

# 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/>

#### ONLINE LINKAGE

<http://www.greateratlantic.fisheries.noaa.gov/protected/section7/guidance/maps/index.html>

### 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](mailto: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 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

THEME KEYWORD Greater Atlantic Regional Fisheries Office  
THEME KEYWORD Green Sea Turtle  
THEME KEYWORD Kemp's Ridley Sea Turtle  
THEME KEYWORD Leatherback Sea Turtle  
THEME KEYWORD Loggerhead Sea Turtle  
THEME KEYWORD National Marine Fisheries Service  
THEME KEYWORD National Oceanic and Atmospheric Administration  
THEME KEYWORD NMFS  
THEME KEYWORD NOAA  
THEME KEYWORD North Atlantic Right Whale  
THEME KEYWORD Sea Turtles  
THEME KEYWORD Section 7  
THEME KEYWORD Sei Whale  
THEME KEYWORD Shortnose Sturgeon  
THEME KEYWORD Sperm Whale  
THEME KEYWORD US EEZ

PLACE

PLACE KEYWORD THESAURUS None  
PLACE KEYWORD Androscoggin River  
PLACE KEYWORD Appomattox River  
PLACE KEYWORD Atlantic Ocean  
PLACE KEYWORD Broad Creek  
PLACE KEYWORD C and D Canal  
PLACE KEYWORD Cape Cod Bay  
PLACE KEYWORD Chesapeake Bay  
PLACE KEYWORD Choptank River  
PLACE KEYWORD Cocheco River  
PLACE KEYWORD Connecticut River  
PLACE KEYWORD Damariscotta River  
PLACE KEYWORD Deerfield River  
PLACE KEYWORD Delaware River  
PLACE KEYWORD East River  
PLACE KEYWORD Georges Bank  
PLACE KEYWORD Greater Atlantic Region  
PLACE KEYWORD Gulf of Maine  
PLACE KEYWORD Housatonic River  
PLACE KEYWORD Hudson River  
PLACE KEYWORD James River  
PLACE KEYWORD Kennebec River  
PLACE KEYWORD Long Island Sound  
PLACE KEYWORD Machias River  
PLACE KEYWORD Marshyhope Creek  
PLACE KEYWORD Mattaponi River  
PLACE KEYWORD Medomak River  
PLACE KEYWORD Merrimack River  
PLACE KEYWORD Mid-Atlantic  
PLACE KEYWORD Nanticoke River  
PLACE KEYWORD Narraganset Bay  
PLACE KEYWORD Narraguagus River  
PLACE KEYWORD New England  
PLACE KEYWORD Pamunkey River  
PLACE KEYWORD Penobscot River  
PLACE KEYWORD Piscataqua River  
PLACE KEYWORD Potomac River  
PLACE KEYWORD Presumpscot River

PLACE KEYWORD Quinnipiac River  
PLACE KEYWORD Rappahannock River  
PLACE KEYWORD Saco River  
PLACE KEYWORD Salmon Falls River  
PLACE KEYWORD Schuylkill River  
PLACE KEYWORD Sheepscot River  
PLACE KEYWORD Southern New England  
PLACE KEYWORD Susquehanna River  
PLACE KEYWORD Taunton River  
PLACE KEYWORD Thames River  
PLACE KEYWORD United States  
PLACE KEYWORD US EEZ  
PLACE KEYWORD US Exclusive Economic Zone  
PLACE KEYWORD Westfield River  
PLACE KEYWORD York River

#### ACCESS CONSTRAINTS

None.

#### USE CONSTRAINTS

S7 Consultation Area Use Constraints

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NOAA Fisheries Service. Greater Atlantic Region Consultation Areas for Section 7 of the Endangered Species Act. [Geodatabase]. Gloucester, MA: National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), Greater Atlantic Regional Fisheries Office (GARFO) [producer] {SHAPEFILE PUBLICATION DATE}.  
<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.

#### [POINT OF CONTACT](#)

##### [CONTACT INFORMATION](#)

##### [CONTACT PERSON PRIMARY](#)

[CONTACT PERSON](#) Zach Jylkka

[CONTACT ORGANIZATION](#) NOAA Fisheries Service Greater Atlantic Regional Fisheries Office, Protected Resources Division

[CONTACT POSITION](#) Fisheries Biologist

##### [CONTACT ADDRESS](#)

[ADDRESS TYPE](#) mailing and physical address

[ADDRESS](#) 55 Great Republic Drive

[CITY](#) Gloucester

[STATE OR PROVINCE](#) MA

[POSTAL CODE](#) 01930

[CONTACT VOICE TELEPHONE](#) 978-282-8467

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[CONTACT ELECTRONIC MAIL ADDRESS](#) zachary.jylkka@noaa.gov

##### [CONTACT INSTRUCTIONS](#)

<http://www.greateratlantic.fisheries.noaa.gov/>

#### [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](#)

##### [HORIZONTAL POSITIONAL ACCURACY REPORT](#)

The horizontal accuracy of S7 Consultation Area boundaries is dependent upon the horizontal accuracy of the source data, specifically the National Hydrography Dataset (NHD).

#### [LINEAGE](#)

SOURCE INFORMATION

SOURCE CITATION

CITATION INFORMATION

ORIGINATOR U.S. Geological Survey, National Geospatial Technical Operations Center

PUBLICATION DATE 2014-07-18

TITLE

Medium-Resolution National Hydrography Dataset

GEOSPATIAL DATA PRESENTATION FORM vector digital data

PUBLICATION INFORMATION

PUBLICATION PLACE Reston, VA

PUBLISHER U.S. Geological Survey

OTHER CITATION DETAILS

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.

ONLINE LINKAGE <http://viewer.nationalmap.gov/basic/>

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_23\\_Maine\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_23_Maine_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_33\\_New\\_Hampshire\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_33_New_Hampshire_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_50\\_Vermont\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_50_Vermont_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_25\\_Massachusetts\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_25_Massachusetts_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_44\\_Rhode\\_Island\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_44_Rhode_Island_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_09\\_Connecticut\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_09_Connecticut_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_36\\_New\\_York\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_36_New_York_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_34\\_New\\_Jersey\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_34_New_Jersey_ST.zip)

ONLINE LINKAGE [https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD\\_M\\_42\\_Pennsylvania\\_ST.zip](https://prd-tnm.s3.amazonaws.com/StagedProducts/Hydrography/NHD/State/MediumResolution/GDB/NHD_M_42_Pennsylvania_ST.zip)

SOURCE SCALE DENOMINATOR 24000

TYPE OF SOURCE MEDIA digital data

SOURCE TIME PERIOD OF CONTENT

TIME PERIOD INFORMATION

RANGE OF DATES/TIMES

BEGINNING DATE 1994-01-01

ENDING DATE 2009-11-06

SOURCE CURRENTNESS REFERENCE

publication date

SOURCE CITATION ABBREVIATION

NHD

SOURCE CONTRIBUTION

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

SINGLE DATE/TIME

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>

ONLINE LINKAGE

[http://www.ngdc.noaa.gov/mgg/global/relief/ETOPO1/data/bedrock/grid\\_registered/binary/etop](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

SINGLE DATE/TIME

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

PUBLISHER esri

OTHER CITATION DETAILS

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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

TYPE OF SOURCE MEDIA digital data

SOURCE TIME PERIOD OF CONTENT

TIME PERIOD INFORMATION

SINGLE DATE/TIME

CALENDAR DATE 2017-08

SOURCE CURRENTNESS REFERENCE

publication date

SOURCE CITATION ABBREVIATION

World Imagery Basemap

SOURCE CONTRIBUTION

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

[2014 S7 Whale Process Step] Published information was used to develop the polygons for this data. These sources included Perrin, W.F., B. Wursig, and J.G.M (eds). Thewissen. 2002. Encyclopedia of Marine Mammals. Academic Press. 1414p.; Waring G.T, E. Josephson, K. Maze-Foley, P.E. Rosel. (eds). 2013. U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments -- 2012. NOAA Tech Memo NMFS NE 223; 419 p.; Wynne, K. and M. Schwartz. 1999. Guide to Marine Mammals & Turtles of the U.S. Atlantic & Gulf of Mexico. Rhode Island Sea Grant, University of Rhode Island. 114p

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 NHDLine 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 NHDLine 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 ETOPO1. 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

#### PROCESS STEP

#### PROCESS DESCRIPTION

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

PROCESS DATE 2018-03-01

## Spatial Reference ►

#### HORIZONTAL COORDINATE SYSTEM DEFINITION

##### GEOGRAPHIC

LATITUDE RESOLUTION .000001

LONGITUDE RESOLUTION .000001

GEOGRAPHIC COORDINATE UNITS Decimal degrees

#### GEODETTIC 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\_ZZZ\_LLL\_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

Feature is relevant to a listed sturgeon species

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

GARFO

##### ATTRIBUTE DOMAIN VALUES

##### ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE Sea Turtles

##### ENUMERATED DOMAIN VALUE DEFINITION

Feature is relevant to a listed sea turtle species

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

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 DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE SPM  
ENUMERATED DOMAIN VALUE DEFINITION

**Whale, Sperm**  
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*

ENUMERATED DOMAIN VALUE DEFINITION

**Leatherback turtle**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **Acipenser brevirostrum**

ENUMERATED DOMAIN VALUE DEFINITION

**Shortnose sturgeon**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **Acipenser oxyrinchus oxyrinchus**

ENUMERATED DOMAIN VALUE DEFINITION

**Atlantic sturgeon**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **Salmo salar**

ENUMERATED DOMAIN VALUE DEFINITION

**Atlantic salmon**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE

ATTRIBUTE LABEL **DPS**

ATTRIBUTE DEFINITION

**Distinct Population Segment (when applicable) of species affected within feature**

ATTRIBUTE DEFINITION SOURCE **GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **All DPSs**

ENUMERATED DOMAIN VALUE DEFINITION

**All Atlantic sturgeon DPSs**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **Gulf of Maine DPS**

ENUMERATED DOMAIN VALUE DEFINITION

**Atlantic sturgeon DPS or Atlantic salmon DPS (see [SPNAME] field)**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **NY Bight DPS**

ENUMERATED DOMAIN VALUE DEFINITION

**Atlantic sturgeon DPS**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE **Chesapeake Bay DPS**

ENUMERATED DOMAIN VALUE DEFINITION

**Atlantic sturgeon DPS**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**

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

ATTRIBUTE DOMAIN VALUES  
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  
ATTRIBUTE DOMAIN VALUES  
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  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE Threatened/Endangered

ENUMERATED DOMAIN VALUE DEFINITION

All Distinct Population Segments (DPS) of a species may be present, but some DPSs are threatened while others are endangered.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

Endangered Species Act of 1973

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE N/A

ENUMERATED DOMAIN VALUE DEFINITION

Field not applicable.

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

GARFO

ATTRIBUTE

ATTRIBUTE LABEL FRCIT

ATTRIBUTE DEFINITION

Federal Register Citation

ATTRIBUTE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

Free text

ATTRIBUTE

ATTRIBUTE LABEL RECPLAN

ATTRIBUTE DEFINITION

Recovery Plan Citation

ATTRIBUTE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES

UNREPRESENTABLE DOMAIN

Free text

ATTRIBUTE

ATTRIBUTE LABEL LIFESTAGE

ATTRIBUTE DEFINITION

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

ATTRIBUTE DEFINITION SOURCE GARFO

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE ADU

ENUMERATED DOMAIN VALUE DEFINITION

Adults

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

GARFO

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE ASM

ENUMERATED DOMAIN VALUE DEFINITION

Adults and Smolts (Juveniles)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

GARFO

ATTRIBUTE DOMAIN VALUES

ENUMERATED DOMAIN

ENUMERATED DOMAIN VALUE AJV

ENUMERATED DOMAIN VALUE DEFINITION

Adults and Juveniles

ENUMERATED DOMAIN VALUE DEFINITION SOURCE

GARFO

ATTRIBUTE DOMAIN VALUES

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

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE FRY  
ENUMERATED DOMAIN VALUE DEFINITION

### Fry

ENUMERATED DOMAIN VALUE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE HCH  
ENUMERATED DOMAIN VALUE DEFINITION

### Hatchlings (Alevin)

ENUMERATED DOMAIN VALUE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE JUV  
ENUMERATED DOMAIN VALUE DEFINITION

### Juveniles

ENUMERATED DOMAIN VALUE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE JLV  
ENUMERATED DOMAIN VALUE DEFINITION

### Juveniles and Larvae

ENUMERATED DOMAIN VALUE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE LAR  
ENUMERATED DOMAIN VALUE DEFINITION

### Larvae

ENUMERATED DOMAIN VALUE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE PAR  
ENUMERATED DOMAIN VALUE DEFINITION

### Parr

ENUMERATED DOMAIN VALUE DEFINITION SOURCE  
GARFO

ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE PYL  
ENUMERATED DOMAIN VALUE DEFINITION

## 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.

ATTRIBUTE 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  
ENUMERATED DOMAIN VALUE DEFINITION  
**Migrating and foraging**  
ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE MFR  
ENUMERATED DOMAIN VALUE DEFINITION  
**Migrating, foraging, and rearing**  
ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE NON  
ENUMERATED DOMAIN VALUE DEFINITION  
**Behavior not applicable**  
ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE WIN  
ENUMERATED DOMAIN VALUE DEFINITION  
**Overwintering**  
ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE RER  
ENUMERATED DOMAIN VALUE DEFINITION  
**Rearing**  
ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE SPN  
ENUMERATED DOMAIN VALUE DEFINITION  
**Spawning**  
ENUMERATED DOMAIN VALUE DEFINITION SOURCE

**GARFO**  
ATTRIBUTE DOMAIN VALUES  
ENUMERATED DOMAIN  
ENUMERATED DOMAIN VALUE STG  
ENUMERATED DOMAIN VALUE DEFINITION  
**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

ATTRIBUTE DOMAIN VALUES  
UNREPRESENTABLE DOMAIN  
Free text

ATTRIBUTE  
ATTRIBUTE LABEL DATECREATE  
ATTRIBUTE DEFINITION  
Date GIS feature was drawn, used for version tracking  
ATTRIBUTE DEFINITION SOURCE GARFO  
ATTRIBUTE DOMAIN VALUES  
UNREPRESENTABLE DOMAIN  
Date as MM/DD/YYYY

OVERVIEW DESCRIPTION  
ENTITY AND ATTRIBUTE OVERVIEW

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.

ENTITY AND ATTRIBUTE DETAIL CITATION

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

## Distribution Information ►

DISTRIBUTOR  
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RESOURCE DESCRIPTION Downloadable Data  
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## Metadata Reference ►

METADATA DATE 2018-03-01

METADATA FUTURE REVIEW DATE 2022-03-01

METADATA CONTACT

CONTACT INFORMATION

CONTACT ORGANIZATION PRIMARY

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METADATA STANDARD NAME FGDC Content Standard for Digital Geospatial Metadata

METADATA STANDARD VERSION FGDC-STD-001-1998