Greater Atlantic Region Consultation Areas for Section 7 of the Endangered Species Act

Identification ►

CITATION
CITATION INFORMATION
ORIGINATOR NOAA Fisheries Greater Atlantic Regional Fisheries Office
PUBLICATION DATE 2018-03-01
TITLE Greater Atlantic Region Consultation Areas for Section 7 of the Endangered Species Act
EDITION v1.2
PUBLICATION INFORMATION
PUBLICATION PLACE Gloucester, MA
PUBLISHER NOAA National Marine Fisheries Service (NMFS) - Greater Atlantic Regional Fisheries Office (GARFO)
ONLINE LINKAGE http://www.greateratlantic.fisheries.noaa.gov/gis
ONLINE LINKAGE http://www.greateratlantic.fisheries.noaa.gov/

DESCRIPTION
ABSTRACT
This dataset is intended as guidance for Federal action agencies in consideration of Section 7 (S7) of the Endangered Species Act (ESA). The areas depicted represent locations where the Greater Atlantic Regional Fisheries Office (GARFO) has identified species presence and areas of critical habitat for use by Federal action agencies during S7 consultation.

S7 Consultation Areas delineate locations where listed species are potentially affected within a river/estuary/marine zone. The Consultation Areas specify which life stages and behaviors may be affected. Please note that due to data limitations, if a Federal action agency project (and associated action area) is outside of a major waterway (e.g., in a very small tributary, or shallow area near a marsh), S7 Consultation Areas may lack the spatial resolution to capture the action area. Therefore, activities outside a Consultation Area but within a certain proximity may still affect the species identified within the Consultation Area. GARFO encourages Federal action agencies to request technical assistance to verify presence/absence of listed species when making consultation determinations. If a user knows of more recent information that is not reflected in the S7 Consultation Area data, please notify us so that we can make appropriate updates (zachary.jylkka@noaa.gov).

The NOAA Greater Atlantic Region includes: the states of ME, NH, VT, MA, CT, RI, NY, NJ, PA, DE, MD, DC, VA, WV, OH, MI, IN, IL, WI and MN; Atlantic waters of the US Exclusive Economic Zone from the NC/VA border to US/Canada Maritime Boundary; and US waters of the Great Lakes.

Atlantic Large Whales: This data depicts a best estimate of the range of Atlantic large whales in waters of the Greater Atlantic Region as guidance for action agencies. Please note that the distribution of these species may not be exclusively limited to the areas included.

Sea Turtles: Sea turtle species in the Greater Atlantic Region include loggerhead, Kemp's ridley, leatherback, and green sea turtles. Hawksbill sea turtles are rare in the Greater Atlantic Region and are not included. Sea turtles move north into these waters in the spring, arriving in more southern waters of the mid-Atlantic in mid-April/May and the Gulf of Maine in June. In the fall, this trend is reversed with most sea turtles leaving Greater Atlantic Region waters by the end of November. Outside of these times, sea turtle presence in these waters is considered unlikely.
Atlantic Salmon: The Gulf of Maine distinct population segment (DPS) of Atlantic salmon are an anadromous species found within rivers of Maine, as well as coastal waters encompassed by the Gulf of Maine, Gulf of St. Lawrence, Grand Bank, and the Labrador Sea. NOAA Fisheries has ESA Section 7 jurisdiction over Atlantic salmon in marine and estuarine waters, while the Fish & Wildlife Service has jurisdiction in freshwater. Please note that the distribution of these species may not be exclusively limited to the areas included.

Atlantic Sturgeon: There are four distinct population segments (DPS) of Atlantic sturgeon listed as endangered (New York Bight, Chesapeake Bay, Carolina, and South Atlantic) and one DPS listed as threatened (Gulf of Maine) under the ESA. The range for all five DPSs includes marine waters, coastal bays and estuaries, and coastal river systems from the Labrador Inlet in Labrador, Canada to Cape Canaveral, Florida.

Shortnose Sturgeon: Shortnose sturgeon are endangered throughout their range, and occur in Atlantic Ocean waters and associated bays, estuaries, and coastal river systems from Minas Basin, Nova Scotia, Canada, to the St. Johns River, Florida. They spend the majority of their lives within coastal river systems, and only adults occur in marine waters, with some adults making coastal migrations between river systems.

PURPOSE
These Section 7 Consultation Area data are intended to aid Federal action agencies during their S7 responsibilities under the Endangered Species Act (ESA) and with their determination whether activities authorized, funded, or carried out by a Federal agency may affect species listed by NOAA Fisheries under the ESA. This does not replace the Section 7 consultation process, but will help Federal action agencies determine if listed species may be affected by a proposed Federal action.

SUPPLEMENTAL INFORMATION
The Federal action agency must consider the full extent of their action area (i.e., “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50CFR§402.02)) to determine whether or not the proposed activity overlaps with listed species presence in these Consultation Areas. In cases where neither the direct nor the indirect effects of an action will extend into an area of species presence or critical habitat, and thus listed species and critical habitat will be not be exposed to any effects of the action, the Federal action agency may conclude the consultation process with a No Effect determination (see our guidance on no effect determinations). Maps indicate locations where species presence and/or critical habitat has been identified and thus section 7 consultation is likely recommended. However, based on the nature and extent of direct and indirect effects of the proposed action, does not necessarily mean all activities within indicated Consultation Areas need consultation. For example, a proposed action may be so minor or limited due to minimization measures, and/or of such a brief duration, and/or occur when species are not present, that the Federal action agency determines there are no effects of the proposed project on listed species. Federal action agencies must use discretion and expertise to determine if proposed activity may affect listed species or critical habitat. If an action agency determines that the proposed activity will not have any effect on a listed species/designated critical area, then no further consultation is necessary. However, if an action agency determines the proposed activity may affect a listed species or designated critical habitat in any capacity, they must initiate either a formal or informal consultation and, as necessary, prepare a biological assessment to initiate consultation (see instructions below).

See http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html for more on how to use the data.

TIME PERIOD OF CONTENT
TIME PERIOD INFORMATION
SINGLE DATE/TIME
CALENDAR DATE 2018-03-01
CURRENTNESS REFERENCE
Publication date

**STATUS**  
**PROGRESS** Complete  
**MAINTENANCE AND UPDATE FREQUENCY** As needed

**SPATIAL DOMAIN**  
**BOUNDING COORDINATES**  
**WEST BOUNDING COORDINATE** -80  
**EAST BOUNDING COORDINATE** -64  
**NORTH BOUNDING COORDINATE** 48  
**SOUTH BOUNDING COORDINATE** 36

**KEYWORDS**  
**THEME**  
**THEME KEYWORD THESAURUS** ISO 19115 Topic Category  
**THEME KEYWORD** biota  
**THEME KEYWORD** boundaries  
**THEME KEYWORD** environment  
**THEME KEYWORD** inlandWaters  
**THEME KEYWORD** location  
**THEME KEYWORD** oceans  
**THEME KEYWORD** planningCadastre  

**THEME**  
**THEME KEYWORD THESAURUS** EPA GIS Keyword Thesaurus  
**THEME KEYWORD** Biology  
**THEME KEYWORD** Compliance  
**THEME KEYWORD** Conservation  
**THEME KEYWORD** Ecology  
**THEME KEYWORD** Ecosystem  
**THEME KEYWORD** Environment  
**THEME KEYWORD** Estuary  
**THEME KEYWORD** Impact  
**THEME KEYWORD** Land  
**THEME KEYWORD** Management  
**THEME KEYWORD** Marine  
**THEME KEYWORD** Natural Resources  
**THEME KEYWORD** Regulatory  
**THEME KEYWORD** Surface Water  
**THEME KEYWORD** Water  

**THEME**  
**THEME KEYWORD THESAURUS** GARFO Keywords  
**THEME KEYWORD** Atlantic  
**THEME KEYWORD** Atlantic Large Whale Take Reduction Plan  
**THEME KEYWORD** Atlantic Salmon  
**THEME KEYWORD** Atlantic Sturgeon  
**THEME KEYWORD** Blue Whale  
**THEME KEYWORD** Distinct Population Segment  
**THEME KEYWORD** DPS  
**THEME KEYWORD** EEZ  
**THEME KEYWORD** Endangered Species Act  
**THEME KEYWORD** ESA  
**THEME KEYWORD** Exclusive Economic Zone  
**THEME KEYWORD** Fin Whale  
**THEME KEYWORD** GARFO
None.

**USE CONSTRAINTS**

S7 Consultation Area Use Constraints

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http://www.greateratlantic.fisheries.noaa.gov/gis

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submerged features, or man-made structures. Users assume responsibility for determining the appropriate use of this dataset.

*** Temporal Considerations *** Section 7 Consultation Areas are subject to change or modification. When changes to the Consultation Areas affect this dataset, it will be archived and replaced by an updated version as soon as feasible. It is the user’s responsibility to ensure the most recent Consultation Area data are being used.

*** Shorelines/Base Layers *** The accuracy of this dataset is dependent upon the accuracy and resolution of the datasets (e.g. shoreline, hydrography, bathymetry, shared administrative boundaries) used in the creation process. Source datasets used are specified in the metadata. These data sources were selected for their suitability to a broad audience, and may not be suitable for specific uses requiring higher-resolution information. Coastlines and water body boundaries change. Unless otherwise noted, where the National Hydrography Dataset or NOAA Medium Resolution Shoreline is used, assume the boundary reaches the most current river, estuary, or coastal shoreline delineation available.

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**SECURITY INFORMATION**
**SECURITY CLASSIFICATION SYSTEM** FIPS Pub 199
**SECURITY CLASSIFICATION** public
**SECURITY HANDLING DESCRIPTION** Standard Technical Controls

**Data Quality**

**LOGICAL CONSISTENCY REPORT**
GIS staff and Section 7 Biologists reviewed the data to ensure that all applicable fields were populated with valid values.

**COMPLETENESS REPORT**
Consultation Areas are limited to the depiction of waterways in the source data. Federal action agencies must consider “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action” (50CFR§402.02) to determine whether the proposed activity overlaps with Consultation Areas.

**POSITIONAL ACCURACY**
**HORIZONTAL POSITIONAL ACCURACY**
The horizontal accuracy of S7 Consultation Area boundaries is dependent upon the horizontal accuracy of the source data, specifically the National Hydrography Dataset (NHD).
NHD data was downloaded for each state. Border-crossing features are repeated in each state's dataset. The nationwide dataset is cited here. Only a subset of state-level download links are cited due to field limits. The following states' data were used for this project: ME, NH, VT, MA, RI, CT, NY, NJ, PA, DE, MD, DC, VA, WV, NC, SC.
Hydrography feature classes NHDArea and NHDFlowline provided most boundaries for double
bank river polygons, river mouths, river polylines, and coastlines. Feature classes NHDLine and
NHDWaterbody occasionally provided boundaries connecting NHDArea or NHDFlowline features.

Source information
Source Citation
Citation Information
Originator DoC/NOAA/NMFS/NEFSC/DMS
Publication Date 2006-06
Title
final_Statistical_Areas
Geospatial Data Presentation Form  vector digital data
Publication Information
Publication Place Northeast Fisheries Science Center
Publisher David F. Chevrier
Online Linkage  ftp://ftp.nefsc.noaa.gov/pub/gis/

Type of Source Media  digital data
Source Time Period of Content
Time Period Information
Single Date/Time
Calendar Date  2006-06
Source Currentness Reference
publication date
Source Citation Abbreviation
Stat Areas
Source Contribution
Offshore Atlantic Salmon boundaries.

Source Information
Source Citation
Citation Information
Originator NOAA's Ocean Service, Office of Coast Survey (OCS)
Publication Date 2011-05-01
Title
USMaritimeLimitsNBoundaries
Edition  1
Geospatial Data Presentation Form  vector digital data
Publication Information
Publication Place  Silver Spring, MD
Publisher National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), Office of Coast Survey (OCS)

Type of Source Media  digital data
Source Time Period of Content
Time Period Information
Single Date/Time
Calendar Date  2011-05-01
Source Currentness Reference
publication date
Source Citation Abbreviation
EEZ
Source Contribution
Offshore limit for Atlantic Whale, Sea Turtle and Atlantic Salmon

Source Information
Source Citation
Citation Information
Originator Esther Cushing
Publication Date 2007-03-20
Title
critical_habitat_by_HUC10

**Geospatial Data Presentation Form:** vector digital data

**Publication Information:**
- **Publication Place:** NOAA Fisheries Maine Field Station
- **Publisher:** Esther Cushing
- **Online Linkage:** http://www.nmfs.noaa.gov/pr/species/criticalhabitat.htm

**Source Scale Denominator:** 24000

**Type of Source Media:** digital data

**Source Time Period of Content:**
- **Time Period Information:**
- **Calendar Date:** 2007-03-20

**Source Currentness Reference:** publication date

**Source Citation Abbreviation:** Salmon HUCs

**Source Contribution:** Atlantic Salmon watersheds

**Source Information:**
- **Source Citation:**
- **Citation Information:**
- **Originator:** DOC/NOAA/NESDIS/NGDC > National Geophysical Data Center, NESDIS, NOAA, U.S.
- **Publication Date:** 2009

**Title:** ETOPO1 1 Arc-Minute Global Relief Model

**Edition:** First

**Geospatial Data Presentation Form:** raster digital data

**Publication Information:**
- **Publication Place:** Silver Spring, MD
- **Publisher:** DOC/NOAA/NESDIS/NGDC - National Geophysical Data Center

**Other Citation Details:**
- **Amante, C. and B.W. Eakins, 2009. ETOPO1 1 Arc-Minute Global Relief Model: Procedures, Data

**Online Linkage:**
- **http://www.ngdc.noaa.gov/mgg/global/global.html
- **http://www.ngdc.noaa.gov/mgg/global/relief/ETOPO1/data/bedrock/grid_registered/binary/etop

**Type of Source Media:** digital data

**Source Time Period of Content:**
- **Time Period Information:**
- **Calendar Date:** 2009

**Source Currentness Reference:** publication date

**Source Citation Abbreviation:** ETOPO1

**Source Contribution:** This source topography dataset was used to derive bathymetric contour lines.

**Source Information:**
- **Source Citation:**
- **Citation Information:**
- **Originator:** esri
- **Publication Date:** 2017-08

**Title:** World Imagery

**Geospatial Data Presentation Form:** raster digital data

**Publication Information:**
- **Publication Place:** Redlands, CA
We used this source basemap imagery to hand-digitize double-bank river polygon template boundaries when NHD polygon data did not cover the necessary extent.

**PROCESS STEP**

**PROCESS DESCRIPTION**

[2013 S7 Sea Turtle Process Step 1] A template of Northeast Regional waters was overlaid with sea turtle sightings, strandings, and tracklines; dams from state and federal data sources; rivers, and salinity. This template uses the medium resolution vector shoreline for the western boundary of the area.

**PROCESS DATE** 2013

**PROCESS STEP**

**PROCESS DESCRIPTION**

[2013 S7 Sea Turtle Process Step 2] The template was edited to display those waters in which sea turtles may occur based on the sea turtle and environmental data considered. Sources considered in the development of this data include sightings and trackline data from OBIS-SEAMAP (2009), stranding and entanglement data, and environmental data (e.g., salinity, temperature).

**PROCESS DATE** 2013

**PROCESS STEP**

**PROCESS DESCRIPTION**


**PROCESS DATE** 2014

**PROCESS STEP**

**PROCESS DESCRIPTION**

[Download NHD] Download Medium-Resolution NHD data for Greater Atlantic Region (and some neighbors): ME, VT, NH, MA, RI, CT, NY, NJ, PA, DE, MD, DC, VA, WV, NC, SC.

**PROCESS DATE** 2016-06

**PROCESS STEP**

**PROCESS DESCRIPTION**

[RKM River Template Development] While river kilometer or river mile measurements are available for individual rivers, we were unable to identify a single region-wide data source identifying standard river kilometer (RKM) measurements for major waterways across the
Greater Atlantic Region. We generated our own standard RKM measurements using the National Hydrography Dataset (NHD). Using the [GNIS_Name] attribute, we extracted river line features from the NHDFlowline and NHDLake feature classes from all states containing the river. We discarded by hand any features not representing the target watercourse. We merged and dissolved the remaining features into a single polyline feature representing the target river, filling in gaps as necessary with unnamed NHD features or drawing by hand using ESRI’s World Imagery basemap as a guide. We projected the river into an equidistant coordinate system and generated point features along the river line, spaced exactly 1 kilometer apart, beginning at the mouth. We assigned each point a number value representing its river length distance from the mouth and used the points to split the river line into 1km segments. We transferred the river distance values of the downstream and upstream points to the river line segments. From the NHDWaterbody and NHDArea data layers, we spatially extracted polygons overlapping the river line, discarded unnecessary features by hand, and merged and dissolved features to create a single double-bank polygon for each river. We usually maintained minor tributaries as part of the river polygon, but we split off some larger tributaries as their own RKM or singlepart river templates (see other processing steps for more information). At each river kilometer point location, we measured the bearing of the underlying river line, then generated transects perpendicular to the bearing to cut the double-bank river polygon into 1 RKM segments. We reviewed the resulting RKM polygon segments, and made edits by hand wherever transects crossed before reaching the riverbank, usually around sharp bends in the river. Finally, we assigned each 1 RKM polygon segment with the upstream and downstream RKM distances.

**PROCESS DATE** 2016-2017

**PROCESS STEP**  
**PROCESS DESCRIPTION**

[SINGLEPART RIVER TEMPLATE DEVELOPMENT] Some minor rivers and tributaries do not require river kilometer (RKM) segmentation for Section 7 purposes. We refer to these as singlepart rivers. We generated singlepart river templates using the National Hydrography Dataset (NHD). Using the [GNIS_Name] attribute, we extracted river line features from the NHDFlowline and NHDLake feature classes from all states containing the river. We discarded by hand any features not representing the target watercourse. We merged and dissolved the remaining features into a single polyline feature representing the target river, filling in gaps as necessary with unnamed NHD features or drawing by hand. From the NHDWaterbody and NHDArea data layers, we spatially extracted polygons overlapping the river line, discarded unnecessary features by hand, and merged and dissolved features to create a single double-bank polygon for each river. Where obstructions or physical conditions limit the occurrence of listed species, we split the singlepart polygon templates at these limits and discarded any upstream features.

**PROCESS DATE** 2017

**PROCESS STEP**  
**PROCESS DESCRIPTION**

[COASTAL/MARINE ZONE TEMPLATE DEVELOPMENT] We generated a template of offshore waters using a coastline delineated by features within the NHDArea and NHDWaterbody feature classes whose [FType] attribute values were “SeaOcean.” S7 fishery biologists reviewed this coastline and recommended changes as necessary, typically resulting in the addition of other coastal and nearshore water bodies with [FType] values of “Foreshore” or “StreamRiver.” For an offshore boundary, we generated a 50m Bathymetry contour from ETOP01. From the offshore waters template we generated coastal, marine, and estuarine zones for major bays and sounds. Some offshore are limited by Stat Area boundaries.

**PROCESS DATE** 2017

**PROCESS STEP**  
**PROCESS DESCRIPTION**

[SZLB ATTRIBUTE COLLECTION] S7 fishery biologists assembled the best available scientific information on the ESA-listed species in our region and organized a database with entries for each unique combination of a species’ life stage, behavior, and time of year in distinct river
systems and marine zones. Each entry received a unique ID. Data were gathered from literature reviews, conversations with species experts, and existing biological opinions. As new data become available, S7 biologists will update the database and corresponding features in this geodatabase.

**PROCESS DATE** 2017

**PROCESS STEP**
**PROCESS DESCRIPTION**

[SZLB Feature Extraction] Based on the species, life stage, and behavior information collected in the database, S7 fishery biologists used the templates (i.e., RKM River, Singlepart River, Coastal/Marine Zones) described above and assigned them the appropriate unique ID. For RKM Rivers, biologists relied on source data from literature or personal communications, and chose the appropriate RKM polygons that encompassed the entirety of the area referenced by the source.

**PROCESS DATE** 2017

**PROCESS STEP**
**PROCESS DESCRIPTION**

[Atlantic Salmon Process Step] NOAA Fisheries has ESA Section 7 jurisdiction over Atlantic salmon in marine and estuarine waters, while the Fish & Wildlife Service has jurisdiction in freshwater. We divided Atlantic Salmon Critical Habitat between coastal and upland watersheds, assigning each to the appropriate agency in the [S7_Agency] attribute. For data consistency, we replaced the original Critical Habitat coastline, based on a vintage Hydrologic Unit Code (HUC) watersheds, with the coastline developed for the coastal/marine zone template. Offshore boundaries are derived from a selection of Stat Areas.

**PROCESS DATE** 2017

**PROCESS STEP**
**PROCESS DESCRIPTION**

[Merge and Attribute] We merged features together based on species and river/marine zone. We joined attribute information to the geometric features based on the unique combination of Species / Zone / Life Stage / Behavior.

**PROCESS DATE** 2017

**PROCESS STEP**
**PROCESS DESCRIPTION**

[Metadata] We developed a S7 Consultation Area metadata template using the EPA Metadata Editor v3.2. This template was applied and customized to reflect the specific characteristics of the given dataset. The metadata was validated for FGDC CSDGM compliance.

**PROCESS DATE** 2017

**PROCESS STEP**
**PROCESS DESCRIPTION**

[Biologist Review] NOAA Fisheries GARFO species experts reviewed the decision rules for determining unique combinations of life stages, behaviors, and times of year, as well as the descriptions of those life stages and behaviors. As new data become available from peer-reviewed literature, research reports, etc., species experts and S7 biologists will discuss updates to the database and associated features in this geodatabase. S7 biologists will make updates based on those discussions on an annual basis, if not more frequently.

**PROCESS DATE** 2017

**PROCESS STEP**
**PROCESS DESCRIPTION**

[Quality Review] S7 biologists and GIS staff reviewed the resultant S7 Consultation Areas for accuracy and completeness.

**PROCESS DATE** 2017
[Publication] The geodatabase, with accompanying metadata, was uploaded for public download on the NOAA NMFS GARFO GIS website.

**Spatial Reference**

**Horizontal Coordinate System Definition**
- Geographic
  - Latitude Resolution: 0.000001
  - Longitude Resolution: 0.000001
  - Geographic Coordinate Units: Decimal degrees

**Geodetic Model**
- Horizontal Datum Name: North American Datum of 1983
- Ellipsoid Name: Geodetic Reference System 1980
- Semi-major Axis: 6378137.000000
- Denominator of Flattening Ratio: 298.257222

**Entities and Attributes**

**Detailed Description**

**Entity Type**
- Entity Type Label: S7 Consultation Area
- Entity Type Definition: Greater Atlantic Region Consultation Areas for Section 7 of the Endangered Species Act
- Entity Type Definition Source: GARFO

**Attribute**
- Attribute Label: UNIQUEID
  - Attribute Definition: Internal Species-Zone-LifeStage-Behavior Identifier
  - Attribute Definition Source: GARFO
  - Attribute Domain Values: Unrepresentable Domain
    - Free text field, structured as SSS_ZZZLLL_BBB, where SSS = 3-character species code, ZZZ = 3-character zone code, LLL = 3-character life stage code, BBB = 3-character behavior code

**Attribute**
- Attribute Label: SPGROUP
  - Attribute Definition: High-level grouping of species
  - Attribute Definition Source: GARFO
  - Attribute Domain Values: Enumerated Domain
    - Enumerated Domain Value: Sturgeon
      - Enumerated Domain Value Definition Source: GARFO
      - Feature is relevant to a listed sturgeon species
    - Enumerated Domain Value: Sea Turtles
      - Enumerated Domain Value Definition Source: GARFO
      - Feature is relevant to a listed sea turtle species

GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Whales
ENUMERATED DOMAIN VALUE DEFINITION Feature is relevant to a listed Atlantic Large Whale species
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Salmon
ENUMERATED DOMAIN VALUE DEFINITION Feature is relevant to Atlantic salmon
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE
ATTRIBUTE LABEL SPNAME
ATTRIBUTE DEFINITION Common Name of species affected within feature. Values represent 3-character species codes used for feature UNIQUEID.
ATTRIBUTE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE SAL
ENUMERATED DOMAIN VALUE DEFINITION Salmon, Atlantic
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE GRN
ENUMERATED DOMAIN VALUE DEFINITION Sea turtle, Green
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE HWK
ENUMERATED DOMAIN VALUE DEFINITION Sea turtle, Hawksbill
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE KMP
ENUMERATED DOMAIN VALUE DEFINITION Sea turtle, Kemp's ridley
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE LTR
ENUMERATED DOMAIN VALUE DEFINITION Sea turtle, Leatherback
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE LOG
ENUMERATED DOMAIN VALUE DEFINITION
Sea turtle, Loggerhead
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE ANS
ENUMERATED DOMAIN VALUE DEFINITION
Sturgeon, Atlantic
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE SNS
ENUMERATED DOMAIN VALUE DEFINITION
Sturgeon, Shortnose
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE BLU
ENUMERATED DOMAIN VALUE DEFINITION
Whale, Blue
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE FIN
ENUMERATED DOMAIN VALUE DEFINITION
Whale, Fin
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE RIT
ENUMERATED DOMAIN VALUE DEFINITION
Whale, Right
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE SEI
ENUMERATED DOMAIN VALUE DEFINITION
Whale, Sei
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE
ATTRIBUTE LABEL SPLATIN
ATTRIBUTE DEFINITION
Scientific (Latin) Name of species affected within feature
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Eubalaena glacialis
ENUMERATED DOMAIN VALUE DEFINITION
North Atlantic right whale
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Balaenoptera borealis
ENUMERATED DOMAIN VALUE DEFINITION
Sei whale
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Balaenoptera physalus
ENUMERATED DOMAIN VALUE DEFINITION
Fin whale
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Physeter macrocephalus
ENUMERATED DOMAIN VALUE DEFINITION
Sperm whale
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Balaenoptera musculus musculus
ENUMERATED DOMAIN VALUE DEFINITION
Blue whale
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Caretta caretta
ENUMERATED DOMAIN VALUE DEFINITION
Loggerhead turtle
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Lepidochelys kempii
ENUMERATED DOMAIN VALUE DEFINITION
Kemp's ridley turtle
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Chelonia mydas
ENUMERATED DOMAIN VALUE DEFINITION
Green turtle
ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Dermochelys coriacea
Leatherback turtle

Shortnose sturgeon

Atlantic sturgeon

All DPSs

Gulf of Maine DPS

NY Bight DPS

Chesapeake Bay DPS

Atlantic sturgeon DPS
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Carolina DPS
ENUMERATED DOMAIN VALUE DEFINITION Atlantic sturgeon DPS
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE South Atlantic DPS
ENUMERATED DOMAIN VALUE DEFINITION Atlantic sturgeon DPS
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Northwest Atlantic DPS
ENUMERATED DOMAIN VALUE DEFINITION Loggerhead sea turtle DPS
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE North Atlantic DPS
ENUMERATED DOMAIN VALUE DEFINITION Green sea turtle DPS
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Gulf of Maine DPS
ENUMERATED DOMAIN VALUE DEFINITION Atlantic salmon DPS
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE
ATTRIBUTE LABEL ESASTATUS
ATTRIBUTE DEFINITION Endangered Species Act Listing Status for identified species
ATTRIBUTE DEFINITION SOURCE ESA

ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Threatened
ENUMERATED DOMAIN VALUE DEFINITION Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range
ENUMERATED DOMAIN VALUE DEFINITION SOURCE Endangered Species Act of 1973

ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Endangered
ENUMERATED DOMAIN VALUE DEFINITION Any species which is in danger of extinction throughout all or a significant portion of its range
ENUMERATED DOMAIN VALUE DEFINITION SOURCE Endangered Species Act of 1973

ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE Threatened/Endangered
All Distinct Population Segments (DPS) of a species may be present, but some DPSs are threatened while others are endangered.

Endangered Species Act of 1973

Field not applicable.

Federal Register Citation

Recovery Plan Citation

Species Life Stage affected within feature. Values represent 3-character life stage codes used for feature UNIQUEID.

Adults

Adults and Smolts (Juveniles)

Adults and Juveniles
Enumerated Domain
Enumerated Domain Value EGG
Enumerated Domain Value Definition Eggs
Enumerated Domain Value Definition Source GARFO

Attribute Domain Values
Enumerated Domain
Enumerated Domain Value EYL
Enumerated Domain Value Definition Eggs and Yolk-sac Larvae
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value FRY
Enumerated Domain Value Definition Fry
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value HCH
Enumerated Domain Value Definition Hatchlings (Alevin)
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value JUV
Enumerated Domain Value Definition Juveniles
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value JLV
Enumerated Domain Value Definition Juveniles and Larvae
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value LAR
Enumerated Domain Value Definition Larvae
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value PAR
Enumerated Domain Value Definition Parr
Enumerated Domain Value Definition Source GARFO

Enumerated Domain Value PYL
Enumerated Domain Value Definition Larvae
Post Yolk-sac Larvae

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE SMO
ENUMERATED DOMAIN VALUE DEFINITION

Smolts (Juveniles)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE SUB
ENUMERATED DOMAIN VALUE DEFINITION

Subadults

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE YOY
ENUMERATED DOMAIN VALUE DEFINITION

Young of year

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE
ATTRIBUTE LABEL BEHAVIOR
ATTRIBUTE DEFINITION
Species behavior affected within feature. Values represent 3-character behavior codes used for feature UNIQUEID.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE CLV
ENUMERATED DOMAIN VALUE DEFINITION

Calving

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE COL
ENUMERATED DOMAIN VALUE DEFINITION

Cold-stunning

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE FOR
ENUMERATED DOMAIN VALUE DEFINITION

Foraging

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO

ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN

 ENUMERATED DOMAIN VALUE MIG
ENUMERATED DOMAIN VALUE DEFINITION

Migrating

ENUMERATED DOMAIN VALUE DEFINITION SOURCE
GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE MAF
Migrating and foraging
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE MFR
Migrating, foraging, and rearing
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE NON
Behavior not applicable
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE WIN
Overwintering
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE RER
Rearing
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE SPN
Spawnning
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
ENUMERATED DOMAIN
ENUMERATED DOMAIN VALUE STG
Staging
ENUMERATED DOMAIN VALUE DEFINITION SOURCE GARFO

ATTRIBUTE
ATTRIBUTE LABEL WATERSHED
ATTRIBUTE DEFINITION
Major watershed name containing feature
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN
Free text
ATTRIBUTE
ATTRIBUTE LABEL ZONE
ATTRIBUTE DEFINITION
Zone (river, estuary, or marine waters) containing feature. Unique 3-character zone abbreviations are used for feature UNIQUEID, but there are too many to list here, and more are added as needed.
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN
Free text

ATTRIBUTE
ATTRIBUTE LABEL SEASON1BEG
ATTRIBUTE DEFINITION
If the Consultation Area feature is only seasonally relevant, this field records the approximate start date of the relevant season
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN
Date as MM/DD

ATTRIBUTE
ATTRIBUTE LABEL SEASON1END
ATTRIBUTE DEFINITION
If the Consultation Area feature is only seasonally relevant, this field records the approximate last date of the relevant season
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN
Date as MM/DD

ATTRIBUTE
ATTRIBUTE LABEL SEASON2BEG
ATTRIBUTE DEFINITION
If the Consultation Area feature is only seasonally relevant, and there are multiple seasons (e.g., upstream migration, downstream migration), this field records the approximate start date of the relevant season occurring later in the year
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN
Date as MM/DD

ATTRIBUTE
ATTRIBUTE LABEL SEASON2END
ATTRIBUTE DEFINITION
If the Consultation Area feature is only seasonally relevant, and there are multiple seasons (e.g., upstream migration, downstream migration), this field records the approximate end date of the relevant season occurring later in the year
ATTRIBUTE DEFINITION SOURCE GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN
Date as MM/DD

ATTRIBUTE
ATTRIBUTE LABEL RKMDNGAR
ATTRIBUTE DEFINITION
The downstream river kilometer (RKM) of the Consultation Area feature, based on GARFO's measurements of river distance
ATTRIBUTE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

Distance (km) from calculated mouth of river

ATTRIBUTE
ATTRIBUTE LABEL  RKMUPGAR
ATTRIBUTE DEFINITION
The upstream river kilometer (RKM) of the Consultation Area feature, based on GARFO's measurements of river distance
ATTRIBUTE DEFINITION SOURCE  GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN

Distance (km) from calculated mouth of river

ATTRIBUTE
ATTRIBUTE LABEL  RKMDNSRC
ATTRIBUTE DEFINITION
The downstream river kilometer (RKM) of the Consultation Area feature, based on the primary source's (not GARFO) measurements of river distance
ATTRIBUTE DEFINITION SOURCE  See [RKMSRC]
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN

Distance (km) from calculated mouth of river

ATTRIBUTE
ATTRIBUTE LABEL  RKMUPSRC
ATTRIBUTE DEFINITION
The upstream river kilometer (RKM) of the Consultation Area feature, based on the primary source's (not GARFO) measurements of river distance
ATTRIBUTE DEFINITION SOURCE  See [RKMSRC]
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN

Distance (km) from calculated mouth of river

ATTRIBUTE
ATTRIBUTE LABEL  RKMSRC
ATTRIBUTE DEFINITION
The primary source citation used for [RKMDNSRC] and [RKMUPSRC] fields
ATTRIBUTE DEFINITION SOURCE  Self-Referential
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN

Free text

ATTRIBUTE
ATTRIBUTE LABEL  CITATION
ATTRIBUTE DEFINITION
Primary sources contributing to delineation of Consultation Area
ATTRIBUTE DEFINITION SOURCE  GARFO
ATTRIBUTE DOMAIN VALUES
UNREPRESENTABLE DOMAIN

Free text

ATTRIBUTE
ATTRIBUTE LABEL  NOTES
ATTRIBUTE DEFINITION
Additional details supporting or clarifying the Consultation Area boundaries or seasonality
ATTRIBUTE DEFINITION SOURCE  GARFO
Entity Attributes provide reference information for the S7 Consultation Area represented. Attributes describe the species, zone, life stage, and behavior likely to be found within the delineated feature. Attributes also describe seasonality, upstream and downstream river extent (where applicable), and supporting primary source citations.

Entities and attributes are a product of the NOAA Fisheries Greater Atlantic Regional Fisheries Office.

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Resource Description
Downloadable Data

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