: None

Source Contribution: Socioeconomic Information

Source Information:

Source Citation:

Citation Information:

Originator: Lynch, T. (RIDEM, Wakefield)

Publication Date: Unpublished Material

Title:

Fish and marine mammals in RI; commercial fishing; historical sites

Geospatial Data Presentation Form: Expert knowledge

Type of Source Media: Personal communication

Source Time Period of Content:

Time Period Information:

Single Date/Time:

Calendar Date: 2000

Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Luchetti, L., (USCG, Providence)
Publication_Date: Unpublished Material
Title: Seawater intakes in RI
Geospatial_Data_Presentation_Form: Hardcopy table
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: RIGIS
Publication_Date: 1996
Title: Boat ramps in RI
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Rhode Island, <http://www.edc.uri.edu/rigis-spf/rigis.html>
Publisher: RIGIS
Source_Scale_Denominator: 24000
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1953
Ending_Date: 1988
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: RIGIS
Publication_Date: 1996
Title: Marinas in RI
Geospatial_Data_Presentation_Form: Digital
Publication_Information:
Publication_Place: Rhode Island, <http://www.edc.uri.edu/rigis-spf/rigis.html>
Publisher: RIGIS
Source_Scale_Denominator: 24000
Type_of_Source_Media: Online
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1996
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: RI Hist. Pres. & Heritage Comm.
Publication_Date: 2000
Title: Historic/archaeological sites in RI
Geospatial_Data_Presentation_Form: Hardcopy maps
Publication_Information:
Publication_Place: Providence, RI

Publisher: Contact: Paul Robinson (RIHPHC, Providence), 401/222-2678

Source_Scale_Denominator: 24000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Ganz, A. (RIDEM, Wakefield)

Publication_Date: Unpublished Material

Title: Aquaculture lease sites in RI

Geospatial_Data_Presentation_Form: Hardcopy maps

Source_Scale_Denominator: Various

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDOA (Aquaculture Div., Milford)

Publication_Date: 2000

Title: Aquaculture lease sites in CT

Geospatial_Data_Presentation_Form: Hardcopy maps

Publication_Information:

Publication_Place: Milford, CT

Publisher: Data contact: John Volk (CTDOA, Milford), 203/874-0696

Source_Scale_Denominator: 10000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1978

Ending_Date: 1999

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: DeLorme

Publication_Date: 1999

Title: Connecticut / Rhode Island Atlas & Gazetteer

Geospatial_Data_Presentation_Form: Hardcopy maps

Publication_Information:

Publication_Place: Yarmouth, ME.

Publisher: DeLorme, Yarmouth, ME, 80 p.

Source_Scale_Denominator: 65000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1999

Source_Currentness_Reference: Date of publication

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: RIGIS

Publication_Date: 1989

Title: Airports in RI

Geospatial_Data_Presentation_Form: Digital points

Publication_Information:

Publication_Place: Rhode Island

Publisher: <<http://www.edc.uri.edu/rigis-spf/Statewide/state.html>>

Source_Scale_Denominator: 24000

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1976

Ending_Date: 1983

Source_Currentness_Reference: Dates of surveys

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Barnes, D. & B. Cunningham (NYSDEC)

Publication_Date: Unpublished Material

Title: Shellfish concentration areas and aquaculture sites in NY

Geospatial_Data_Presentation_Form: Expert knowledge

Type_of_Source_Media: Personal communication

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 2000

Source_Currentness_Reference: Date of communication

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: Research Planning, Inc.

Publication_Date: Unpublished Material

Title: Aerial overflights

Geospatial_Data_Presentation_Form: Hardcopy map

Source_Scale_Denominator: 24000

Type_of_Source_Media: Paper

Source_Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 1999

Source_Currentness_Reference: Date of survey

Source_Citation_Abbreviation: None

Source_Contribution: Socioeconomic Information

Source_Information:

Source_Citation:

Citation_Information:

Originator: CTDEP

Publication_Date: 1984

Title: Airports in CT

Geospatial_Data_Presentation_Form: Digital points

Publication_Information:

Publication_Place: Hartford, CT

Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034

Source_Scale_Denominator: 24000

Type_of_Source_Media: Floppy disk

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1969

Ending_Date: 1984
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: CTDEP
Publication_Date: 1999
Title: Ferries in CT
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: Hartford, CT
Publisher: Data contact: Ron Rosza (CTDEP, Hartford), 860/424-3034
Source_Scale_Denominator: 24000
Type_of_Source_Media: Floppy disk
Source_Time_Period_of_Content:
Time_Period_Information:
Range_of_Dates/Times:
Beginning_Date: 1990
Ending_Date: 1991
Source_Currentness_Reference: Dates of surveys
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NYS Historic Preservation Office
Publication_Date: 2000
Title: NYS Historic Sites
Geospatial_Data_Presentation_Form: Digital points
Publication_Information:
Publication_Place: New York
Publisher: Data contact: Bob Englert (NYSHPO), 518/237-8643
Source_Scale_Denominator: Unknown
Type_of_Source_Media: Email
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NY/NJ Area Committee
Publication_Date: 1994
Title: NY/NJ Water Intakes
Geospatial_Data_Presentation_Form: Hardcopy table
Publication_Information:
Publication_Place: NYC
Publisher:
Area Contingency Plan for NY/NJ; Contact: E. Levine (NOAA, NYC), 212/668-6428
Source_Scale_Denominator: Unknown
Type_of_Source_Media: CD-ROM
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 1994
Source_Currentness_Reference: Date of publication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:

Originator: Freedman, J. (RI CRMC)
Publication_Date: Unpublished Material
Title: Recreational beaches; washover sites
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Alves, D. (RI CRMC)
Publication_Date: Unpublished Material
Title: Aquaculture sites
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: Levine, E. (NOAA, NYC)
Publication_Date: Unpublished Material
Title: Human-use features
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: The Port Authority of NY & NJ
Publication_Date: Unpublished Material
Title: Locations of bridges, historic sites, marinas
Geospatial_Data_Presentation_Form: Expert knowledge
Type_of_Source_Media: Personal communication
Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2001
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Source_Information:
Source_Citation:
Citation_Information:
Originator: NJ State Hist. Pres. Office
Publication_Date: Unpublished Material
Title: Locations of archaeological/historic sites in NJ
Geospatial_Data_Presentation_Form: Hardcopy maps
Source_Scale_Denominator: 24000
Type_of_Source_Media: Paper

Source_Time_Period_of_Content:
Time_Period_Information:
Single_Date/Time:
Calendar_Date: 2000
Source_Currentness_Reference: Date of communication
Source_Citation_Abbreviation: None
Source_Contribution: Socioeconomic Information
Process_Step:

Process_Description:
Three main sources of data were used to depict human-use resources for this data layer: 1) personal interviews with resource experts from the Rhode Island Department of Environmental Management (RI DEM), New York State Department of Environmental Conservation (NYS DEC), Rhode Island Coastal Resources Management Council (RI CRMC), National Oceanic and Atmospheric Administration (NOAA), and The Port Authority of New York and New Jersey; 2) digital point coverages, including: 1996 Rhode Island GIS (RIGIS) boat ramp and marina coverages for RI, a 1989 RIGIS airport coverage for RI, a 1984 Connecticut Department of Environmental Protection (CT DEP) digital coverage of airports in CT, a 1999 CT DEP coverage of ferries in CT, and a 2000 New York State Historic Preservation Office digital coverage of historic sites in NY; and 3) various hardcopy documents, including: information on the locations of water intakes, provided by the U.S. Coast Guard, Marine Safety Office, Providence, and the New York/New Jersey Area Committee; 2000 CT Department of Agriculture (CT DOA) hardcopy maps of aquaculture lease sites in CT; DeLorme Atlas and Gazetteers for Rhode Island, Connecticut, New York, and New Jersey; 1999 maps generated by Research Planning, Inc. during aerial overflights; 2000 New Jersey State Historic Preservation Office archaeological/historical site maps; and a 1999 NJ DEP Fish, Game, & Wildlife map of New Jersey's Wild Places and Open Spaces. Information gathered during initial interviews and from hardcopy maps and reports was compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles. Digital data was used as it was provided. Following the data compilation phase, two sets of completed maps were sent out to the resources agencies for review, and edits were made based on recommendations by the resource experts.

Process_Date: 200109

Process_Contact:

Contact_Information:
Contact_Organization_Primary:
Contact_Organization: NOAA, Office of Response and Restoration
Contact_Person: Jill Petersen
Contact_Address:
Address_Type: Physical address
Address: 7600 Sand Point Way, N.E.
City: Seattle
State_or_Province: Washington
Postal_Code: 98115-6349
Contact_Voice_Telephone: (206) 526-6944
Contact_Facsimile_Telephone: (206) 526-6329
Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: Vector

Point_and_Vector_Object_Information:

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Complete chain

Point_and_Vector_Object_Count: 103

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Link

Point_and_Vector_Object_Count: 787

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Entity Point

Point_and_Vector_Object_Count: 962

SDTS_Terms_Description:

SDTS_Point_and_Vector_Object_Type: Node, planar graph

Point_and_Vector_Object_Count: 167

Spatial_Reference_Information:

Horizontal_Coordinate_System_Definition:

Geographic:

Latitude_Resolution: 0.00005

Longitude_Resolution: 0.00005
Geographic_Coordinate_Units: Decimal degrees
Geodetic_Model:
Horizontal_Datum_Name: North American Datum of 1983
Ellipsoid_Name: Geodetic Reference System 1980
Semi-major_Axis: 6378137
Denominator_of_Flattening_Ratio: 298.257222

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

In addition to the geographic data layers, two relational attribute or data tables, SOC_DAT and SOURCES, are used to store the complex socioeconomic data in the ESI data structure. The geographic data layer containing socioeconomic resource information (in this case, SOCECON) 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 the Rhode Island, Connecticut, New York, and New Jersey atlas, the number is 71). ID is a unique combination of the atlas number (71), an element-specific number (SOCECON = 10) and a unique record number. SOC_DAT and the other relational data tables are described below in detail. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the way these tables relate to the geographic data layers and other attribute tables in the ESI data structure.

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOCECON.AAT

Entity_Type_Definition:

The SOCECON.AAT table contains attribute information for the vector arcs representing state borders and bridges.

Entity_Type_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: R

Enumerated_Domain_Value_Definition: BRIDGE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: SB

Enumerated_Domain_Value_Definition: STATE BORDER

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

Detailed_Description:

Entity_Type:

Entity_Type_Label: SOCECON.PAT

Entity_Type_Definition:

The SOCECON.PAT table contains attribute information for the vector points representing airports, aquaculture sites, beaches, boat ramps, commercial fishing sites, Coast Guard, ferries, historical sites, marinas, water intakes, and wash over sites. Note that all attribute information is stored in a series of relational files, described below. See the Browse_Graphic section for a link to the entity-relationship diagram, which describes the relationships between attribute tables in the ESI data structure

Entity_Type_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TYPE

Attribute_Definition:

The human-use features depicted on the maps are those that could be impacted by an oil spill or could provide access for response operations

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: A

Enumerated_Domain_Value_Definition: AIRPORT

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: AQ

Enumerated_Domain_Value_Definition: AQUACULTURE
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: B
Enumerated_Domain_Value_Definition: BEACH
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: BR
Enumerated_Domain_Value_Definition: BOATRAMP
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: CF
Enumerated_Domain_Value_Definition: COMMERCIAL FISHING
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: CG
Enumerated_Domain_Value_Definition: COAST GUARD
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: F
Enumerated_Domain_Value_Definition: FERRY
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: HS
Enumerated_Domain_Value_Definition: HISTORICAL SITE
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: M
Enumerated_Domain_Value_Definition: MARINA
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: RF
Enumerated_Domain_Value_Definition: RECREATIONAL FISHING
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: WI
Enumerated_Domain_Value_Definition: WATER INTAKE
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc
Enumerated_Domain:
Enumerated_Domain_Value: WO
Enumerated_Domain_Value_Definition: WASH OVER
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc

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 (71), element number (10), and record number.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 711000001

Range_Domain_Maximum: 711000962

Attribute:

Attribute_Label: HUNUM

Attribute_Definition: An identifier that links directly to the SOC_DAT table.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71000372

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: Research Planning, Inc.

Attribute:

Attribute_Label: HUNUM

Attribute_Definition:

An identifier that links records in the SOC_LUT data table to records in the SOC_DAT data table. HUNUM values of 0 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 71000001

Range_Domain_Maximum: 71000381

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 (71), element number (10), and record number. ID values of 9999 are holes in polygons and do not contain information.

Attribute_Definition_Source: NOAA

Attribute_Domain_Values:

Range_Domain:

Range_Domain_Minimum: 711000001

Range_Domain_Maximum: 711100513

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: Research Planning, Inc.

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: 71000001

Range_Domain_Maximum: 71000381

Attribute:

Attribute_Label: TYPE

Attribute_Definition: Identifies the feature type

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: AIRPORT

Enumerated_Domain_Value_Definition: AIRPORT

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: AQUACULTURE

Enumerated_Domain_Value_Definition: AQUACULTURE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: BEACH

Enumerated_Domain_Value_Definition: BEACH

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: BOAT RAMP

Enumerated_Domain_Value_Definition: BOAT RAMP

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: COAST GUARD

Enumerated_Domain_Value_Definition: COAST GUARD

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: COMMERCIAL FISHING

Enumerated_Domain_Value_Definition: COMMERCIAL FISHING

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: FERRY

Enumerated_Domain_Value_Definition: FERRY

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: HISTORICAL SITE

Enumerated_Domain_Value_Definition: HISTORICAL SITE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MANAGEMENT AREA

Enumerated_Domain_Value_Definition: MANAGEMENT AREA

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MARINA

Enumerated_Domain_Value_Definition: MARINA

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: MARINE SANCTUARY

Enumerated_Domain_Value_Definition: MARINE SANCTUARY

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: NATIONAL PARK

Enumerated_Domain_Value_Definition: NATIONAL PARK

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: PARK

Enumerated_Domain_Value_Definition: REGIONAL OR STATE PARK

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WASH OVER

Enumerated_Domain_Value_Definition: WASH OVER

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WATER INTAKE

Enumerated_Domain_Value_Definition: WATER INTAKE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Enumerated_Domain:

Enumerated_Domain_Value: WILDLIFE REFUGE

Enumerated_Domain_Value_Definition: WILDLIFE REFUGE

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: NAME

Attribute_Definition: The feature name

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: CONTACT

Attribute_Definition: Contact person or entity

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PHONE

Attribute_Definition: Contact telephone number
Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: G_SOURCE
Attribute_Definition:
Geographic source integer identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: A_SOURCE
Attribute_Definition:
Attribute source integer identifier that links records in the SOC_DAT data table to records in the SOURCES data table.
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Range_Domain:
Range_Domain_Minimum: 1
Range_Domain_Maximum: N

Attribute:

Attribute_Label: OWNER
Attribute_Definition: Person or entity that owns the feature
Attribute_Definition_Source: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

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: Research Planning, Inc.

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, and to G_SOURCE and S_SOURCE in the BIORES table.
Attribute_Definition_Source: Research Planning, Inc.
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: Research Planning, Inc.
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value: Any character
Enumerated_Domain_Value_Definition: Free text
Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATE_PUB
Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: mmyyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TITLE

Attribute_Definition: Title of source material or data

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: DATA_FORMAT

Attribute_Definition: The format of the source material

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: PUBLICATION

Attribute_Definition: Additional citation information

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Any character

Enumerated_Domain_Value_Definition: Free text

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: SCALE

Attribute_Definition: Scale denominator of the source

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: integer

Enumerated_Domain_Value_Definition: Any integer

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Attribute:

Attribute_Label: TIME_PERIOD

Attribute_Definition:

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

Attribute_Definition_Source: Research Planning, Inc.

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value: Numeric

Enumerated_Domain_Value_Definition: yyyy

Enumerated_Domain_Value_Definition_Source: Research Planning, Inc.

Distribution_Information:

Distributor:

Contact_Information:

Contact_Person_Primary:

Contact_Person: John Kaperick

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6400

Contact_Facsimile_Telephone: (206) 526-6329

Resource_Description:

ESI Atlas for Rhode Island, Connecticut, New York, and New Jersey

Distribution_Liability:

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

Custom_Order_Process:

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

Metadata_Reference_Information:

Metadata_Date: 200203

Metadata_Review_Date: 200203

Metadata_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jill Petersen

Contact_Organization: NOAA, Office of Response and Restoration

Contact_Position: GIS Manager

Contact_Address:

Address_Type: Physical Address

Address: 7600 Sand Point Way, N.E.

City: Seattle

State_or_Province: Washington

Postal_Code: 98115-6349

Contact_Voice_Telephone: (206) 526-6944

Contact_Facsimile_Telephone: (206) 526-6329

Contact_Electronic_Mail_Address: Jill.Petersen@noaa.gov

Metadata_Standard_Name: Content Standards for Digital Geospatial Metadata

Metadata_Standard_Version: FGDC-STD-001-1998

Relationships between spatial data layers and attribute data tables

