

Environmental Sensitivity Index Maps

A Guide to Coastal Resources at Risk to Spilled Oil

Maine and New Hampshire: Volume 4



Office of Response and Restoration

September 2016

NOAA

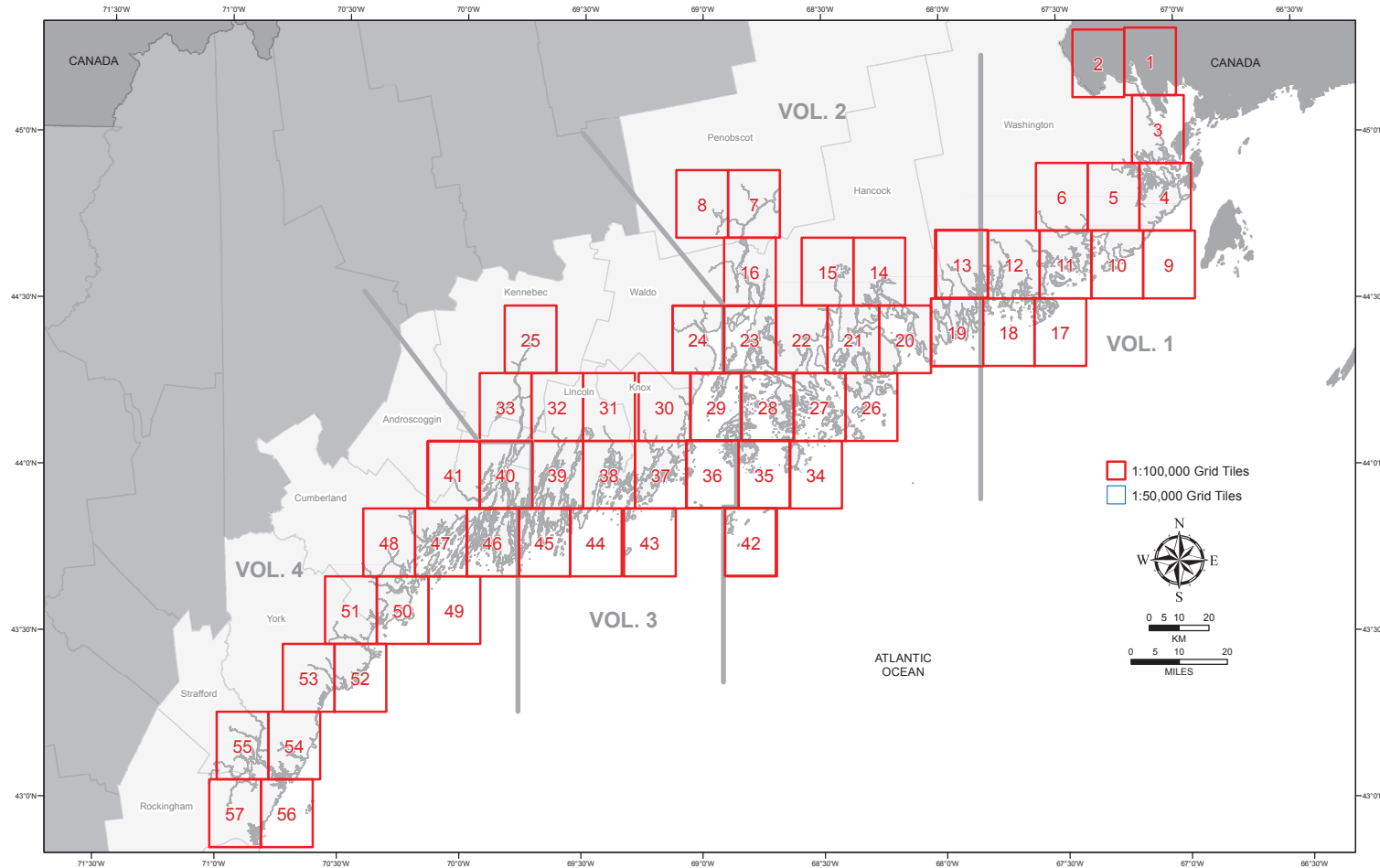
Environmental Sensitivity

Index Maps

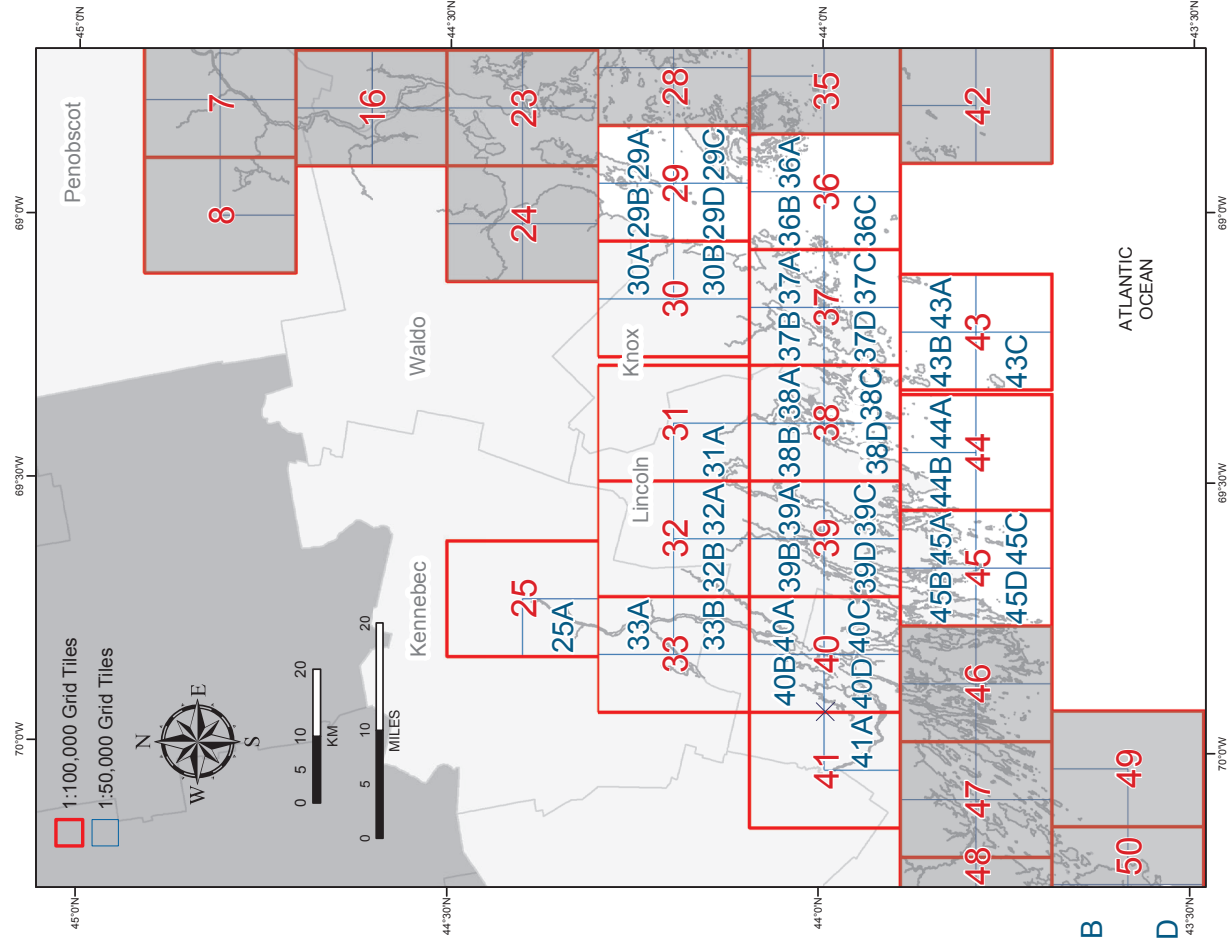
A Guide to Coastal Resources at Risk to Spilled Oil

Maine and New Hampshire

Maine and New Hampshire



Maine and New Hampshire: Volume 3
Midcoast Maine, Southern Maine and New Hampshire



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ENVIRONMENTAL SENSITIVITY INDEX: MAINE AND NEW HAMPSHIRE

INTRODUCTION

This Environmental Sensitivity Index (ESI) atlas was developed for the marine and coastal areas of Maine and New Hampshire. The atlas covers the coastal areas of Maine from the international border between the United States and Canada along the Saint Croix River, westward to the New Hampshire and Massachusetts state borders. The study area also includes Great Bay and approximately 70 bays that open into the Gulf of Maine, but does not include the Bay of Fundy, which is between the Canadian provinces of New Brunswick and Nova Scotia. Major tidal tributary rivers include the Piscataque, Saco, Nonesuch, Fore, Royal, Harraseeket, Kennebec, Black, Sheepscot, Damariscotta, Oyster, Passagassawakeag, Penobscot, Orland, Union, Narraguagus, Machias, Pennamaquan, and Saint Croix Rivers in Maine, and the Piscataque, Lamprey, Squamscott in New Hampshire. The inland extent of the study area includes lands and fresh waters to five nautical miles from the shoreline of tidal waters. The ESI represents a compilation of information about three main categories: shoreline habitats, sensitive biological resources, and human-use resources. Though the data will be useful for many shoreline applications, the goal of the ESI data is to present a concise summary of resources that may be particularly vulnerable to spilled oil. The intent of the data should caveat other uses. As an example, the ESI is not intended to present a catalog or comprehensive listing of species present in an area, rather the focus is on species particularly sensitive to oiling and life stages where vulnerability may increase.

SHORELINE HABITAT MAPPING

The shoreline and classifications were fully updated using the following sources and methods. The shoreline and intertidal habitats were delineated using a mapped sequence of Light Detection and Ranging (LiDAR) and high resolution digital orthophotography datasets. The LiDAR data was obtained from the U.S. Geological Survey (USGS) Topographic LiDAR: LiDAR for the North East program (2011) and the Federal Emergency Management Agency (FEMA) Topographic LiDAR: Cumberland and York Counties, Maine program (2006).

The base shoreline was compiled at Mean Higher High Water (MHHW) first by LiDAR extraction, then refined within a Geographic Information System (GIS) utilizing high resolution digital orthophotos. After the shoreline was delineated, digital orthoimagery from various sources was used to classify shoreline segments using the nationally, standardized ESI scale (see below). Imagery from the Maine Office of Geographic Information Systems (2014), USDA-FSA Aerial Photography Field Office (2014), and the Piscataqua Region Estuaries Partnership (2013), as well as various imagery sources for Google Earth and Bing Maps (2014) was used during the classification phase.

Shoreline features of 10 meters (m) or greater in length were classified. In addition, wetland polygon datasets originally created by the United States Fish and Wildlife Service National Wetland Inventory (NWI) were modified and updated to be used in conjunction with the ESI shoreline. The data was visually reviewed and classified against the aerial imagery and adjusted where necessary to allow for proper classification. All classifications were determined by the specifications outlined in the Environmental Sensitivity Index Guidelines version 3.0 (2002). Where necessary, multiple types were used to describe shoreline segments. GIS quality control measures were implemented to ensure that all data met the required specifications.

The ESI shoreline classification and ranking scale has been used to assess vulnerability of shoreline to spilled oil since the mid-1970s. Rankings range from 1 – least vulnerable, to 10 – most vulnerable, with a variety of qualifiers unique to the geographic region. The scale incorporates the following considerations:

- 1) Shoreline type (substrate, grain size, tidal elevation, origin)
- 2) Exposure to wave and tidal energy
- 3) Biological productivity and sensitivity
- 4) Ease of cleanup

Prediction of the behavior and persistence of oil in intertidal habitats is based on an understanding of the dynamics of the coastal environments, not just the substrate type and grain size. The intensity of energy expended upon a shoreline by wave action, tidal currents, and river currents directly affects the persistence of stranded oil. The need for shoreline cleanup activities is determined, in part, by the slowness of natural processes in removal of oil stranded on the shoreline. The potential for biological injury and ease of cleanup of spilled oil are also important factors in the ESI shoreline ranking. Thus, shorelines exposed to high levels of physical energy, such as wave action and tidal currents, and low biological activity rank low on the scale, whereas sheltered shorelines with associated high biological activity have the highest ranking. The shoreline types delineated for Maine and New Hampshire presented in order of increasing sensitivity to spilled oil, are listed below.

- | | |
|--|--|
| 1A) Exposed Rocky Shores | 8A) Sheltered Scarps (Bedrock/Mud/Clay) |
| 1B) Exposed, Solid Man-made Structures | 8A) Sheltered, Impermeable, Rocky Shores |
| 2A) Exposed, Wave-cut Platforms in Clay | 8B) Sheltered, Solid Man-made Structures |
| 2B) Exposed Scarps and Steep Slopes in Mud | 8C) Sheltered Riprap |
| 3A) Fine- to Medium-grained Sand Beaches | 8D) Sheltered, Rocky, Rubble Shores |
| 3B) Scarps and Steep Slopes in Sand | 9A) Sheltered Tidal Flats |
| 4) Coarse-grained Sand Beaches | 9B) Vegetated Low Banks |
| 5) Mixed Sand and Gravel Beaches | 10A) Salt- and Brackish-water Marshes |
| 6A) Gravel Beaches | 10B) Freshwater Marshes |
| 6B) Riprap | 10C) Swamps |
| 7) Exposed Tidal Flats | 10D) Scrub-Shrub Wetlands |

For each of these shoreline types, a photo and description of the physical attributes, predicted oil behavior, and response considerations is included at the end of the introductory pages.

SENSITIVE BIOLOGICAL RESOURCES

Biological information presented in this atlas was collected, compiled, and reviewed with the assistance of biologists and resource managers from the following agencies:

- Maine Department of Environmental Protection (MDEP)
- Maine Department of Marine Resources (MDMR)
- Maine Department of Inland Fisheries and Wildlife (MDIFW)
- U.S. Fish and Wildlife Service (USFWS)
- New Hampshire Audubon
- New Hampshire Fish and Game Department
- New Hampshire Department of Environmental Services (NH DES)
- University of New Hampshire
- NOAA Office for Coastal Management
- The Nature Conservancy
- Northeast Regional Ocean Council
- New Hampshire Seacoast Science Center

The biological resources shown in this atlas were extracted from the ESI GIS data compiled for this region. The extracted features were mapped at scale of 1:50,000 and appear on the maps referenced by a combination of number and letter. For example, Map 1B will show the biological features in conjunction with the ESI shoreline. The biology maps on these maps is “layered” in the PDF maps. This allows the user to turn off the biological features to more clearly see the underlying shoreline and habitat polygons. The data published date appearing at the bottom of the maps and on the cover page reflect when the data collection and compilation was completed. This atlas represents those data and was published November 2016.

KEY BIOLOGICAL FEATURES ON ESI MAPS

- 1) Occurrences of animal and plant species that are at risk to spilled oil or may be impacted during a spill response are represented in the database by polygons, points, and lines.
- 2) To avoid clutter, the front of the map features occurrences that cover less than 10 kilometers of the map extent. A Map ID is associated with each of these polygonal, linear or point features.
- 3) Each map includes a tabular report summarizing the species found in the area. Features that are shown on the map are referenced by their Map ID. Features that cover more than 10 kilometers are presented in the report as Widespread in Mapped Area. Species occurrences that appear in the database as General Distribution are listed in a third category, Also Present in Mapped Area. To fully understand the diversity of species present, ALL sections of the map report should be reviewed.
- 4) Associated with each species in the table is the state (S) and federal (F) protected status as threatened (T) or endangered (E), as well as concentration, seasonality, and life-history information. Federal listings were provided by USFWS. State listings were provided by New Hampshire Fish and Game and Maine Department of Inland Fish and Wildlife.
- 5) The table includes a Mapping Qualifier with each species record (see table of mapping qualifiers and guidelines below). The mapping qualifier should help users understand particular vulnerabilities associated with the map data.
- 6) Feature level source information is included in the GIS database used to create these maps. The GIS data also provides the extent polygons for all mapped features; it can be queried, filtered, and used with other GIS datasets.
- 7) Species have been divided into groups and subgroups based on their behavior, morphology, taxonomic classification, and spill vulnerability and sensitivity. The icons below reflect this grouping scheme.
- 8) Colors depicting monthly seasonality roughly reflect Winter/Spring/Summer/Fall, but are primarily intended to ease readability.

MARINE MAMMAL



Dolphin



Pinniped



Whale

HERPETOFAUNA



Amphibian/Snake



Turtle

HABITAT



Upland/Wetland/Plant

BIRD



Alcid/Pelagic



Diving



Gull/Tern



Passerine



Raptor



Shorebird



Wading



Waterfowl

INVERTEBRATE



Bivalve



Cephalopod



Crab/Invertebrate/
Shellfish



Echinoderm



Gastropod



Insect



Lobster

FISH



Fish



Nursery

Mapping Qualifiers and Guidelines

Element	Qualifier	Guidelines
All	Concentration Area	Areas where concentrations are considerably higher than other records of the same species in the area of interest.
All	General Distribution	Used for broad, general distributions of species that are often mapped to landscape- or habitat-scale features.
All	Vulnerable Occurrence	Intended for records of rare species with discrete occurrences, where the conservation value of the species should be highlighted for spill response.
Birds, Herpetofauna, Marine Mammals, Fish, Invertebrates	Migration	Used when an area is a known staging area of high importance to the species for birds; and/or areas are potential or known migration corridors in the marine environment for other elements.
Birds, Herpetofauna	Nesting	Applicable to all nesting birds and herps. Should represent known nesting areas rather than all potential nesting habitat.
Birds	Rafting	Similar to 'Concentration Area' qualifier, but specific to large on-water concentrations.
Birds	Wintering	Designates known areas of importance to wintering birds.
Benthic	High Ecological Value	For use in areas where benthic organisms provide high ecological services, high quality habitat, or known areas of high biodiversity.
Fish and Invertebrates	Harvest Area	May be used as a qualifier for distributions in special cases, where the general distribution was not mapped and/or widespread and the distribution of the harvested resources is used to depict important areas.
Fish and Invertebrates	Nursery Area	Refers to specific areas of known importance to early life history stages (e.g., larvae, juveniles) of a species.
Fish and Invertebrates	Spawning Area	Areas where animals are spawning. Spawning is loosely defined as the release of gametes or eggs from the adult.

MARINE MAMMALS

Marine mammals depicted in the Maine and New Hampshire atlas include whales, dolphins, porpoises and seals. Marine mammal concentration areas were mapped based on interviews with local resource experts from the Seacoast Science Center, Maine DMR, and University of New Hampshire. Harbor Seals (*Phoca vitulina*) and Gray Seals (*Halichoerus grypus*) are present year-round in Maine and New Hampshire Coastal Waters although the vast majority is harbor seals. Harp Seals (*Pagophilus groenlandicus*) and Hooded Seals (*Cystophora cristata*) also occur in winter months although are not common. In Maine, data for Harbor and Gray Seals were obtained from the "Digital Atlas of Seal Haul-out Sites in Maine: 1981-2001", authored by Dow, et al, December, 2005. The atlas covers the coastal waters of Maine, from the Isles of Shoals to Cobscook Bay. Aerial surveys were conducted between 1981 and 2001.

Data for whales, dolphins and porpoises were generally mapped as large polygons based on "Marine Mammals Sightings per Unit Effort" data set created by The Nature Conservancy and obtained from the Northeast Regional Ocean Council, as well as through interviews with local resource experts.

Expert contacts for Maine/New Hampshire marine mammals*:

Name	Agency	City	Phone	Species
Erin Summers	Maine DMR	West Boothbay Harbor, ME	207-633-9556	Marine Mammals
Ashley Stokes	Seacoast Science Center	Rye, NH	603-997-8043	Marine Mammals
Stranding/Rescue Hotline (NH)	Seacoast Science Center	Rye, NH	603-997-9448	Marine Mammals
Stranding/Rescue Hotline (ME)	Marine Mammals of Maine	Bath, ME	207-233-3199	Marine Mammals
Stranding/Rescue Hotline (NE)	New England Aquarium	Boston, MA	617-973-5247	Marine Mammals

***Note: this list is not meant to represent all marine mammal experts for the region.**

Major Data Sources Used: Marine Mammals

Digital Atlas of Seal Haul-out Sites in Maine: 1981-2001, authored by Dow, et al, December, 2005

Ashley Stokes, Marine Mammal Rescue Coordinator, Seacoast Science Center. Distribution and Abundance of Marine Mammals, Personal Communication.

The Nature Conservancy, 2010. Marine Mammals Sightings Per Unit Effort. Boston, MA. Vector digital data. <http://www.northeastoceandata.org>

BIRDS

Major Sources for bird concentration areas depicted in this atlas include the Maine Department of Inland Fisheries and Wildlife (MDFW) and New Hampshire Audubon. Pamela Hunt, Senior Biologist with New Hampshire Audubon, and NH Important Bird Area (IBA) Coordinator, provided specific locations of nesting sites, concentration areas, and general distribution notes for 96 species of birds. NH Important Bird Areas within this atlas include Great Bay, Hampton/Seabrook Estuary, Isles of Shoals, and Pease Grasslands. Dr. Adrienne Kovach, UNH, provided additional nesting information on the Salt Marsh Sparrow (*Ammodramus caudacutus*) and Nelson's Sparrow (*Ammodramus nelsoni*). Dr. James Coyer, UNH provided additional information on bird concentrations on the Isles of Shoals.

Piping Plover, Least Tern Essential Wildlife Habitats- Piping Plover (*Charadrius melodus*) and Least Tern (*Sterna antillarum*) nesting, feeding, and brood-rearing areas are identified and mapped as Essential Habitat by the Maine Department of Inland Fisheries and Wildlife (MDIFW). Essential Wildlife Habitats are areas currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species in Maine and which may require special management considerations. As required under the Maine Endangered Species Act, a state agency or municipal government shall not permit, license, fund or carry out projects that will significantly alter an Essential Habitat or violate protection guidelines adopted for the habitat. Landowners, project planners, municipalities or state agencies considering a project in or near an Essential Habitat should immediately contact an MDIFW Regional Wildlife Biologist for assistance.

These data are provided by the MDIFW solely for individual use or the use of a company or agency for the purpose stated. Boundaries may change as additional survey data become available. The designation of essential habitats is an ongoing process, where sites may be added, deleted and/or revised following public rulemaking. As a result, information and maps will be periodically updated. To be certain the most current essential habitat maps and documents are consulted, users are advised to carefully monitor update notices and version dates. Landowners, project planners, municipalities or state agencies considering a project in or near an Essential Habitat should immediately contact an MDIFW Regional Wildlife Biologist for assistance.

Roseate Tern Nesting Areas Essential Habitat- Roseate Tern (*Sterna dougallii*) nesting areas identified and mapped as Essential Habitat by the MDIFW.

High Value Habitat Areas for Harlequin Ducks in Maine- This feature class contains a subset of habitat areas for Harlequin Ducks (*Histrionicus histrionicus*) from MDIFW's "Endangered, Threatened, & Special Concern" (ETSC) observations database. Some Harlequin Duck areas in this feature class may not be in the ETSC database yet (as of Aug 2015). Because this is a state listed Threatened Species and there are less than 2,000 Harlequins wintering in Maine the Harlequin Dataset includes all sites where Harlequins were documented during the coast wide survey conducted in 2008 and the most recent survey of the core wintering area (outer Penobscot and Jericho Bays) conducted in March 2012. Intended use is to protect these habitats from degradation from oil spill, development projects and impacts from associated human activities.

NRPA-Protected Inland Waterfowl/Wading Bird Habitats- This layer represents Inland Waterfowl / Wading bird Habitat (IWWH), a Significant Wildlife Habitat defined under Maine's Natural Resources Protection Act (NRPA; <http://www.maine.gov/dep/blwq/docstand/nrpapage.htm>). IWWHs with a high or moderate rating meet the Significant Wildlife Habitat definition and are protected under NRPA. Low-rated IWWHs are NOT included in this layer because they do not meet the definition and are not protected under NRPA. Boundaries and attributes of polygons in organized townships were updated in 2008 by MDIFW staff using recent (2001-2007), high-resolution (≤ 1 m), color orthoimagery. For most polygons, multiple images from different years and seasons were used. Polygons in unorganized townships were mapped by MDIFW regional staff in the 1990s from lower-resolution orthoimagery, various wetland data sets, and field visits or via an automated process developed by Heather Rustigian and William Krohn (USGS Biological Resources Division) using statewide digital NWI (National Wetlands Inventory) data, aerial imagery, and hydrology data. Each IWWH boundary includes a 250-foot upland zone around the wetland perimeter. Upland zones were edited to exclude areas of intensive development, slivers crossing major roads into non-wetland habitat, and shorelines >250 feet from a vegetated, non-forested wetland on Great Pond. Changes to polygon boundaries and IWWH ratings are occasionally made based on a field visit by an MDIFW regional biologist. The last such modification was made 2012-08-22.

High Value Habitat Areas for Purple Sandpipers in Maine- This feature class contains a subset of habitat areas for Purple Sandpipers (*Calidris maritima*) from MDIFW's "Endangered, Threatened, & Special Concern" (ETSC) observations database but may also contain areas that have not yet been incorporated (as of Aug 2015) into ETSC.

This dataset represents a subset of Purple Sandpiper wintering areas documented during a coast wide systematic survey effort conducted between 2001 and 2007. Areas selected for this dataset represents all sites with documented use by flocks of 100 or more Purple Sandpipers. This dataset does not include areas with documented use of less than 100 Purple Sandpipers. This subset represents 124 Purple Sandpiper areas out of a total of 380 areas with documented use by Purple Sandpipers

NRPA – Significant Shorebird Wildlife Habitat- Extensive field surveys began in 1993 to identify, map, and document use of feeding and roosting areas for shorebirds. Surveyed species for mapping Significant Wildlife Habitat under the Maine Natural Resources Protection Act include American Golden Plover (*Pluvialis dominica*), American Oystercatcher (*Haematopus palliatus*), Baird's Sandpiper (*Calidris baridii*), Black-bellied Plover (*Pluvialis squatarola*), Buff-breasted Sandpiper (*Tryngites subruficollis*), Dunlin (*Calidris alpina*), Greater Yellowlegs (*Tringa melanoleuca*), Hudsonian Godwit (*Limosa haemastica*), Least Sandpiper (*Calidris minutilla*), Lesser Yellowlegs (*Tringa flavipes*), Pectoral Sandpiper (*Calidris melanotos*), Red Knot (*Calidris canutus*), Ruddy Turnstone (*Arenaria interpres*), Sanderling (*Calidris alba*), Semipalmated Plover (*Charadrius semipalmatus*), Semipalmated Sandpiper (*Calidris pusilla*), Short-billed Dowitcher (*Limnodromus griseus*), Solitary Sandpiper (*Tringa solitaria*), Stilt Sandpiper (*Actitis macularia*), Western Sandpiper (*Calidris mauri*), Whimbrel (*Numenius phaeopus*), White-rumped Sandpiper (*Calidris fuscicollis*), and Willet (*Catoptrophorus semipalmatus*). Other surveyed species not used for mapping Significant Wildlife Habitat but that may also occur in these areas include two inland species, Killdeer (*Charadrius vociferous*) and Spotted Sandpiper (*Actitis macularia*), that use coastal areas during migration, Piping Plover (*Charadrius melodus*) (MDIFW maps Essential Wildlife Habitats for Piping Plovers as a separate GIS data set), and

Purple Sandpipers (*Calidris maritima*) that winter offshore on rocky islands and ledges are included in MDIFW's "Endangered, Threatened, & Special Concern" (ETSC) GIS data set. Polygons have been modified by Maine Department of Inland Fisheries & Wildlife to better align habitat boundaries with natural features based on high resolution, low tide imagery from Maine DMR.

NPRA – Significant Wading Bird Colony Habitat- These areas represent wading bird colonies that have been active in recent years (2009-2013). These wading bird colonies contain nesting pairs of one or more of the following species: great blue heron (*Ardea Herodias*), black-crowned night-heron (*Nycticorax nycticorax*), snowy egret (*Egretta thula*), great egret (*Ardea alba*), little blue heron (*Egretta caerulea*), and glossy ibis (*Plegadis falcinellus*). The layer was created from aerial survey or ground survey data. The polygons primarily include the island on which the birds are nesting. The one exception is Seven-hundred Acre Island in Islesboro, which was created by only capturing the colony and the two nearby coves and corresponding shoreline.

High Concentration Areas of Winter Waterfowl- This layer uses annual mid-winter waterfowl inventory data from 2003-2013 to determine areas along the Maine coast that support high concentrations of wintering waterfowl. Mid-winter survey sub-sections (minus land area) were used as area units.

Point data from the mid-winter inventory was spatially joined to the survey sub-section polygons (minus the land area) and the number of ducks per unit area was calculated. The resulting polygons were converted to a raster format, using the "DucksPerSquareMile" attribute as the raster value. A separate raster layer was completed for each year from 2003-2013. The "Raster Calculator" tool in ArcGIS was then used to get the average ducks per unit area for the 10 year period. The raster was then classified using "natural breaks" and the two highest categories were subsequently reclassified into a new raster layer. This final layer represents areas that had an average of between 149-421 ducks per square mile from 2003-2013.

Rafting Bird Concentration Areas- Rafting bird areas are based on data collected by MDIFW staff in cooperation with the U.S. Fish and Wildlife Service (USFWS). The data are from aerial surveys of coastal waterbirds conducted over several seasons from 2000 through 2004. Winter data were obtained from coastal mid-winter waterfowl surveys of 2004. Bird counts were combined with vulnerability rankings to calculate a density number in order to pinpoint the most important rafting bird habitat areas. Density contours were plotted, and areas with numbers indicating concentrations of 200 or more individuals are shown on the maps.

Bald Eagle Nests- Bald eagle (*Haliaeetus leucocephalus*, Maine Species of Special Concern) nest sites in Maine are mapped as Essential Habitat by the MDIFW. The 2005 data set consists of polygons representing quarter mile circular buffer around bald eagle nests. There are 298 nest locations within Maine included in this atlas

Expert contacts for Maine/New Hampshire Birds*:

Name	Agency	City	Phone	Species
Donald Katnik	MDIFW	Bangor, ME	207-941-4455	Birds
Pamela Hunt	NH Audubon	Concord, NH	603-224-9909 x328	Birds
Adrienne Kovach	University of New Hampshire	Durham, NH	603-862-1603	Saltmarsh Sparrow, Nelsons Sparrow
James Coyer	University of New Hampshire	Durham, NH	603-862-1202 603-964-9011(May-Sept)	Isle of Shoals birds
Mark McCollough	USFWS – Maine Field Office	Orono, ME	207-866-3344	Endangered Species
Scott Lindsay	MDIFW	Gray, ME	207-657-2345	Region A Biologist
Keel Kemper	MDIFW	Sidney, ME	207-547-5319	Region B Biologist
Thomas Schaeffer	MDIFW	Jonesboro, ME	207-434-5925	Region C Biologist

***Note: this list is not meant to represent all bird experts for the region.**

Major Data Sources Used: Birds

Pamela Hunt, NH Audubon, Concord NH. Bird Locations in New Hampshire. Expert Knowledge

MDIFW. 2003. ehplvtrn (piping plover, least tern essential wildlife habitats). Augusta, Maine. Vector digital data. Content available from Maine Office of Geographic Information Systems.

MDIFW. 2005. evi_roseate05 (roseate tern nesting areas essential habitat). Augusta, Maine. Vector digital data. Content available from Maine Office of Geographic Information Systems.

MDIFW. 2005. evi_sni05_t_e (natural resource protection act regulated coastal seabird nesting islands). Augusta, Maine. Vector digital data. Content available from Maine Office of Geographic Information Systems.

MDIFW. 2015. harlequinducks2015 (high value habitat areas for harlequin ducks in maine). Augusta, Maine. Vector digital data.

MDIFW. 2012. iwwh (nrpa-protected inland waterfowl / wading bird habitats). Augusta, Maine. Vector digital data. Content available from Maine Office of Geographic Information Systems.

MDIFW. 2015. purplesandpipers2015 (high value habitat areas for purple sandpipers in Maine). Augusta, Maine. Vector digital data.

MDIFW 2009. raftingbirds (rafting bird concentration areas). Augusta, Maine. Vector digital data.

MDIFW 2015. shorebird_2015 (npra - significant shorebird wildlife habitat). Augusta, Maine. Vector digital data.

MDIFW 2015. wadingbirdcolonies2015 (nrpa - significant wading bird colony habitat). Augusta, Maine. Vector digital data.

MDIFW 2015. winterwaterfowl2015 (high concentration areas of winter waterfowl). Augusta, Maine. Vector digital data.

HERPETOFAUNA

Herpetofauna depicted in the Maine and New Hampshire atlas include a few species of sea turtles and inland species of turtles, frogs, and salamanders that are Endangered, Threatened or of Special Concern.

Sea turtles depicted in this atlas for both Maine and New Hampshire include Kemp's ridley (*Lepidochelys kempi*, federally endangered), loggerhead (*Caretta caretta*, federally threatened), green (*Chelonia mydas*, federally threatened), and leatherback (*Dermochelys coriacea*, federally endangered). While these sea turtles are uncommon off the coast of Maine and New Hampshire, there are occasional seasonal sightings within the Gulf of Maine based on the 2010 "Sea Turtle Sightings Per Unit Effort" data prepared by The Nature Conservancy, as well as from interviews with local subject matter experts.

In New Hampshire, inland species data were obtained from NH Fish & Game Department Reptile and Amphibian Reporting Program and through interview with local resource experts. In Maine, inland species data were obtained from MDIFW's mapped habitats based on observations of wildlife species that are Endangered, Threatened, or of Special Concern, as well as from MDIFW significant vernal pool buffers. MDIFW notes that this data is updated very regularly to reflect new observations and ideally updated monthly.

Expert contacts for Maine/New Hampshire herpetofauna*:

Name	Agency	City	Phone	Species
Amanda Shearin, PhD	MDIFW	Augusta, ME	207-592-4967	Reptiles and Amphibians
Michael Marchand	NH Fish and Game	Concord, NH	603-271-3016	Reptiles and Amphibians
Erin Summers	Maine DMR	West Boothbay Harbor, ME	207-633-9556	Sea Turtles
Kate Sampson	NOAA GARFO	Gloucester, MA	978-282-8470	Sea Turtles
Stranding/Rescue Hotline	New England Aquarium	Boston, MA	617-973-5247	Sea Turtles

***Note: this list is not meant to represent all herpetofauna experts for the region.**

Major Data Sources Used: Herpetofauna

MDIFW 2015. ETSC (Endangered, Threatened, or Species of Concern). Augusta, Maine. Vector digital data.

MDIFW 2016. Significant Vernal Pool Buffers. Augusta, Maine. Vector digital data.

NH Fish & Game Department, Nongame & Endangered Wildlife Program, NH Reptile and Amphibian Reporting Program. Concord, NH. PDF Maps.

The Nature Conservancy, 2010. Sea Turtle Sightings Per Unit Effort. Boston, MA. Vector digital data. <http://www.northeastoceandata.org>

TERRESTRIAL MAMMALS

The terrestrial mammals depicted in this atlas are limited to the New England Cottontail (*Sylvilagus transitionalis*, state/federally endangered), northern river otter (*Lutra Canadensis*), muskrat (*Ondatra zibethicus*), and beaver (*Castor canadensis*). Other mammals are potentially occurring in the study area, but are not mapped due to their relatively wide distribution, a lack of information regarding particular concentration areas, and/or the unlikelihood of impact during coastal and marine oil spills due to their use of more upland and inland habitats.

Expert contacts for Maine/New Hampshire terrestrial mammals*:

Name	Agency	City	Phone	Species
Walter Jakubas	MDIFW	Bangor, ME	207-941-4471	Terrestrial Mammals
Heidi Holman	NH Fish and Game	Concord, NH	603-271-2461	Terrestrial Mammals
Kelly Boland	USFWS, Rachel Carson National Wildlife Refuge	Wells, ME	207-646-9226	New England Cottontail
Steve Jones	University of New Hampshire	Durham, NH	603-862-5124	Estuarine species

***Note: this list is not meant to represent all terrestrial mammal experts for the region.**

Major Data Sources Used: Terrestrial Mammals

MDIFW 2015. ETSC (Endangered, Threatened, or Species of Concern). Augusta, Maine. Vector digital data. Content available from Maine Office of Geographic Information Systems.

USFWS, 2016. Distribution of New England Cottontail in New England.

FISH

Finfish depicted in this atlas include selected marine, estuarine, and diadromous species of commercial, recreational, ecological and/or conservation interest. Fish species distributions and associated data were provided by the USFWS Gulf of Maine Coastal Program (GOMCP), Maine Department of Marine Resources (DMR) – Division of Sea Run Fisheries and Habitat, the MDIFW, NOAA National Marine Fisheries Service, and through interviews with local resource experts.

The GOMCP provided a GIS data set for all 12 species of diadromous fish in Maine; American eel (*Anguilla rostrata*), rainbow smelt (*Osmerus mordax*), alewife (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), American shad (*Alosa sapidissima*), sea lamprey, shortnose sturgeon (*Acipenser brevirostrum*), Atlantic sturgeon (*Acipenser oxyrinchus*), striped bass (*Morone saxatilis*), Atlantic tomcod (*Microgadus tomcod*), sea-run brook trout (*Salvelinus fontinalis*), and Atlantic Salmon (*Salmo salar*). The data includes the current and historic extent of each species coded into the National Hydrography Dataset (NHD). For this atlas, the original NHD-based linear data was integrated with the ESI Hydro polygons to form both linear (FISHL) and polygon (FISH) feature classes. Note that while the Atlantic sturgeon is listed as a federally endangered species throughout its range in the coastal U.S., the Gulf of Maine population of Atlantic Sturgeon is listed as threatened.

The Maine DMR provided additional GIS data sets for smelt and alewife distributions (lines and polygons). Both the Maine DMR and GOMCP also recommended including the 1984 Coastal Marine Resources Inventory data set “ACFISH2”, which contains point locations of streams and rivers in Maine with runs and passages of anadromous and catadromous fish. This data set is included in the FISHPT feature class for this atlas.

The Maine DMR also provided the 2013 Maine Atlantic Salmon Habitat Survey data set which identifies important Atlantic salmon habitat including spawning and rearing areas. This data was developed from field surveys conducted on the mainstem and selected tributaries of the Aroostook, Dennys, Ducktap, East Machias, Kennebec, Machias, Passagassawakeag, Penobscot, Pleasant, Presumpscot, Saco, Sheepscot, St. George, Tunk and Union Rivers in Maine. Originally in a linear format, this data was integrated into both polygons (FISH) and lines (FISHL) for this atlas.

The Maine DMR provided the “elvers11” GIS point data set, which provides locations where elver (juvenile eels) harvest activities have been observed by the Maine Marine Patrol in 1996 and 2011. These locations are passage ways for the catadromous species, *Anguilla rostrata*, which migrate each spring from salt water to fresh water.

Distribution, abundance and seasonality of other estuarine and marine fish species in both New Hampshire and Maine waters was based primarily on interviews with UNH scientists Dr. Hunt Howell and Dr. Larry Harris and data collected as part of NOAA Essential Fish Habitat (EFH) of the Northeast Region. Estuarine and marine fish species were mapped using broad distributions on most maps and some important spawning areas have been indicated (i.e., striped bass).

Expert contacts for Maine/New Hampshire fish*:

Name	Agency	City	Phone	Species
Bob Houston	USFWS, Gulf of Maine Coastal Program	Falmouth, ME	207-781-8364	Fish
Oliver Cox	Maine DMR, Division of Sea-Run Fisheries and Habitat	Bangor, ME	207-941-4487	Diadromous
Hunt Howell	University of New Hampshire	Durham, NH	603-862-2109	Marine/Estuarine
Larry Harris	University of New Hampshire	Durham, NH	603-862-3897	Marine/Estuarine
Cheri Patterson	NH Fish and Game	Durham, NH	603-868-1095	Marine Fisheries

***Note: this list is not meant to represent all fish experts for the region.**

Major Data Sources Used: Fish

USFWS, Gulf of Maine Coastal Program. 2007. Statewide Distribution of Diadromous Fish. Falmouth, ME. Vector Digital Data.

MEDMR. 2007. ACFISH2 (Runs and Passages of Diadromous Fish). West Boothbay Harbor, ME. Vector Digital Data. Content available from Maine Office of Geographic Information Systems.

MEDMR. 2007. MEDMR_SPAWNPTS (Important Herring Spawning Areas). West Boothbay Harbor, ME. Vector Digital Data.

MEDMR. 2014. MAINE_ALEWIFE_PONDS_020614 (Alewife Ponds in Maine). West Boothbay Harbor, ME. Vector Digital Data.

MEDMR. 2014. MAINE_ALEWIFE_STREAMS_020614 (Alewife Streams in Maine). West Boothbay Harbor, ME. Vector Digital Data.

MEDMR. 2014. MAINE_SMELT_JAN2014_REVISIONV3III (Maine Smelt Habitat). West Boothbay Harbor, ME. Vector Digital Data. Content available from Maine Office of Geographic Information Systems.

MEDMR. 2013. AHAB3 (Maine Atlantic Salmon Habitat Survey). Jonesboro, ME. Vector Digital Data.

MEDMR. 2011. ELVERS11 (Sensitive Elver Run Sites). West Boothbay Harbor, ME. Vector Digital Data.

NOAA National Marine Fisheries Service, Essential Fish Habitat (EFH). 2015. New England Fishery Management Council, NMFS Northeast Region Habitat Conservation Division. Vector Digital Data.

INVERTEBRATES

Invertebrates depicted in this atlas include bivalves, rare/threatened insects, lobster, horseshoe crab, green urchin, and northern shrimp. Species of commercial, recreational, ecological and/or conservation interest are emphasized. Invertebrate distributions were mapped using GIS data sets provided by MEDMR, MDIFW and NH DES, as well as through interviews with local resource experts.

The MEDMR provided shellfish GIS data that included individual polygon data sets for eight species of molluscan shellfish; sea scallop (*Placopectin magellanicus*), american oysters (*Crassostrea virginica*), atlantic surf clams (*Spisula solidissima*), blue mussels (*Mytilus edulis*), european oysters (*Ostrea edulis*), hard clams (*Mercenaria mercenaria*), razor clam (*Ensis directus*) and softshell clams (*Mya arenaria*). This data was based on locations indicated by town officials, harvesters, Harbormasters, MEDMR biologists, MEDMR specialists, MEDMR Marine Patrol officers or MEDMR scientists from February 2008 to September 2010. The MEDMR also provided GIS data for locations of Maine mussel seed conservation areas as outlined in the Maine Department of Marine Resources' Rule 12.06.

NH DES provided current and historic GIS data on softshell clams, oysters, blue mussels, surf clams, and razor clams. Other invertebrate concentrations, as well as larger, more general distribution areas in NH and ME coastal waters were developed through interviews with resource experts at UNH, NH DES and NH Fish and Game.

Horseshoe crab (*Limulus polyphemus*) distributions in this atlas include general distribution polygons as well as known spawning sites based on GIS data sets provided by the MEDMR, and from expert opinion provided by UNH.

The MDIFW "ETSC" GIS data set was used to map distributions of invertebrate species classified as endangered, threatened, or of special concern within Maine. NH Freshwater mussel distribution maps were used from the NH Fish & Game Nongame & Endangered Wildlife Program. Species depicted in this atlas include the butterfly Hessel's Hairstreak (*Callophrys hesseli*, ME endangered), and freshwater mussels Brook Floater (*Alasmodonta varicose*, NH endangered/ME threatened), and Yellow Lampmussel (*Lampsilis cariosa*, ME threatened).

Expert contacts for Maine/New Hampshire invertebrates*:

Name	Agency	City	Phone	Species
Molly Docherty	MDIFW Endangered Species Program	Augusta, ME	207-941-4466	Rare Insects
Denis-Marc Nault	Maine DMR, Municipal Shellfish Program	West Boothbay Harbor, ME	207-633-2092	Shellfish, marine invertebrates
Kathleen Reardon	Maine DMR	West Boothbay Harbor, ME	207-633-9404	Lobster
Chris Nash	NH DES	Portsmouth, NH	603-559-1509	Shellfish
Larry Harris	UNH	Durham, NH	603-862-3897	Sea Urchins, Marine Invertebrates
Ray Grizzle	UNH	Durham, NH	603-862-5130	Shellfish, Crab
Win Watson	UNH	Durham, NH	603-862-1629	Horseshoe Crab, Lobster
Cheri Patterson	NH Fish and Game	Durham, NH	603-868-1095	Marine Invertebrates

***Note: this list is not meant to represent all invertebrate experts for the region.**

Major Data Sources Used: Invertebrates

NH DES. 2015. Current Shellfish Beds 20130923 Update. Vector Digital Data.

NH Fish and Game. 2014. Nongame & Endangered Wildlife Program. Concord, NH. Freshwater Mussel Distribution Maps. PDF Maps.

MEDMR. 2010. Molluscan Shellfish. Augusta, ME. Vector Digital Data. Content available from Maine Office of Geographic Information Systems.

MEDMR. 2007. MEDMR_SEED (Maine Mussel Seed Conservation Areas). West Boothbay Harbor, ME. Vector Digital Data.

MEDMR. 2006. HSCLOCATIONS (Maine Horseshoe Crab Locations). West Boothbay Harbor, ME. Vector Digital Data.

MEDMR. 2006. BWHHSCBREEDINGSITES (Horseshoe Crab Known Spawning Sites). West Boothbay Harbor, ME. Vector Digital Data.

MDIFW 2015. ETSC (Endangered, Threatened, or Species of Concern). Augusta, Maine. Vector digital data.

BENTHIC HABITATS

Benthic species mapped in this atlas include submerged aquatic vegetation (eelgrass) and marine worms. Eelgrass meadows in NH and ME form an important marine and estuarine coastal aquatic habitat. Along with other plants, eelgrass forms the base of food production in the sea. Eelgrass provides shelter for juvenile fish, and invertebrates, is a site for primary settlement of the larvae of some bivalve mollusks, and in certain locations helps to stabilize unconsolidated sediments and shorelines. Polygons depicting eelgrass (*Zostera marina*) in Maine's coastal waters are based on the 2010 data set produced by MEDMR, Bureau of Resource Management, and a 2013 data set for Casco Bay produced by the Casco Bay Estuary Partnership. Polygons depicting eelgrass in NH coastal waters are based on the Great Bay Estuary Eelgrass 2013 data set developed by Dr. Frederick Short, UNH.

Polygons depicting marine worm beds are based on the 2005 marine worm data set provided by MEDMR. This layer is based on interviews with commercial marine bait worm harvesters and site visits carried out between October 2004 and May 2005. Information was compiled on a 1:24000 base and screen digitized from original paper documents. Areas represented are known harvest locations and those areas that historically have sustained significant populations of the two annelid worm species, *Nereis virens* (sand worm) and *Glycera dibranchiata* (blood worm). The habitat delineated is primarily mixed and fine grained sediment which can be categorized as predominantly intertidal mud flats. Site specific studies associated with this mapping are documented in Atherton, Chen, and Thayer, unpublished.

Expert contacts for Maine/New Hampshire benthic*:

Name	Agency	City	Phone	Species
Erin Summers	Maine DMR	West Boothbay Harbor, ME	207-633-9556	Benthic
Frederick Short	UNH	Durham, NH	603-862-5134	eelgrass

***Note: this list is not meant to represent all invertebrate experts for the region.**

Major Data Sources Used: Benthic

Dr. Frederick Short, 2015. Great Bay Estuary Eelgrass 2013. University of New Hampshire, Durham, NH. Vector Digital Data.

MEDMR. 2010. EELGRASS2010 (Maine Eelgrass Distribution, 2001-2010). West Boothbay Harbor, ME. Vector Digital Data.

Casco Bay Estuary Partnership. 2013. EELGRASS2013 (Casco Bay Eelgrass). Vector Digital Data. Content available from Maine Office of Geographic Information Systems.

Thomas Atherton, Yong Chen, and Peter Thayer, unpublished . ""A Comprehensive Study of Maine's Baitworm Industry". Submitted in 2005 to Maine Department of Marine Resources in fulfillment of contract #804291.

HABITATS

Habitat features depicted in this atlas include rare plant species and communities from the Maine Natural Areas Program and fringe marsh habitat from the MDIFW. Rare plant species in NH are tracked by the NH Natural Heritage Bureau and not included on this atlas due to vulnerability of collection concerns by the Bureau. The NH Natural Heritage Bureau should be contacted directly for up-to-date information or review of specific locations for rare plants, animals, and communities in NH.

Rare Plants and Rare and Exemplary Natural Community and Ecosystem Types- Developed by the Maine Natural Areas Program (MNAP), this data maps location of rare plants and rare and exemplary natural community and ecosystem types in the organized towns of Maine. This dataset is used for status assessment, species management, and habitat conservation of rare plant species and rare and exemplary natural communities and ecosystems in Maine. This subset of data published by MNAP represents species and natural community and ecosystem records for which the Maine Natural Areas Program has precise mapping information and it excludes examples of common natural community and ecosystem occurrences that are not exemplary.

Fringe Marsh- The Fringe Marsh (2015) polygon data set from MDIFW identify segments of fringe marsh along Maine's coast which provide important habitat for fish and wildlife, especially when adjacent to other coastal habitats such as tidal flats and eelgrass beds. Fringe marsh differs from other coastal "meadow" marshes by location, shape, and vegetation. Fringe marsh tends to be at the edge of the salt water. It tends to be long and linear. Both of these characteristics make fringe marsh different from "meadow" marshes, which can extend much farther inland and have more complex vegetative communities. Fringe marsh may grade into low or high meadow marsh or may be isolated. Although the amount of fringe marsh can affect its value as wildlife habitat, the length of a particular fringe marsh segment probably is not that important. Pieces of fringe marsh separated by other landscape features such as rock may still function as a single ecological unit. The draft data set attempts to map Maine's fringe marsh. The mapping is based on high-resolution, low-tide imagery. Most of the polygons in this data set have not been field verified, but the ability to map fringe marsh from aerial imagery was developed by comparing sample polygons with field evaluations. That work demonstrated a capability to

accurately identify fringe marsh segments at least 6 feet wide. This draft data is still being edited (as of Aug 2015), but the fringe marsh areas are not expected to change significantly in the final version of this data. Field verification of specific fringe marsh areas is always recommended when the accuracy of a single polygon is critical to the purpose for which the data is being used.

Expert contacts for Maine/New Hampshire habitats and rare plants*:

Name	Agency	City	Phone	Species
Molly Docherty	Maine Natural Areas Program, DACF	Augusta, ME	207-297-9044	Plants and Natural Communities
Sabrina Stanword	NH Natural Heritage Bureau	Concord, NH	603-271-2215 x303	Plants and Natural Communities
William Nichols	NH Natural Heritage Bureau	Concord, NH	603-271-2215 x444	Plants and Natural Communities
Donald Katnik	MDIFW	Bangor, ME	207-941-4455	Fringe Marsh

***Note: this list is not meant to represent all habitat and rare plant experts for the region.**

Major Data Sources Used: Habitats

Maine Natural Areas Program. 2015. MNAP_EOS_ORG (Rare Plant Species And Rare And Exemplary Natural Communities And Ecosystems In Maine). Augusta, ME. Vector Digital Data. Content available from Maine Office of Geographic Information Systems.

MDIFW. 2015. FRINGEMARSH2015 (Fringe Marsh Habitat along Maine's Coast). Augusta, ME. Vector Digital Data.

INVASIVE SPECIES

The spread of invasive or non-native species can degrade habitat, increase the potential for crop damage and diseases in humans, livestock and natural resources, reduce biodiversity through competition and limit recreational opportunities. Invasive species often opportunistically spread after disturbance events alter the natural landscape. Oil spill response and clean up often alters the landscape in a manner conducive to the spread of invasive species as crews often mobilize from all over the U.S. in response to large scale spill events. Boats, trailers, waders and clean up equipment can spread invasive species from waterbody to waterbody unless properly cleaned after use. Invasive species that were mapped are shown on the HUMAN-USE RESOURCE maps.

Invasive Species Contacts:

Nancy Olmstead	Maine Natural Areas Program, Invasive Plant Biologist	Augusta, ME	207-287-3200
Amy P. Smagula	NH DES, Limnologist/Exotic Species Program Coordinator	Concord, NH	603-271-2248

WILDLIFE REHABILITATION

The following contact provides veterinary care and/or retrieval of wildlife adversely affected by an event: Tri-State Bird Rescue & Research. 170 Possum Hollow Road, Newark, DE 19711. (302)-737-9543.

HUMAN-USE RESOURCES

The human-use resources shown in this atlas were extracted from the ESI GIS data compiled for this region. The extracted features were mapped at scale of 1:100,000 and appear on the maps referenced by a number. For example, Map 1 will show the human-use features in conjunction with the ESI shoreline.

Management areas such as wildlife refuges and state parks are mapped as polygons. Where the feature is a known point location (e.g., marinas, airports, water intakes), the specific location is displayed.

Map IDs can be found in the accompanying data tables for point and polygon features mapped. The Map ID may provide more information (i.e., name, contact) for that particular resource. The types of human use resources mapped in this atlas are depicted below.

	Abandoned Vessel		Management Area
	Access		Marina
	Airport		Military Installation
	Anchorage		Mine Site
	Aquaculture		National Estuarine Research Reserve
	Army Corps of Engineers		National Park
	Beach		Nature Conservancy
	Boat Ramp		Oil Facility
	Campground		Park
	Critical Habitat		Port
	EPA Facility		Renewable Energy
	Essential Habitat		Repeated Measurement Site
	Heliport		River Mile
	Historic Wreck		State Protected Area
	Historical Site		Tribal Land
	Lock and Dam		Water Intake
			Wildlife Refuge

Abandoned Vessel: Data on locations of abandoned and derelict vessels comes from the U.S. Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), Nation Ocean Service (NOS), and the Coastal Service Center (CSC)

Access Site: Locations where it is possible to gain access to the shoreline were mapped from data provided by the Maine Department of Environmental Protection (MEDEP) and the Complex System Research Center at the University of New Hampshire.

Airport: Locations of airports, airfields, landing strips etc. whether they are manned or unmanned. Data was collected from the U.S. DOC, U.S. Census Bureau Geography Division and the Maine Department of Transportation.

Anchorage: Locations where commercial vessels can be anchored offshore were provided by the U.S. Department of Commerce (DOC) and NOAA's Nation Ocean Service (NOS) and the Coastal Service Center (CSC).

Aquaculture: Locations where farmed or managed aquaculture/mariculture occurs were obtained from MEDMR , NHDES, and NH Fish and Game. Lobster

Archaeological Site: Maine law (statute) governing archaeology is contained in Chapter 27 of the Maine Revised Statutes Annotated, sections 371-378. This statute is unofficially called "Maines Antiquities Law" Both Maine and New Hampshire preferred to protect the archaeological. In the event of an oil spill or clean up activity please contact the State Archaeologist who can provide precise locational information of all sites.

Dr. Arthur "Art" Spiess, State Archaeologist
Maine Historic Preservation Commission
Mailing Address: 55 Capitol Street, 65 State House Station
Augusta, Maine 04333-0065
Phone: 207-287-2789

Tanya Krajcik: Archaeologist and Records Coordinator
New Hampshire Division of Historical Resources
Mailing Address: 19 Pillsbury Street, 2nd Floor
Concord, NH 03301-3570
Phone: 603-271-6569

Army Corps of Engineers: U.S. Army Corps of Engineers (ACE) data were downloaded from Marine Cadastre which originated from the U.S. Army Engineer Corps of Engineers.

Beach: Locations of recreational beaches used for activities such as swimming, sun-bathing, surf fishing, etc. were created by Woolpert, Inc. using Google Maps

Boat Ramp: Boat ramp location data were provided by the Maine office of Geographical Information Systems and the Complex System Research Center at the University of New Hampshire.

Camp Ground: Locations of campgrounds were obtained for New Hampshire from NH Office of Energy and Planning and the locations of campgrounds were created by Woolpert, Inc. using the ESRI Data and Maps

County Boundary: Boundaries for counties were downloaded from the US Census Bureau Geography Division.

Critical Habitat: Designated Critical Habitat was mapped for the Atlantic salmon. Data were provided by the USFWS and NOAA NMFS.

Environmental Protection Agency: Jurisdictional region boundaries were provided by the U.S. Environmental Protection Agency (EPA).

Environmental Protection Agency Facility: Represents facilities required to file a Risk Management Plan (RMP) due to the presence of extremely hazardous substances that may result in a chemical accident. The data comes from the USEPA.

Essential Habitat: Significant vernal pools are classified by abundance of fairy shrimp, blue spotted salamanders, spotted salamanders, and wood frogs, or by the presence of a state-listed rare, endangered, or threatened species that commonly require a vernal pool to complete a critical portion of their life history. Examples of these species are Blanding's turtles, Spotted Turtles, and Bog haunter dragonflies.. These data were provided by the Maine Department of Environmental Protection.

Federal Emergency Management Agency Region: Jurisdictional region boundaries were provided by the Federal Emergency Management Agency (FEMA) Mapping and Analysis Center.

Ferry Route: Ferry routes were obtained from Maine DOT.

Heliport: Locations of heliports, whether they are manned or unmanned, were extracted from data collected from the U.S. DOC, U.S. Census Bureau Geography Division and the Maine Department of Transportation.

Historical Site: Maine and New Hampshire Historical sites were provided by the National Park Service's (NPS) National Register of Historic Places (2014) and supplemented with appropriate sites from the state's conservation lands database. In the event of an oil spill or clean up activity please contact the Maine Historic Preservation Commission or New Hampshire Division of Historical Resources contacts found in the Archaeological Site (above) who can provide precise location information.

Historic Wreck: Data on locations of historic wrecks comes from the U.S. Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), Nation Ocean Service (NOS), and the Coastal Service Center (CSC)

Lock and Dam: The mapped points are dams within the area of interest. The data was compiled from various sources including the US ACE, Maine Emergency Management Agency (MEMA), MEDEP, MEGIS and New Hampshire Department of Environmental Services, Dam Safety Engineer.

Management Area: Management areas in this ESI atlas include Maine’s department of Marine Resources shellfish management program areas and the department of Public Health Shellfish Management Areas. These are areas where biologists are responsible for assisting municipalities manage shellfish ordinances, conservation closure permits, transplant permits, and intertidal management plans. The management area within New Hampshire includes natural lands that the state is managing for various reasons through conservation.

Marina: Marina location data were digitized as points from address matching from Marinas.com and verified with Google Earth imagery.

Military Installation: Military installation data were provided by the U.S. Census Bureau Geography Division

Mining Sites: Mining site locations were provided by Maine Department of Environmental Protection

National Estuarine Research Reserve (NERR): NERR boundary data were provided by the National Estuarine Research Reserve System’s Centralized Data Management Office as a part of the Protected Areas Geographic Information System (PAGIS) Project

National Guard: Army National Guard Units were provided by U.S. Geological Survey and the U.S. Department of the Interior.

National Landmark: National landmark locations were obtained from the National Parks Service. Houses remained in the database that may be disturbed during cleanup activities.

National Park: National park boundaries were obtained from the National Parks Service. The National Park within the area of interest includes Acadia National Park.

Nature Conservancy: Boundaries of The Nature Conservancy (TNC) properties in Maine and New Hampshire were obtained from The Nature Conservancy.

Oil Facility: Petroleum product terminal locations were obtained from NOAA’s Coastal Service Center Coastal Energy Facilities database.

Park: State park boundaries were obtained from Maine’s Department of Conservation Bureau of Parks and Land, Land Use Regulatory Commission, Department of Inland Fisheries and Wildlife and State Planning offices. New Hampshire’s regional and state park boundaries were obtained from New Hampshire’s Office of Energy and Planning

Pipeline: This refers to oil and gas pipeline infrastructure that was publically available.

Port: Major port location data were compiled from the National Atlas of the United States.

Rail Route: Locations of railways were obtained from the U.S. Census Bureau Geography Division

Recreational Fishing: Locations of recreational fishing were not included as a human-use resource in Maine or New Hampshire since they are common throughout the study area in these states. In the event of an oil spill or clean up activity please contact nearby marinas or boat ramp locations.

Renewable Energy: Renewable energy locations were obtained from the EPA’s Office of Atmospheric Programs, Clean Air Markets Division and include solar and nuclear facilities.

Repeated Measurement Site: Repeated measurement sites for Maine and New Hampshire represent NOAA national data buoy locations (DB).

River Miles: River miles within Maine and New Hampshire was created by Woolpert using ArcGIS10, the USGS stream lines, and the generated hydro layer for the AOI.

Shipping Lane: Shipping lanes in Maine and New Hampshire waters were obtained from NOAA’s Office for Coastal Management

State Protected Areas: State protected areas presented in this ESI Map represent Wildlife Management Areas (WMA). The data was obtained from US Fish and Wildlife and the states conservation land data.

State Waters: The Maine and New Hampshire state waters boundary was created by Woolpert by buffering three nautical miles offshore of the new shoreline created for this project.

Tribal Lands: The Passamaquoddy Tribe in Maine is the only tribe within the ESI map AOI.

Water Intake: Location of a water intake was provided by James Coyer for the Shoals Marine Laboratory.

Wildlife Refuge: National Wildlife Refuges (NWR) fall within the ESI atlas area: Great Bay NWR in New Hampshire and Crabtree Neck Wildlife Refuge, Cross Island Archipelago NWR, Lake Umbagog NWR, Petit Manan NWR, Rachel Carson NWR, Seal Island NWR, and Sunhaze NWR in Maine.

GEOGRAPHIC INFORMATION SYSTEM

The entire atlas product is stored in digital form in a Geographic Information System (GIS) as spatial data layers and associated databases. The format for the data varies depending on the type of information or features for which the data are being stored.

Under separate cover is a metadata document that details the data dictionary, processing techniques, data lineage, and other descriptive information for the digital datasets and maps that were used to create this atlas. Below is a brief synopsis of the information contained in the digital version. Refer to the metadata file for a full explanation of the data and its structure.

MAJOR ROADS

The major roads polyline layer represents major thoroughfares within the United States (ArcGIS Content Team (ESRI) and Tele Atlas North America Inc., U.S. Major Roads, ed. 10, published June 30, 2010, ESRI® Data & Maps series, Redlands, CA, USA). These roads are shown on the maps, but are not part of the underlying ESI GIS data.

SHORELINE CLASSIFICATIONS

The ESI shoreline habitat classification is stored as lines and polygons with associated attributes. In many cases, a shoreline may have two or three different classifications or colored lines on the shoreline. These multiple classifications are represented in the database by ESI#1/ESI#2, where ESI#1 is the landward-most classification and ESI#2 is the seaward-most classification. In addition to the line features, marshes (ESI=10A, ESI=10B), swamps (ESI=10C), and scrub-shrub wetlands (ESI=10D) are also stored as polygons.

SENSITIVE BIOLOGICAL RESOURCES

Biological resources are stored as points and polygons. Associated with each feature is a unique identification number that is linked to a series of data tables that further identify the resources. The main biological resource table consists of a list of species identification numbers for each site, the concentration of each species at each site, a mapping qualifier, and identification codes for seasonality and source information. This data table is linked to other tables that describe the seasonality and life-history time periods for each species (at month resolution) for the specified map feature. Other data tables linked to the first table include: the species identification table, which includes common and scientific names; the species status table, which gives information for state and/or federal threatened or endangered listings; and the source database, which provides source metadata at the feature-species level (specific sources are listed for each species occurring at each mapped feature in the biology feature classes).

HUMAN-USE FEATURES

Human-use features are represented as polygons, points or lines. Management areas such as wildlife refuges, national parks and state parks are mapped as polygons. Known locations such as marinas, high use beaches, airports and water intakes are displayed as points when security risks allow. Bridges and railroads are mapped as line features.

ACKNOWLEDGMENTS

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APPROPRIATE USE OF ATLAS AND DATA

This atlas and the associated database were developed to provide summary information on sensitive natural and human-use resources for the purposes of oil and chemical spill planning and response. Although the atlas and database should be very useful for other environmental and natural resource planning purposes, it should not be used in place of data held by the New Hampshire Department of Environmental Service, Maine Department of Environmental Protection, New Hampshire Audubon, University of New Hampshire, Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, New Hampshire Fish and Game Department, the State Natural Heritage Program, the U.S. Fish and Wildlife Service, or other agencies. Likewise, information contained in the atlas and database cannot be used in place of consultations with natural and cultural resource agencies, or in place of field surveys. This atlas should not be used for navigation.

SPECIES LIST

Common Name	Scientific Name
BENTHIC	
Eelgrass	<i>Zostera marina</i>
Worm bed	-

BIRDS	
ALCID	
<u>Atlantic puffin</u>	<u><i>Fratercula arctica</i></u>
Black guillemot	<i>Cephus grylle</i>
Common murre	<i>Uria aalge</i>
Dovekie	<i>Alle alle</i>
<u>Razorbill</u>	<u><i>Alca torda</i></u>
Thick-billed murre	<i>Uria lomvia</i>

DIVING	
<u>Common Loon</u>	<u><i>Gavia immer</i></u>
Double-crested cormorant	<i>Phalacrocorax auritus</i>
<u>Great cormorant</u>	<u><i>Phalacrocorax carbo</i></u>
Horned grebe	<i>Podiceps auritus</i>
<u>Pied-billed grebe</u>	<u><i>Podilymbus podiceps</i></u>
Red-necked grebe	<i>Podiceps grisegena</i>
Red-throated loon	<i>Gavia stellata</i>

GULL_TERN	
<u>Arctic tern</u>	<u><i>Sterna paradisaea</i></u>
<u>Black tern</u>	<u><i>Chlidonias niger</i></u>
Bonaparte's gull	<i>Larus philadelphia</i>
<u>Common tern</u>	<u><i>Sterna hirundo</i></u>
Glaucous-winged/herring gull hybrid	<i>Larus spp.</i>
Great black-backed gull	<i>Larus marinus</i>
Herring gull	<i>Larus argentatus</i>
Laughing gull	<i>Larus atricilla</i>
<u>Least tern</u>	<u><i>Sterna antillarum</i></u>
Ring-billed gull	<i>Larus delawarensis</i>
<u>Roseate tern</u>	<u><i>Sterna dougallii</i></u>

PASSERINE	
<u>Grasshopper sparrow</u>	<u><i>Ammodramus savannarum</i></u>
<u>Horned lark</u>	<u><i>Eremophila alpestris</i></u>
Marsh wren	<i>Cistothorus palustris</i>
Nelson's sharp-tailed sparrow	<i>Ammodramus nelsoni</i>
Saltmarsh sharp-tailed sparrow	<i>Ammodramus caudacutus</i>
Seaside sparrow	<i>Ammodramus maritimus</i>
<u>Sedge wren</u>	<u><i>Cistothorus platensis</i></u>
Vesper sparrow	<i>Poocetes gramineus</i>

Common Name	Scientific Name
BIRDS, cont.	

PELAGIC	
Cory's shearwater	<i>Calonectris diomedea</i>
Great shearwater	<i>Puffinus gravis</i>
Leach's storm-petrel	<i>Oceanodroma leucorhoa</i>
Manx shearwater	<i>Puffinus puffinus</i>
Northern fulmar	<i>Fulmarus glacialis</i>
Northern gannet	<i>Morus bassanus</i>
Sooty shearwater	<i>Puffinus griseus</i>
Wilson's storm-petrel	<i>Oceanites oceanicus</i>

RAPTOR	
<u>Bald eagle</u>	<u><i>Haliaeetus leucocephalus</i></u>
<u>Northern harrier</u>	<u><i>Circus cyaneus</i></u>
Osprey	<i>Pandion haliaetus</i>
<u>Peregrine falcon</u>	<u><i>Falco peregrinus</i></u>
Red-tailed hawk	<i>Buteo jamaicensis</i>
Snowy owl	<i>Nyctea scandiaca</i>

SHOREBIRD	
American golden-plover	<i>Pluvialis dominica</i>
American oystercatcher	<i>Haematopus palliatus</i>
Baird's sandpiper	<i>Calidris bairdii</i>
Black-bellied plover	<i>Pluvialis squatarola</i>
Buff-breasted sandpiper	<i>Tryngites subruficollis</i>
Dunlin	<i>Calidris alpina</i>
Greater yellowlegs	<i>Tringa melanoleuca</i>
Hudsonian godwit	<i>Limosa haemastica</i>
Least sandpiper	<i>Calidris minutilla</i>
Lesser yellowlegs	<i>Tringa flavipes</i>
Pectoral sandpiper	<i>Calidris melanotos</i>
<u>Piping plover</u>	<u><i>Charadrius melodius</i></u>
Purple sandpiper	<i>Calidris maritima</i>
<u>Red Knot</u>	<u><i>Calidris canutus</i></u>
Red phalarope	<i>Phalaropus fulicaria</i>
Red-necked phalarope	<i>Phalaropus lobatus</i>
Ruddy turnstone	<i>Arenaria interpres</i>
Sanderling	<i>Calidris alba</i>
Semipalmated plover	<i>Charadrius semipalmatus</i>
Semipalmated sandpiper	<i>Calidris pusilla</i>
Short-billed dowitcher	<i>Limnodromus griseus</i>
Solitary sandpiper	<i>Tringa solitaria</i>
Spotted sandpiper	<i>Actitis macularia</i>
Stilt sandpiper	<i>Calidris himantopus</i>
<u>Upland sandpiper</u>	<u><i>Bartramia longicauda</i></u>

SPECIES LIST

Common Name	Scientific Name	Common Name	Scientific Name
BIRDS, cont.		BIRDS, cont.	
Western sandpiper	<i>Calidris mauri</i>	Long-tailed duck	<i>Clangula hyemalis</i>
Whimbrel	<i>Numenius phaeopus</i>	Mallard	<i>Anas platyrhynchos</i>
White-rumped sandpiper	<i>Calidris fuscicollis</i>	Northern pintail	<i>Anas acuta</i>
Willet	<i>Catoptrophorus semipalmatus</i>	Red-breasted merganser	<i>Mergus serrator</i>
WADING		Ring-necked duck	<i>Aythya collaris</i>
American bittern	<i>Botaurus lentiginosus</i>	Ruddy duck	<i>Oxyura jamaicensis</i>
<u>Black-crowned night-heron</u>	<u><i>Nycticorax nycticorax</i></u>	Scaup	<i>Aythya spp.</i>
Glossy ibis	<i>Plegadis falcinellus</i>	Scoters	<i>Melanitta spp.</i>
Great blue heron	<i>Ardea herodias</i>	Surf scoter	<i>Melanitta perspicillata</i>
Great egret	<i>Ardea alba</i>	Waterfowl	-
Green heron	<i>Butorides virescens</i>	White-winged scoter	<i>Melanitta fusca</i>
<u>Least bittern</u>	<u><i>Ixobrychus exilis</i></u>	Wood duck	<i>Aix sponsa</i>
Little blue heron	<i>Egretta caerulea</i>	FISH	
Snowy egret	<i>Egretta thula</i>	Alewife	<i>Alosa pseudoharengus</i>
Sora	<i>Porzana carolina</i>	American eel	<i>Anguilla rostrata</i>
Virginia rail	<i>Rallus limicola</i>	American plaice	<i>Hippoglossoides platessoides</i>
Wading birds	-	American sand lance	<i>Ammodytes americanus</i>
Yellow rail	<i>Coturnicops noveboracensis</i>	American shad	<i>Alosa sapidissima</i>
WATERFOWL		Atlantic cod	<i>Gadus morhua</i>
American black duck	<i>Anas rubripes</i>	Atlantic herring	<i>Clupea harengus</i>
American coot	<i>Fulica americana</i>	Atlantic mackerel	<i>Scomber scombrus</i>
American wigeon	<i>Anas americana</i>	Atlantic menhaden	<i>Brevoortia tyrannus</i>
Black Scoter	<i>Melanitta nigra</i>	<u>Atlantic salmon</u>	<u><i>Salmo salar</i></u>
Blue-winged teal	<i>Anas discors</i>	Atlantic silverside	<i>Menidia menidia</i>
Brant	<i>Branta bernicla</i>	<u>Atlantic sturgeon</u>	<u><i>Acipenser oxyrinchus</i></u>
Bufflehead	<i>Bucephala albeola</i>	Atlantic tomcod	<i>Microgadus tomcod</i>
Canada goose	<i>Branta canadensis</i>	Atlantic Wolffish	<i>Anarhichas lupus</i>
Canvasback	<i>Aythya valisineria</i>	Black Seabass	<i>Centropristis striata</i>
Common eider	<i>Somateria mollissima</i>	Blueback herring	<i>Alosa aestivalis</i>
Common gallinule	<i>Gallinula galeata</i>	Bluefish	<i>Pomatomus saltatrix</i>
Common goldeneye	<i>Bucephala clangula</i>	Brook trout (sea run)	<i>Salvelinus fontinalis (sea run)</i>
Common merganser	<i>Mergus merganser</i>	Brown trout (sea run)	<i>Salmo trutta (sea run)</i>
Gadwall	<i>Anas strepera</i>	Butterfish	<i>Peprilus triacanthus</i>
Goldeneye	<i>Bucephala spp.</i>	Cunner	<i>Tautoglabrus adspersus</i>
Greater scaup	<i>Aythya marila</i>	Fourspine stickleback	<i>Apeltes quadracus</i>
Green-winged teal	<i>Anas crecca</i>	Grubby	<i>Myoxocephalus aeneus</i>
<u>Harlequin duck</u>	<u><i>Histrionicus histrionicus</i></u>	Haddock	<i>Melanogrammus aeglefinus</i>
Hooded merganser	<i>Lophodytes cucullatus</i>	Longhorn sculpin	<i>Myoxocephalus octodecemspinosus</i>
Lesser scaup	<i>Aythya affinis</i>		

SPECIES LIST

Common Name	Scientific Name
FISH, cont.	
Mummichog	<i>Fundulus heteroclitus</i>
Ninespine stickleback	<i>Pungitius pungitius</i>
Northern pipefish	<i>Syngnathus fuscus</i>
Northern searobin	<i>Prionotus carolinus</i>
Ocean pout	<i>Macrozoarces americanus</i>
Pollock	<i>Pollachius virens</i>
Rainbow smelt	<i>Osmerus mordax</i>
Red hake	<i>Urophycis chuss</i>
Rock gunnel	<i>Pholis gunnellus</i>
Sea lamprey	<i>Petromyzon marinus</i>
Shorthorn sculpin	<i>Myoxocephalus scorpius</i>
<u>Shortnose sturgeon</u>	<u><i>Acipenser brevirostrum</i></u>
Silver hake	<i>Merluccius bilinearis</i>
Skates	-
Smooth flounder	<i>Pleuronectes putnami</i>
Striped bass	<i>Morone saxatilis</i>
Striped killifish	<i>Fundulus majalis</i>
Threespine stickleback	<i>Gasterosteus aculeatus</i>
White hake	<i>Urophycis tenuis</i>
White perch	<i>Morone americana</i>
Windowpane flounder	<i>Scophthalmus aquosus</i>
Winter flounder	<i>Pleuronectes americanus</i>
Yellowtail flounder	<i>Pleuronectes ferrugineus</i>

HABITATS	
PLANT	
<u>Allegheny vine</u>	<u><i>Adlumia fungosa</i></u>
Annual water minerslettuce	<i>Montia fontana</i>
Appalachian stitchwort	<i>Minuartia glabra</i>
Atlantic white cedar	<i>Chamaecyparis thyoides</i>
<u>Beach plum</u>	<u><i>Prunus maritima</i></u>
<u>Beaked spikerush</u>	<u><i>Eleocharis rostellata</i></u>
Bearded flatsedge	<i>Cyperus squarrosus</i>
Birdeye primrose	<i>Primula laurentiana</i>
<u>Bitternut hickory</u>	<u><i>Carya cordiformis</i></u>
Button sedge	<i>Carex bullata</i>
Coastal sweetpepperbush	<i>Clethra alnifolia</i>
<u>Combleaf mermaidweed</u>	<u><i>Proserpinaca pectinata</i></u>
Dryspike sedge	<i>Carex siccata</i>
Dwarf saltwort	<i>Salicornia bigelovii</i>

Common Name	Scientific Name
HABITATS, cont.	
<u>Eastern annual saltmarsh aster</u>	<u><i>Symphytotrichum subulatum</i></u>
Eastern grasswort	<i>Lilaeopsis chinensis</i>
Eaton's beggarticks	<i>Bidens eatonii</i>
<u>Endangered plant</u>	-
Estuary beggarticks	<i>Bidens hyperborea</i>
Estuary pipewort	<i>Eriocaulon parkeri</i>
<u>Foxtail clubmoss</u>	<u><i>Lycopodiella alopecuroides</i></u>
Fragrant woodfern	<i>Dryopteris fragrans</i>
Hooded arrowhead	<i>Sagittaria calycina</i> var. <i>spongiosa</i>
<u>Horned pondweed</u>	<u><i>Zannichellia palustris</i></u>
<u>Indiangrass</u>	<u><i>Sorghastrum nutans</i></u>
<u>Jesuit's bark</u>	<u><i>Iva frutescens</i> ssp. <i>oraria</i></u>
<u>Lesser brown sedge</u>	<u><i>Carex adusta</i></u>
<u>Limber honeysuckle</u>	<u><i>Lonicera dioica</i></u>
<u>Long's bittercress</u>	<u><i>Cardamine longii</i></u>
<u>Marsh felwort</u>	<u><i>Lomatogonium rotatum</i></u>
Meadow garlic	<i>Allium canadense</i>
<u>Meadow spikemoss</u>	<u><i>Selaginella apoda</i></u>
<u>Middleton false foxglove</u>	<u><i>Agalinis neoscotica</i></u>
Mountain laurel	<i>Kalmia latifolia</i>
<u>Nantucket serviceberry</u>	<u><i>Amelanchier nantucketensis</i></u>
<u>New England blazing star</u>	<u><i>Liatris scariosa</i> var. <i>novae-angliae</i></u>
<u>New England bulrush</u>	<u><i>Bolboschoenus novae-angliae</i></u>
Northern blueberry	<i>Vaccinium boreale</i>
<u>Orangefruit horse-gentian</u>	<u><i>Triosteum aurantiacum</i></u>
<u>Pickering's reedgrass</u>	<u><i>Calamagrostis pickeringii</i></u>
<u>Pursh seepweed</u>	<u><i>Suaeda calceoliformis</i></u>
Ramp	<i>Allium tricoccum</i>
Rare plant	-
<u>Roundleaf thoroughwort</u>	<u><i>Eupatorium rotundifolium</i> var. <i>ovatum</i></u>
Saltmarsh false foxglove	<i>Agalinis maritima</i>
Sassafras	<i>Sassafras albidum</i>
<u>Scarlet oak</u>	<u><i>Quercus coccinea</i></u>
Seaside brookweed	<i>Samolus valerandi</i> ssp. <i>parviflorus</i>

SPECIES LIST

Common Name	Scientific Name
HABITATS, cont.	
Sessilefruit arrowhead	<i>Sagittaria rigida</i>
<u>Slender blue iris</u>	<i>Iris prismatica</i>
<u>Smallflower halfchaff sedge</u>	<i>Lipocarpus micrantha</i>
Smooth winterberry	<i>Ilex laevigata</i>
<u>Striped prince's pine</u>	<i>Chimaphila maculata</i>
<u>Swamp azalea</u>	<i>Rhododendron viscosum</i>
<u>Tall horned beaksedge</u>	<i>Rhynchospora macrostachya</i>
Threadleaf arrowhead	<i>Sagittaria filiformis</i>
<u>Threatened plant</u>	-
Tidal spikerush	<i>Eleocharis aestuum</i>
<u>Twining screwstem</u>	<i>Bartonia paniculata</i>
<u>Variable sedge</u>	<i>Carex polymorpha</i>
<u>Velvet sedge</u>	<i>Carex vestita</i>
Water pygmyweed	<i>Crassula aquatica</i>
Welsh mudwort	<i>Limosella australis</i>
UPLAND	
Coastal dune grassland	-
Northern comandra	<i>Geocaulon lividum</i>
Rare upland community	-
Spruce pine-hardwood mesic flatwood	-
WETLAND	
Brackish marsh	-
Estuarine scrub-shrub	-
Forested wetland	-
Freshwater tidal marsh	-
<u>Long's bulrush</u>	<i>Scirpus longii</i>
<u>Moonwort</u>	<i>Botrychium lunaria</i>
Rare ecological community	-
Rare wetland community	-
<u>Red goosefoot</u>	<i>Chenopodium rubrum</i>
Salt marsh	-
Salt meadow cordgrass (wiregrass)	<i>Spartina patens</i>
Tidal Marsh	-
HERPETOFAUNA	
AMPHIBIAN	
Blue-spotted salamander	<i>Ambystoma laterale</i>
Jefferson salamander	<i>Ambystoma opacum</i>

Common Name	Scientific Name
HERPETOFAUNA, cont.	
Northern leopard frog	<i>Rana pipiens</i>
Rare salamander	-
Spotted salamander	<i>Ambystoma maculatum</i>
Wood Frog	<i>Lithobates sylvaticus</i>
SNAKE	
<u>Eastern ribbon snake</u>	<i>Thamnophis sauritus</i>
Northern black racer	<i>Coluber constrictor constrictor</i>
TURTLE	
<u>Blanding's turtle</u>	<i>Emydoidea blandingii</i>
<u>Green sea turtle</u>	<i>Chelonia mydas</i>
<u>Kemp's ridley sea turtle</u>	<i>Lepidochelys kempii</i>
<u>Leatherback sea turtle</u>	<i>Dermochelys coriacea</i>
<u>Loggerhead sea turtle</u>	<i>Caretta caretta</i>
<u>Spotted turtle</u>	<i>Clemmys guttata</i>
Wood turtle	<i>Glyptemys insculpta</i>
INVERTEBRATES	
BIVALVE	
Alewite floater	<i>Anodonta implicata</i>
Atlantic jackknife clam	<i>Ensis directus</i>
Atlantic surfclam	<i>Spisula solidissima</i>
Blue mussel	<i>Mytilus edulis</i>
<u>Brook floater</u>	<i>Alasmidonta varicosa</i>
Eastern oyster	<i>Crassostrea virginica</i>
European flat oyster	<i>Ostrea edulis</i>
Northern quahog	<i>Mercenaria mercenaria</i>
Sea scallop	<i>Placopecten magellanicus</i>
Softshell clam	<i>Mya arenaria</i>
Squawfoot	<i>Strophitus undulatus</i>
<u>Yellow lampmussel</u>	<i>Lampsilis cariosa</i>
CRAB	
Atlantic rock crab	<i>Cancer irroratus</i>
Blue crab	<i>Callinectes sapidus</i>
Horseshoe crab	<i>Limulus polyphemus</i>
Jonah crab	<i>Cancer borealis</i>
ECHINODERM	
Green urchin	<i>Strongylocentrotus droebachiensis</i>
GASTROPOD	
Rare snail	-

SPECIES LIST

Common Name	Scientific Name
INVERTEBRATES, cont.	

INSECT

Arrowhead spiketail	<i>Cordulegaster obliqua</i>
<u>Hessel's hairstreak</u>	<u><i>Callophrys hesseli</i></u>
Little bluet	<i>Enallagma minusculum</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Rare insect	-
<u>Ringed boghaunter</u>	<u><i>Williamsonia lintneri</i></u>
Saltmarsh tiger beetle	<i>Cicindela marginata</i>
Scarlet bluet	<i>Enallagma pictum</i>
Zebra clubtail	<i>Stylurus scudderi</i>

LOBSTER

American lobster	<i>Homarus americanus</i>
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SHRIMP

Daggerblade grass shrimp	<i>Palaemonetes pugio</i>
Northern shrimp	<i>Pandalus borealis</i>
Sevenspine bay shrimp	<i>Crangon septemspinosa</i>

MARINE MAMMALS

DOLPHIN

Atlantic white-sided dolphin	<i>Lagenorhynchus acutus</i>
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Dolphins	-
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Harbor porpoise	<i>Phocoena phocoena</i>
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PINNIPED

Gray seal	<i>Halichoerus grypus</i>
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Harbor seal	<i>Phoca vitulina</i>
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Harp seal	<i>Pagophilus</i>
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groenlandicus

Hooded seal	<i>Cystophora cristata</i>
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WHALE

<u>Fin whale</u>	<u><i>Balaenoptera physalus</i></u>
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<u>Humpback whale</u>	<u><i>Megaptera novaeangliae</i></u>
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Long-finned pilot whale	<i>Globicephala melas</i>
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Minke whale	<i>Balaenoptera acutorostrata</i>
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<u>North Atlantic right whale</u>	<u><i>Eubalaena glacialis</i></u>
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<u>Sei whale</u>	<u><i>Balaenoptera borealis</i></u>
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<u>Sperm whale</u>	<u><i>Physeter macrocephalus</i></u>
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Common Name	Scientific Name
TERRESTRIAL MAMMALS	

Beaver	<i>Castor canadensis</i>
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Muskrat	<i>Ondatra zibethicus</i>
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<u>New England cottontail</u>	<u><i>Sylvilagus transitionalis</i></u>
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Northern river otter	<i>Lutra canadensis</i>
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* Underlined species are listed as either threatened or endangered under the federal ESA, and/or are listed as Threatened, Endangered, or Special Concern by Maine and/or New Hampshire.

SHORELINE DESCRIPTIONS

EXPOSED, ROCKY SHORES

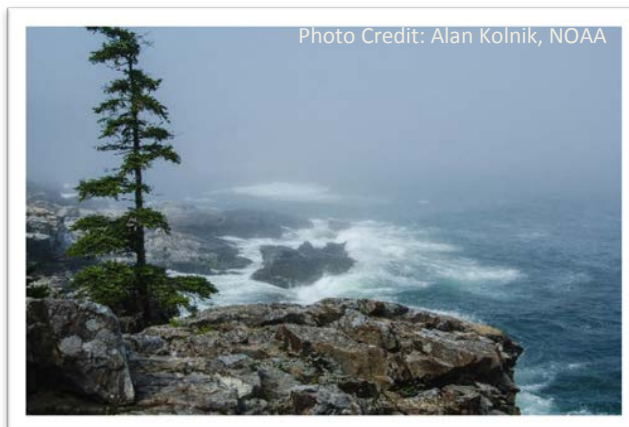
ESI = 1A

DESCRIPTION

- Common along the outer, exposed coast of the study area
- The intertidal zone is steep (greater than 30° slope), solid and composed of large boulders and/or of bedrock
- Sediment accumulations are uncommon because waves and currents remove debris slumped from the eroding cliffs
- There is strong vertical zonation of intertidal biological communities in the estuarine parts of the river
- This shoreline type is regularly exposed to wave action and strong currents
- Wave reflection is a common phenomenon along these shorelines
- Species density and diversity vary greatly depending on exposure and salinity, but barnacles, snails, mussels, amphipods, and macroalgae can be abundant

PREDICTED OIL BEHAVIOR

- In the lower estuary and outer coast, oil is held offshore by waves reflecting off the steep, hard surfaces; Any oil that is deposited is rapidly removed from exposed faces



- Along the river, oil can form a band at the high water line
- The most resistant oil would remain as a patchy band at or above the high-water line
- Impacts to intertidal communities are expected to be short-term in duration; An exception would be where heavy concentrations of a light refined product comes ashore very quickly

RESPONSE CONSIDERATIONS

- Cleanup is usually not required
- Access can be difficult and dangerous

SHORELINE DESCRIPTIONS

EXPOSED, SOLID MAN-MADE STRUCTURES

ESI = 1B

DESCRIPTION

- These structures are solid, man-made structures such as seawalls, jetties, breakwaters, groins, revetments, piers, and port facilities
- Many structures are constructed of concrete, wood, or metal
- Often there is no exposed substrate at low tide, but multiple habitats are indicated if present
- They are built to protect the shore from erosion by waves, boat wakes, and currents, and thus are exposed to relatively high-energy processes
- Attached animals and plants are variable in cover, with sparse biota in fresh/brackish areas and higher biota in salt water areas
- Present in highly developed industrial and port areas and scattered along residential waterfronts

PREDICTED OIL BEHAVIOR

- Oil is held offshore by waves reflecting off the steep, hard surface in exposed settings
- Oil readily adheres to the dry, rough surfaces, but it does not adhere to wet substrates
- The most resistant oil would remain as a band at or above the high-tide line



RESPONSE CONSIDERATIONS

- Cleanup is usually not required
- High-pressure water spraying may be conducted to:
 - remove persistent oil in crevices;
 - minimize aesthetic damage; and
 - prevent chronic leaching of oil from the structure

SHORELINE DESCRIPTIONS

EXPOSED, WAVE-CUT PLATFORMS IN BEDROCK

ESI = 2A

DESCRIPTION

- They are characterized by a narrow shelf or platform that can be flooded depending on water levels
- The substrate is solid and portions of the platform may be covered by a relatively thin veneer of sand or gravel
- Species density and diversity very greatly, but barnacles, snails, mussels, polychaetes, and macroalgae are often very abundant
- Attached organisms are accustomed to the impacts of the waves and the associated hydraulic pressure
- They are often found with gravel and mixed sediment beaches along the high tide line. Also Common at the foot of exposed rocky shores

PREDICTED OIL BEHAVIOR

- Oil will not adhere to the wet rock surface, but could penetrate crevices, sediment veneers, or associated beaches if present
- Persistence of oil is usually short-term, except in wave shadows or where the oil was deposited high above normal wave activity



RESPONSE CONSIDERATIONS

- Cleanup is usually not required except for areas of high recreational use
- Where the high-tide area is accessible, it may be feasible to manually remove heavy oil accumulations and oiled debris

SHORELINE DESCRIPTIONS

EXPOSED SCARPS AND STEEP SLOPES IN CLAY

ESI = 2B

DESCRIPTION

- Regular exposure to high wave energy or tidal currents
- Scarp heights vary from about 1 to 3 feet and usually consist of a heavily rooted, peaty soil
- May be fronted by a narrow beach of fine- to medium-grained sand
- Low biological utilization due to strong currents
- Typically backed by wetland vegetation
- Uncommon in study area

PREDICTED OIL BEHAVIOR

- Oil is not expected to adhere to the wet, impermeable clay surface
- There may be a thin band of oil left at or above the high water line
- Biological impacts can be immediate and severe, particularly if oil is left to pool on the landward side of scarp



RESPONSE CONSIDERATIONS

- Cleanup is usually not required, because any stranded oil is quickly removed by wave action
- Access may be difficult
- Where the high-tide area is accessible, it may be feasible to remove heavy oil accumulations and oiled debris in order to protect a nearshore marine resource, such as marine birds

SHORELINE DESCRIPTIONS

FINE- TO MEDIUM-GRAINED SAND BEACHES

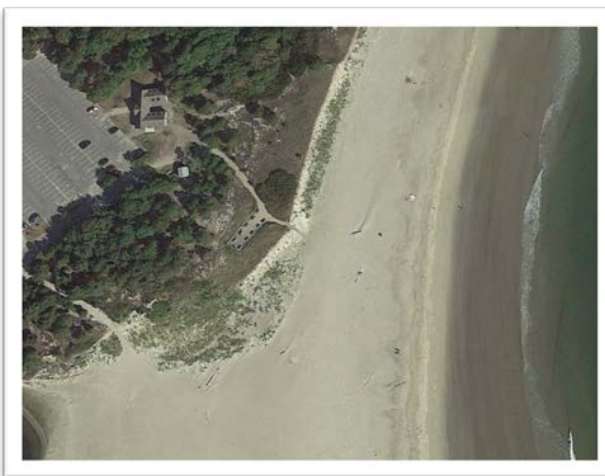
ESI = 3A

DESCRIPTION

- These beaches are broad, gently sloping and relatively hard packed
- They are composed of quartz sand
- There can be heavy accumulations of wrack present
- They are utilized by birds and turtles
- Upper beach fauna are scarce; lower beach fauna can be moderate, but are highly variable
- They are generally areas of heavy recreational use

PREDICTED OIL BEHAVIOR

- Light oil accumulations will be deposited as oily swashes or bands along the upper intertidal zone
- Heavy oil accumulations will cover the entire beach surface; oil will be lifted off the lower beach with the rising tide
- Maximum penetration of oil into fine- to medium-grained sand is about 10-15 cm
- Burial of oiled layers by clean sand within the first week after a spill typically will be less than 30 cm along the upper beach face
- Organisms living in the beach sediment may be killed by smothering or lethal oil concentrations in the interstitial water
- Biological impacts include temporary declines in infauna, which can affect important shorebird foraging areas



RESPONSE CONSIDERATIONS

- These beaches are among the easiest shoreline types to clean
- Cleanup should concentrate on removing oil and oily debris from the upper swash zone once oil has come ashore
- Traffic through dune areas should be severely limited to prevent contamination of clean areas
- Manual cleanup, rather than road graders and front-end loaders, is advised to minimize the volume of sand removed from the shore and requiring disposal
- All efforts should focus on preventing the mixing of oil deeper into the sediments by vehicular and foot traffic
- Mechanical reworking of lightly oiled sediments from the high-tide line to the upper intertidal zone and be effective along outer beaches

SHORELINE DESCRIPTIONS

SCARPS AND STEEP SLOPES IN SAND

ESI = 3B

DESCRIPTION

- This shoreline type occurs where sandy bluffs are undercut by waves or currents and slump
- Some scarps are fronted by narrow beaches, if the erosion rates are moderate and episodic
- Trees growing at the top of these slopes are eventually undercut and woody debris can accumulate at the base of the scarp
- Biological utilization by birds and infauna is low

PREDICTED OIL BEHAVIOR

- Any stranded oil will concentrate at the high-water line and may penetrate sandy sediments if a beach is present
- Oil will also adhere to the dry surfaces of any woody debris that has accumulated at the base of the scarp
- Burial risk is low except when slumping of the bluff occurs
- Active erosion of the scarp will remove the oil



- In most cases, cleanup is not necessary because of the short residence time of the oil
- The need for removal of oiled sediments and debris should be carefully evaluated because of the potential for increased erosion
- Closely supervised manual labor should be used so that the minimal amount of material is removed during cleanup

SHORELINE DESCRIPTIONS

COARSE-GRAINED SAND BEACHES

ESI = 4

DESCRIPTION

- These beaches are moderately sloping and are of variable width.
- Species density and diversity is generally lower than on fine-grained sand beaches
- Substrate permeability is moderate
- They are very common along the shoreline of the bay and banks of major rivers

PREDICTED OIL BEHAVIOR

- During small spills, oil will be deposited primarily as a band along the high-tide line
- Under very heavy accumulations, oil may spread across the entire beach face, though the oil will be lifted off the lower part of the beach with the rising tide
- Penetration of oil into coarse-grained sand can reach 25 cm
- Burial of oiled layers by clean sand can be as rapid as one tidal cycle and to depths of 60 cm or more
- Burial to depths of over one meter is possible if the oil comes ashore at the start of a depositional period
- Organisms living in the beach sediment may be killed by smothering or lethal oil concentrations in the interstitial water
- Biological impacts include temporary declines in infaunal populations, which can also affect important shorebird foraging areas



RESPONSE CONSIDERATIONS

- Removed oil primarily from the upper swash lines
- Removal of sediment should be limited to avoid erosion problems
- Mechanical reworking of the sediment into the surf zone may be used as a final polishing step to treat stained sand without sediment removal
- Activity in the oiled sand should be limited to prevent mixing oil deeper into the beach
- Use of heavy equipment for oil/sand removal may result in the removal of excessive amounts of sand; manual cleanup may be more effective

SHORELINE DESCRIPTIONS

MIXED SAND AND GRAVEL BEACHES

ESI = 5

DESCRIPTION

- Moderately sloping beaches composed of a mixture of sand and gravel (gravel component comprises between 20 to 80 percent of total sediments)
- Because of the mixed sediment sizes, there may be some areas on the beach of pure sand, pebbles, or cobbles
- There can be large-scale changes in the sediment distribution patterns depending upon season, because of transport of the sand offshore during storms
- Substrate has medium-to-high permeability

PREDICTED OIL BEHAVIOR

- During small spills, oil will be deposited along and above the high-tide swash
- Large spills will spread across the entire intertidal area
- Oil penetration into the beach sediments may be up to 50 cm; however, the sand fraction can be quite mobile, and oil behavior is much like on a sand beach if the sand fraction exceeds about 40 percent
- Burial of oil may be deep at and above the high-tide line, where oil tends to persist, particularly where beaches are only intermittently exposed to waves
- In sheltered pockets on the beach, pavements of asphalted sediments can form if there is no removal of heavy oil accumulations because most of the oil remains on the surface
- Once formed, these asphalt pavements can persist for years

RESPONSE CONSIDERATIONS

- Remove heavy accumulations of pooled oil as soon as possible



- All oiled debris should be removed
- Sediment removal should be limited as much as possible
- Low-pressure flushing can be used to float liquid oil away from the sediments for recovery by skimmers or sorbents. High-pressure spraying should be avoided because of potential for transporting contaminated finer sediments (sand) to the lower intertidal or subtidal zones
- Mechanical reworking of lightly oiled sediments from the high-tide zone to the middle intertidal zone can be effective in areas regularly exposed to wave activity (as evidenced by storm berms). However, oiled sediments should not be relocated below the mid-tide-zone
- In-place tilling/excavation may be used to reach deeply buried oil in layers in the middle zone on exposed beaches

SHORELINE DESCRIPTIONS

GRAVEL BEACHES

ESI = 6A

DESCRIPTION

- Gravel beaches can be steep, with multiple wave-built berms forming the upper bench
- Gravel beaches have the lowest trafficability of all beach types and may contain shell and woody debris
- Because of the high mobility of sediments on exposed gravel beaches, there are low densities of animals and plants
- Most permeable of all beach types

PREDICTED OIL BEHAVIOR

- Deep penetration of stranded oil is likely on wave-built gravel beaches because of their high permeability
- On exposed beaches, oil can be pushed over the high-tide and storm berms, pooling and persisting above the normal zone of wave wash
- Deeply penetrated oil can become sources of chronic sheening
- Long-term persistence will be controlled by the depth of the routine reworking by waves or boat wakes

RESPONSE CONSIDERATIONS

- Heavy accumulations of pooled oil should be removed quickly from the upper beach
- All oiled debris should be removed
- Sediment removal should be limited as much as possible
- Low-pressure flushing can be used to float fresh oil away from the sediments for recovery by skimmers or sorbents



- High-pressure spraying should be avoided because of the potential for transporting contaminated finer sediments (sand) to the lower intertidal or subtidal zones
- Mechanical reworking of oiled sediments from the high-tide line to the upper intertidal zone can be effective in areas regularly exposed to wave activity (as evidenced by storm berms). However, oiled sediments should not be relocated below the mid-tide-zone.
- In-place tilling may be used to reach deeply buried oil layers along the mid-intertidal zone on exposed beaches

SHORELINE DESCRIPTIONS

RIPRAP

ESI = 6B

DESCRIPTION

- Riprap structures are composed of cobble- to boulder-sized blocks of granite, limestone, or concrete
- Riprap structures are used for shoreline protection and tidal inlet stabilization
- Attached biota are sparse to moderate on exposed riprap
- Common along highly developed commercial waterfronts and residential areas

PREDICTED OIL BEHAVIOR

- Deep penetration of oil between the blocks is likely
- Oil adheres readily to the rough surfaces of the blocks
- Uncleaned oil can cause chronic leaching until the oil hardens



RESPONSE CONSIDERATIONS

- When the oil is fresh and liquid, high-pressure spraying and/or water flooding may be effective, making sure to recover all mobilized oil
- Heavy and weathered oils are more difficult to remove, requiring scraping and/or hot-water spraying
- It may be necessary to remove and replace heavily oiled blocks in high-use areas

SHORELINE DESCRIPTIONS

EXPOSED TIDAL FLATS

ESI = 7

DESCRIPTION

- Flat accumulations of sediment, less than three degrees
- Highly permeable substrate is dominated by sand, although there may be silt and gravel components
- Sediments are soft with low trafficability
- Biological utilization can be very high, with large numbers of infauna, heavy use by birds for roosting and foraging, and by foraging fish

PREDICTED OIL BEHAVIOR

- Oil does not usually adhere to the surface of exposed tidal flats, but rather moves across the flat and accumulates at the high-tide line
- Deposition of oil on the flat may occur on a falling tide if concentrations are heavy
- Oil does not penetrate water-saturated sediments, but can penetrate into the tops of the bars and burrows when they dry out at low tide
- Biological damage may be severe, primarily to infauna, thereby reducing food sources for birds and other predators



RESPONSE CONSIDERATIONS

- Currents and waves can be very effective in natural removal of the oil
- Cleanup is very difficult (and possible only during low tides)
- The use of machinery should be restricted to prevent mixing of oil into the sediments

SHORELINE DESCRIPTIONS

SHELTERED, IMPERMEABLE, ROCKY SHORES

ESI = 8A

DESCRIPTION

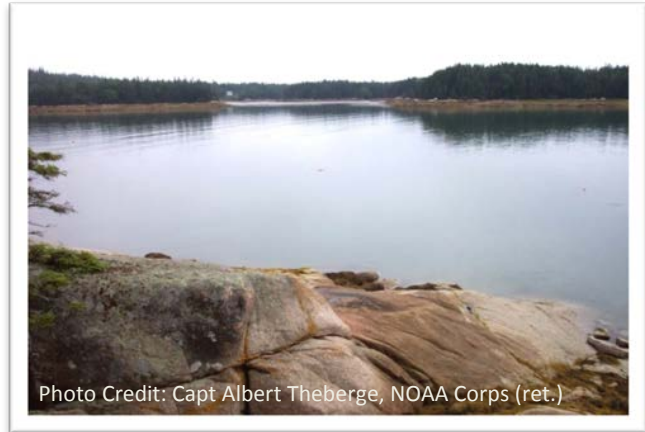
- The substrate is solid and composed of bedrock
- Sediments (rock debris, etc.) may accumulate at the base of this shoreline type
- The slope of the intertidal zone is generally moderate to steep (greater than 15°)
- Located in calm, interior environments and particularly common throughout the study area

PREDICTED OIL BEHAVIOR

- Stranded oil will persist because of low energy setting

RESPONSE CONSIDERATIONS

- Low-pressure flushing at ambient temperatures is most effective when the oil is fresh and still liquid
- Care must be taken during flushing operations to prevent oily effluents from affecting biologically rich, lower intertidal levels



- Where the high-tide area is accessible, it may be feasible to remove heavy oil accumulations and oiled debris

SHORELINE DESCRIPTIONS

SHELTERED, SOLID MAN-MADE STRUCTURES

ESI = 8B

DESCRIPTION

- These structures are solid man-made structures such as seawalls, groins, revetments, piers, and port facilities
- Most of the structures are designed to protect a single lot, thus their composition, design, and condition are highly variable; most are constructed of concrete, wood, or metal
- Often there is no exposed beach at low tide, but multiple habitats are indicated if present
- High densities of attached biota may be present at lower tidal elevations
- Common in highly developed commercial areas and along residential waterfront areas throughout the bays

PREDICTED OIL BEHAVIOR

- Oil will adhere readily to rough surfaces, particularly along the high-tide line, forming a distinct oil band
- If the oil is not removed, it may cause chronic sheening until the oil hardens
- The lower intertidal zone usually stays wet (particularly if algae-covered), preventing oil from adhering to the surface



RESPONSE CONSIDERATIONS

- Cleanup of seawalls is usually conducted for aesthetic reasons or to prevent sheening
- Low- to high-pressure spraying at ambient water temperatures is most effective when the oil is fresh

SHORELINE DESCRIPTIONS

SHELTERED RIPRAP

ESI = 8C

DESCRIPTION

- Riprap structures are composed of cobble- to boulder-sized blocks of granite, limestone, or concrete
- These structures are found inside harbors and bays in developed areas, sheltered from direct exposure to waves
- High densities of attached biota may be present at lower tidal elevations
- Common in highly developed commercial and residential waterfront areas primarily along the shorelines of bridges

PREDICTED OIL BEHAVIOR

- Oil adheres readily to the rough surfaces
- Deep penetration of oil between the blocks is likely
- If oil is left uncleaned, it may cause chronic leaching until the oil hardens



RESPONSE CONSIDERATIONS

- High-pressure spraying may be required to remove oil for aesthetic reasons and to prevent leaching of oil from the structure
- Cleanup crews should make sure to recover all released oil
- It may be necessary to remove and replace heavily oiled riprap in high-use areas

SHORELINE DESCRIPTIONS

SHELTERED TIDAL FLATS

ESI = 9A

DESCRIPTION

- They are present in calm-water habitats, sheltered from regular wave activity, and are usually backed by marshes
- The sediments are very soft and cannot support even light foot traffic in many areas
- Sheltered tidal flats can be sparsely to heavily covered with algae and/or seagrasses
- They can have heavy wrack deposits along the upper fringe
- Large concentrations of shellfish, worms, and snails can be found on and in the sediments
- Bird life is seasonally abundant and flats are heavily utilized by birds for feeding
- Common within sheltered coves and bays

PREDICTED OIL BEHAVIOR

- Oil does not usually adhere to the surface of sheltered tidal flats, but rather moves across the flat and accumulates at the high-tide line
- Deposition of oil on the flat may occur on a falling tide if concentrations are heavy
- Oil will not penetrate the water-saturated sediments, but could penetrate burrows or other crevices in muddy sediments
- In areas of high suspended sediments, sorption of oil can result in deposition of contaminated sediments on the flats



- Biological damage may be severe

RESPONSE CONSIDERATIONS

- These are high-priority areas necessitating the use of spill protection devices to limit oil-spill impact; deflection or sorbent booms and open water skimmers should be used
- Cleanup of the flat surface is very difficult because of the soft substrate; many methods may be restricted
- Low-pressure flushing, vacuum, and deployment of sorbents from shallow-draft boats may be helpful

SHORELINE DESCRIPTIONS

VEGETATED LOW BANKS

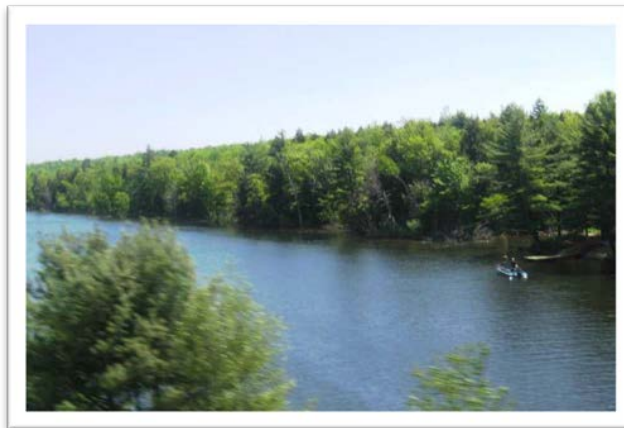
ESI = 9B

DESCRIPTION

- These habitats are either low banks with grasses or trees and tree roots exposed to the water
- They are flooded occasionally by high water
- Sporadic along many tidal channels

PREDICTED OIL BEHAVIOR

- During low water stages there is little impact, with the oil coating a narrow band of sediment at the water level
- During high water stages, the oil could cover and coat the vegetation
- Oiling may cause loss of the grasses, but the trees should survive unless oil penetrates and persists in the substrate



RESPONSE CONSIDERATIONS

- Low-pressure flushing of oiled areas is effective in removing moderate to heavy accumulations of fresh oil from along the banks
- Sorbent and containment boom should be placed on the water side of the cleanup operations to contain and collect oil outflow

- Low- to high-pressure flushing can be used to remove weathered oil from tree roots and trunks, if deemed necessary in areas of high-use area

SHORELINE DESCRIPTIONS

SALT- AND BRACKISH-WATER MARSHES

ESI = 10A

DESCRIPTION

- Intertidal wetlands containing emergent, herbaceous vegetation
- Width of the marsh can vary widely, from a narrow fringe to a broad area within estuaries
- Exposed areas are located along bays with wide fetches and along heavily trafficked waterways
- Sheltered areas and tidal creeks are not exposed to significant wave or boat wake activity
- Resident flora and fauna are abundant and diverse, with high utilization by birds, fish, and shellfish

PREDICTED OIL BEHAVIOR

- Oil adheres readily to intertidal vegetation
- The band of coating will vary widely, depending upon the water level at the time oil slicks are in the vegetation; there may be multiple bands
- Large slicks will persist through multiple tidal cycles and coat the entire stem from the high-tide line to the base
- If the vegetation is thick, heavy oil coating will be restricted to the outer fringe, although lighter oils can penetrate deeper, to the limit of tidal influence
- Medium to heavy oils do not readily adhere to or penetrate the fine sediments, but can pool on the surface or penetrate into burrows
- Light oils can penetrate the top few centimeters of sediment and deeply into burrows and cracks (up to 1 meter)



RESPONSE CONSIDERATIONS

- Under light oiling, the best practice is natural recovery; natural removal processes and rates should be evaluated prior to conducting cleanup
- Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing. During flushing, care must be taken to prevent transporting oil to sensitive areas down slope or along shore
- Cleanup activities should be carefully supervised to avoid vegetation damage
- Any cleanup activity must not mix the oil deeper into the sediments; trampling of the roots must be minimized
- Cutting of oiled vegetation should only be considered when other resources present are at great risk from leaving the oiled vegetation in place

SHORELINE DESCRIPTIONS

FRESHWATER MARSHES

ESI = 10B

DESCRIPTION

- These are grassy wetlands composed of emergent herbaceous vegetation
- They occur upstream of brackish vegetation along major rivers and tributary creeks
- Those along major channels are exposed to strong currents and boat wakes; smaller channels tend to be sheltered
- The sediment substrate is seldom exposed because daily water level changes are low; greater changes result from floods and wind-generated tides
- Resident flora and fauna are abundant and diverse, with high utilization by birds and fish

PREDICTED OIL BEHAVIOR

- Oil adheres readily to the vegetation
- The band of coating will vary widely, depending upon the water level at the time oil slicks are in the vegetation; there may be multiple bands
- If the vegetation is thick, heavy oil coating will be restricted to the outer fringe, although lighter oils can penetrate deeper
- Medium to heavy oils do not readily adhere to or penetrate the fine sediments, but can pool on the surface or penetrate into burrows



RESPONSE CONSIDERATIONS

- Under light oiling, the best practice is natural recovery; natural removal processes and rates should be evaluated prior to conducting cleanup
- Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing
- Cleanup activities should be carefully supervised to avoid vegetation damage
- Any cleanup activity must not mix the oil deeper into the sediments; trampling of the roots should be minimized through the use of walking boards
- Cutting of oiled vegetation should only be considered when other resources present are at great risk from leaving the oiled vegetation in place

SHORELINE DESCRIPTIONS

SWAMPS

ESI = 10C

DESCRIPTION

- Swamps consist of shrubs and hardwood forested wetlands, essentially flooded forests; vegetation is taller, on average, greater than 6 m
- The sediment tends to be silty clay with large amounts of organic debris
- They are seasonally flooded, though there are many low, permanently flooded areas
- Resident flora and fauna are abundant with numerous species

PREDICTED OIL BEHAVIOR

- Oil behavior depends on whether the swamp is flooded or not
- During floods, most of the oil passes through the forest, coating the vegetation at the waterline, which changes levels throughout the flood event
- Woody vegetation is less sensitive than grasses to oil coating
- Some oil can be trapped and pooled on the swamp floodplain as water levels drop
- Penetration into the floodplain soils is usually limited because of high water levels, saturated soils, muddy composition, surface organic debris, and vegetation cover
- There can be large amounts of oily debris
- During dry periods, terrestrial spills flow downhill and accumulate in depressions or reach water bodies



RESPONSE CONSIDERATIONS

- Under light oiling, the best practice is to let the area recover naturally
- Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing. During flushing, care must be taken to prevent transporting oil to sensitive areas down slope or along shore
- Under stagnant water conditions, herding of oil with water spray may be needed to push oil to collection areas
- Oily debris can be removed where there is access
- Any cleanup activity must not mix the oil deeper into the sediments

SHORELINE DESCRIPTIONS

SCRUB-SHRUB WETLANDS

ESI = 10D

DESCRIPTION

- Scrub-shrub wetlands consist of woody vegetation less than 6 m tall including true shrubs, small trees, and trees and shrubs that are stunted due to environmental conditions
- The sediments are silty clay mixed with organic debris
- They are seasonally flooded, though there are many low, permanently flooded areas
- Resident flora and fauna are abundant and diverse
- Present along sheltered portions of bays and tidal channels

PREDICTED OIL BEHAVIOR

- Oil behavior depends on water level
- During high water, most of the oil passes through the wetland, coating the vegetation above the waterline
- Woody vegetation is less sensitive than grasses to oil
- Some oil can be trapped and pooled on the surface as water levels drop
- Penetration into the soils is usually limited because of high water levels, muddy composition, surface organic debris, and vegetation cover
- Large amounts of oily debris can remain
- During dry periods, terrestrial spills flow downhill and accumulate in depressions or reach water bodies

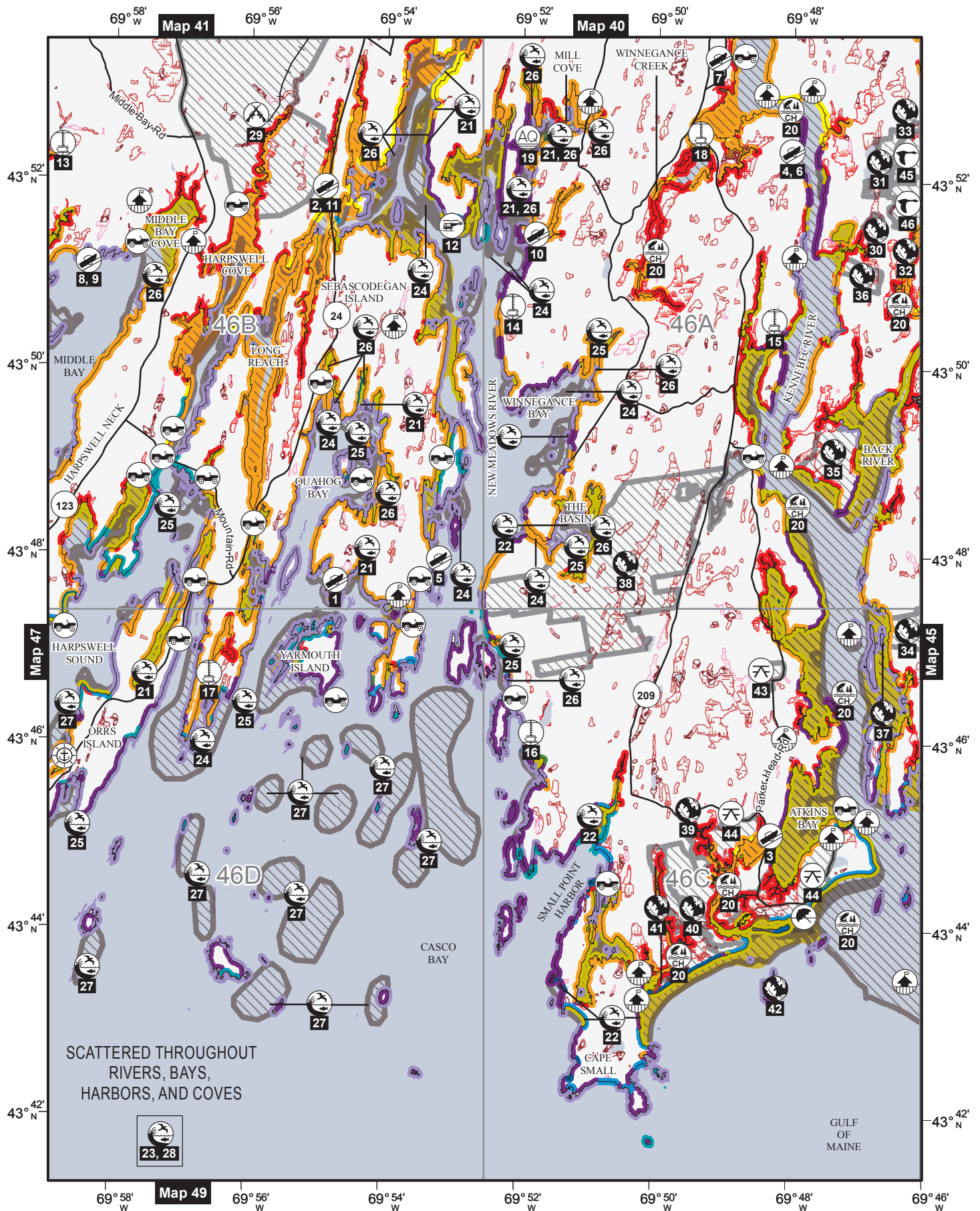


RESPONSE CONSIDERATIONS

- Under light oiling, the best practice is natural recovery
- Heavy accumulations of pooled oil can be removed by vacuum, sorbents, or low-pressure flushing
- Under stagnant water conditions, herding of oil with water spray may be needed to push oil to collection areas
- Oily debris can be removed where there is access
- Any cleanup activity must not mix the oil deeper into the sediments. Trampling of the roots must be minimized
- Woody vegetation should not be cut

ENVIRONMENTAL SENSITIVITY INDEX MAPS





Map 46
S. Maine/ New Hampshire



SEE BACK OF MAP
 for details about mapped resources and
 other resources that occur in mapped area.
 Data Published: October 2016

0 Not for Navigation 2 Miles
 0 2 Kilometers

1:100,000



Map 46
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			
Map ID	Type	Name	Contact Phone
1	BOAT RAMP	BETHEL POINT TOWN LANDING	HARPSWELL
2	BOAT RAMP	BUTTERMILK COVE BOAT RAMP	DOC
3	BOAT RAMP	CANOE ACCESS SITE	PHIPPSBURG
4	BOAT RAMP	FIDDLER'S REACH - MORSE LAUNCH	PHIPPSBURG
5	BOAT RAMP	HOLBROOK TOWN LANDING	HARPSWELL
6	BOAT RAMP	KENNEBEC RIVER BOAT RAMP 8	DOC
7	BOAT RAMP	KENNEBEC RVR @ SO. END BOAT RAMP	BATH
8	BOAT RAMP	MIDDLE BAY BOAT RAMP	BRUNSWICK
9	BOAT RAMP	SIMPSON'S POINT	BRUNSWICK
10	BOAT RAMP	SUBINO LANDING	WEST BATH
11	BOAT RAMP	TURKEY BRIDGE / PRINCES POINT BOAT LAUNCH	BRUNSWICK
12	HELIPORT	MIARA	JOSEPH A. MIARA, JR. 978-475-5012
13	LOCK AND DAM	BOOKERS POND DAM	
14	LOCK AND DAM	HOUGHTON POND DAM	HERBERT ANDERSON
15	LOCK AND DAM	ROGERS NECK POND DAM	GEORGE FISK
16	LOCK AND DAM	WAH-TUH LAKE DAM	DOROTHY DANA
17	LOCK AND DAM	WILSON POND DAM	D W RICHARDS
18	LOCK AND DAM	WINNEGANCE CAUSEWAY DAM	STATE OF ME DOT

DISPLAYED ON MAP (POLYGONS)			
Map ID	Type	Name	Contact Phone
19	AQUACULTURE	NMR MC - MILL COVE, NEW MEADOWS RIVER	WINTER POINT INC. 207-443-3889
20	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT	
21	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
22	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
23	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
24	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
25	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
26	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
27	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
28	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
29	MILITARY	NAVAL AIR STATION BRUNSWICK	
30	NATURE CONSERVANCY	KEP - BACK RIVER - BUFFLEHEAD COVE PRESERVE	THE NATURE CONSERVANCY 207-729-5181
31	NATURE CONSERVANCY	KEP - BACK RIVER - HOLT WOODLANDS RESEARCH FOREST	THE NATURE CONSERVANCY 207-729-5181
32	NATURE CONSERVANCY	KEP - BACK RIVER - MARGOT DOMIZI FREEMAN PRESERVE	THE NATURE CONSERVANCY 207-729-5181
33	NATURE CONSERVANCY	KEP - BACK RIVER - MILL POINT PRESERVE	THE NATURE CONSERVANCY 207-729-5181
34	NATURE CONSERVANCY	KEP - BERRY WOODS PRESERVE	THE NATURE CONSERVANCY 207-729-5181
35	NATURE CONSERVANCY	KEP - LOWER BACK RIVER - BALD HEAD PRESERVE	THE NATURE CONSERVANCY 207-729-5181
36	NATURE CONSERVANCY	KEP - LOWER BACK RIVER - BUFFLEHEAD COVE PRESERVE	THE NATURE CONSERVANCY 207-729-5181
37	NATURE CONSERVANCY	KEP - MDIFW - LOWER KENNEBEC	THE NATURE CONSERVANCY 207-729-5181

DISPLAYED ON MAP (POLYGONS) (continued)

Map ID	Type	Name	Contact	Phone
38	NATURE CONSERVANCY	KEP - THE BASIN PRESERVE	THE NATURE CONSERVANCY	207-729-5181
39	NATURE CONSERVANCY	MORSE MOUNTAIN	THE NATURE CONSERVANCY	207-729-5181
40	NATURE CONSERVANCY	MORSE MOUNTAIN EASEMENT	THE NATURE CONSERVANCY	207-729-5181
41	NATURE CONSERVANCY	MORSE MOUNTAIN PRESERVE	THE NATURE CONSERVANCY	207-729-5181
42	NATURE CONSERVANCY	MORSE MOUNTAIN PRESERVE - HERON ISLANDS	THE NATURE CONSERVANCY	207-729-5181
43	PARK	PARKER HEAD SITE	TOWN OF PHIPPSBURG	207-729-5181
44	PARK	POPHAM BEACH STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-389-1335
45	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 2	PRIVATE LAND OWNER	
46	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 3	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	

ALSO PRESENT IN MAPPED AREA (POLYGONS)

Type	Name	Contact	Phone
STATE PROTECTED AREA	FRED MORSE WILDLIFE MANAGEMENT AREA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	KENNEBEC RIVER ESTUARY WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	OUTER MARK ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	SUGARLOAF ISLANDS (NORTH)	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	SUGARLOAF ISLANDS (SOUTH)	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	

JURISDICTIONS

COUNTY: CUMBERLAND, LINCOLN, SAGadahoc
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USACE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	2,376.63	3.71
10B	Freshwater Marshes	329.28	0.51
10C	Swamps	1,994.72	3.12
10D	Scrub and Shrub Wetlands	498.66	0.78
9A	Sheltered Tidal Flats	1,664.65	2.60
7	Exposed Tidal Flats	4,427.71	6.92
5	Mixed Sand and Gravel Beaches	118.12	0.18
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,721.49	2.69

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	168,454.23	104.67	14%
10B	Freshwater Marshes	1,437.11	0.89	< 1%
10C	Swamps	2,528.56	1.57	< 1%
10D	Scrub and Shrub Wetlands	3,142.62	1.95	< 1%
9A	Sheltered Tidal Flats	132,361.33	82.25	11%
9B	Vegetated Low Banks	238,986.61	148.50	20%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	201.69	0.13	< 1%
8A	Sheltered, Impermeable, Rocky Shores	14,109.18	8.77	1%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	201.69	0.13	< 1%
8A	Sheltered, Impermeable, Rocky Shores	14,109.18	8.77	1%
8B	Sheltered, Solid Man-Made Structures	253.29	0.16	< 1%
8C	Sheltered Riprap	756.06	0.47	< 1%
7	Exposed Tidal Flats	199,899.33	124.21	17%
6A	Gravel Beaches	573.10	0.36	< 1%
6B	Riprap	2,775.39	1.72	< 1%
5	Mixed Sand and Gravel Beaches	31,832.75	19.78	3%
4	Coarse Grained Sand Beaches	12,632.20	7.85	1%
3A	Fine to Medium Grained Sand Beaches	4,098.26	2.55	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	266,705.11	165.72	22%
1A	Exposed, Rocky Shores	124,496.10	77.36	10%
1B	Exposed, Solid Man-Made Structures	5,891.50	3.66	< 1%
Total ESI Shoreline:		1,211,134.42	752.56	
Total Shoreline:		673,702.35	418.62	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response: [restoration.noaa.gov](https://www.noaa.gov/restoration)



Map 46A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area														
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-												
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/- T	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
	Shorebird	Willet	Concentration Area	-IC	Foraging												
7	Waterfowl	American black duck	Rafting		-												
	Waterfowl	Black Scoter	Rafting		-												
	Waterfowl	Bufflehead	Rafting		-												
	Waterfowl	Common eider	Rafting		-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting		T/-	-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C		-													May-Sep	-	-	-
51	Diving	Common Loon	Rafting	-T		-													-	-	-	-
	Diving	D. crested cormorant	Rafting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting			-													-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-													May-Sep	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence			-													-	Dec-Jan	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
89	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
102	Gull/Tern	Common tern	Roosting	C/T		-													May-Aug	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Oct	May-Jun	Jul-Oct	-
188	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting		T/-	-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C	-													-	-	-	Mar-Oct	Mar-Oct
287	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
296	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
301	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
303	Diadromous	Atlantic sturgeon	General Distribution	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	General Distribution	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Concentration Area		High													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area		Low													-	-	-	Jan-Dec	Jan-Dec
315	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration		-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
320	Marine Benthic	Atlantic tomcod	Migration		-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
328	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	-	Jan-Dec	Oct-Apr
375	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C	-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E													-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-													Dec-Feb	-	-	Jan-Dec	Oct-Apr
409	Marine Benthic	Atlantic tomcod	Migration	-/C	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C	-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E													-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	-	Jan-May	Jan-May
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	-	Jan-Dec	Oct-Apr
411	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration		-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
417	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Brown trout (sea run)	Migration		-													-	-	-	Oct-Dec	Oct-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	-	Jan-Dec	Oct-Apr

Southern Maine and New Hampshire: Map 46A

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
418	Diadromous	Alewife	Migration	-I/C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-I/C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-I/T		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-I/C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E		-													-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-													-	-	-	-
499	Plant	Welsh mudwort	Vulnerable Occurrence	C/-		-													-	-	-	-
500	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-		-													-	-	-	-
501	Plant	Seaside brookweed	Vulnerable Occurrence	C/-		-													-	-	-	-
502	Plant	Horned pondweed	Vulnerable Occurrence	C/E		-													-	-	-	-
505	Wetland	Brackish marsh	High Ecological Value			-													-	-	-	-
507	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
508	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
525	Plant	Appalachian stitchwort	Vulnerable Occurrence	C/-		-													-	-	-	-
534	Plant	Beaked spikerush	Vulnerable Occurrence	T/-		-													-	-	-	-
542	Wetland	Freshwater tidal marsh	High Ecological Value			-													-	-	-	-
554	Plant	Long's bittercress	Vulnerable Occurrence	T/-		-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
583	Plant	Eastern grasswort	Vulnerable Occurrence	C/-		-													-	-	-	-
614	Plant	E.A. saltmarsh aster	Vulnerable Occurrence	T/-		-													-	-	-	-
	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
615	Plant	Eastern grasswort	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-		-													-	-	-	-
616	Plant	Eastern grasswort	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E		-													-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-		-													-	-	-	-
617	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E		-													-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-		-													-	-	-	-
618	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E		-													-	-	-	-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-		-													-	-	-	-
619	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E		-													-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
664	Turtle	Green sea turtle	General Distribution	-/-	T	Rare												-	-	-	Jun-Nov	Jun-Nov
	Turtle	K. ridley sea turtle	General Distribution	E/-	E	Rare												-	-	-	Jun-Nov	Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	E	Low												-	-	-	Jun-Nov	Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T	Low												-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
675	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area			-												-	-	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area			-												Aug-Sep	-	-	Jan-Dec	Jan-Dec
697	Bivalve	Eastern oyster	Harvest Area	-/C		-												Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
706	Bivalve	Blue mussel	Harvest Area			-												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	European flat oyster	Harvest Area			-												Aug-Sep	-	-	Jan-Dec	Jan-Dec
	Bivalve	Northern quahog	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
707	Bivalve	European flat oyster	Harvest Area			-												Aug-Sep	-	-	Jan-Dec	Jan-Dec
	Bivalve	Northern quahog	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Mating	Calving	Pupping	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
744	Pinniped	Harbor seal	Haul Out			-												-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Alcid	Razorbill	General Distribution	T/-		-												-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-												-	-	-	-
		Great cormorant	General Distribution	T/-		-												-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-												May-Oct	-	-	-
		Common tern	General Distribution	C/T		-												May-Aug	-	-	-
		Roseate tern	General Distribution	E/E	E	-												-	-	-	-

FISH





Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D				
	Diadromous	Alewife	-IC	-													-	-	Apr-Dec	Apr-Jul
		American eel	-IC	-													-	-	Mar-Oct	Mar-Oct
		American shad	-IC	-													-	-	May-Feb	May-Jul
		Atlantic salmon	E	-													-	-	Jan-Dec	May-Mar
		Atlantic sturgeon	-JT	T													-	-	Jan-Dec	Jan-Dec
		Blueback herring	-IC	-													-	-	Jan-Dec	Jan-Dec
		Brook trout (sea run)	C/-	-													-	-	Jan-May	Jan-May
		Sea lamprey	-IC	-													-	-	Apr-Jul	Apr-Jul
		Shortnose sturgeon	E/E	E													-	-	Jan-Dec	Jan-Dec
		Striped bass	-IC	-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	-IC	-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod		-													-	-	Jan-Dec	Jan-Dec

INVERTEBRATES



Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D				
	Crab	Horseshoe crab	-IC	Low													May-Jul	-	Jan-Dec	Jan-Dec

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Black guillemot															May-Aug	-	-	-
		Dovekie															-	-	-	-
	Diving	Thick-billed murre															-	-	-	-
		D. crested cormorant															Jun-Sep	-	-	-
		Horned grebe															-	-	-	-
		Red-necked grebe															-	-	-	-
		Red-throated loon															-	-	-	-
	Gull/Tern	G. black-backed gull															-	-	-	-
		Herring gull															-	-	-	-
		Ring-billed gull															-	-	-	-
	Pelagic	Northern gannet															-	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D				
	Estuarine Nursery	Atlantic herring															-	Oct-May	Jan-Dec	Apr-Dec
		Winter flounder															-	-	Jan-Dec	-
	Marine Benthic	American plaice															Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
		American sand lance															-	Dec-Jun	Jan-Dec	Jan-Dec
		Atlantic cod															Nov-Mar	Nov-Jul	Jan-Dec	Oct-Jul
		Atlantic Wolffish															Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec

FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Cunner													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	Mar-Oct	Mar-Oct
	Pollock													Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	Sep-May	Sep-May
	Silver hake													-	-	Apr-Nov	Apr-Nov
	Skates													-	-	Jan-Dec	Jan-Dec
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Butterfish													-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	1,217.10	1.90
10B	Freshwater Marshes	95.81	0.15
10C	Swamps	952.26	1.49
10D	Scrub and Shrub Wetlands	171.41	0.27
9A	Sheltered Tidal Flats	254.07	0.40
7	Exposed Tidal Flats	1,116.52	1.74
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	135.77	0.21

ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	65,621.11	40.78	22%
10B	Freshwater Marshes	267.57	0.17	< 1%
10C	Swamps	648.12	0.40	< 1%
10D	Scrub and Shrub Wetlands	1,663.47	1.03	1%
9A	Sheltered Tidal Flats	28,375.82	17.63	10%
9B	Vegetated Low Banks	69,031.23	42.89	23%
8A	Sheltered, Impermeable, Rocky Shores	1,976.77	1.23	1%
8B	Sheltered, Solid Man-Made Structures	52.41	0.03	< 1%
8C	Sheltered Riprap	341.66	0.21	< 1%
7	Exposed Tidal Flats	69,911.99	43.44	23%
6B	Riprap	264.53	0.16	< 1%
5	Mixed Sand and Gravel Beaches	758.79	0.47	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	34,736.49	21.58	12%
1A	Exposed, Rocky Shores	23,945.74	14.88	8%
1B	Exposed, Solid Man-Made Structures	432.11	0.27	< 1%

Total ESI Shoreline: 298,027.80 Total ESI Shoreline: 185.19
 Total Shoreline: 174,631.33 Total Shoreline: 108.51

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 46B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
							J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area				High												
SAV	Eelgrass	High Ecological Value				0% To 10% Cover												
SAV	Eelgrass	High Ecological Value				10% To 40% Cover												
SAV	Eelgrass	High Ecological Value				40% To 70% Cover												
SAV	Eelgrass	High Ecological Value				70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
								J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-											Mar-May	
3	Wading	Wading birds	Vulnerable Occurrence				-											Apr-Nov	
	Waterfowl	Waterfowl	Vulnerable Occurrence				-											Apr-Nov	
4	Shorebird	American golden-plover	Concentration Area				Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging											May-Jun	
	Shorebird	Baird's sandpiper	Concentration Area				Foraging												
	Shorebird	BB sandpiper	Concentration Area				Foraging												
	Shorebird	Black-bellied plover	Concentration Area				Foraging												
	Shorebird	Dunlin	Concentration Area				Foraging												
	Shorebird	Greater yellowlegs	Concentration Area				Foraging												
	Shorebird	Hudsonian godwit	Concentration Area				Foraging												
	Shorebird	Least sandpiper	Concentration Area				Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	T		Foraging												
	Shorebird	Ruddy turnstone	Concentration Area				Foraging												
	Shorebird	Sanderling	Concentration Area				Foraging												
	Shorebird	Semipalmated plover	Concentration Area				Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging												
	Shorebird	Solitary sandpiper	Concentration Area				Foraging												
	Shorebird	Stilt sandpiper	Concentration Area				Foraging												
	Shorebird	Western sandpiper	Concentration Area				Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging												
	Shorebird	Willet	Concentration Area	-/C			Foraging												
7	Waterfowl	American black duck	Rafting				-											May-Aug	
	Waterfowl	Black Scoter	Rafting				-											Apr-Aug	

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting		T/-	-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
13	Alcid	Black guillemot	Roosting			-													May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-		-													-	-	-	-
	Wading	BC night-heron	Roosting	E/-		-													May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Oct	May-Jun	Jul-Oct	-
167	Passerine	Grasshopper sparrow	Vulnerable Occurrence	E/C		-													May-Oct	-	-	-
	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E		-													Apr-Oct	-	-	-
189	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-/C		-													May-Aug	May-Jun	Jul-Sep	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Wading	BC night-heron	Concentration Area	E/-		Foraging												May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Foraging												May-Sep	-	-	-
	Wading	Great egret	Concentration Area			Foraging												-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Foraging												May-Sep	Apr	Oct	-
190	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-												May-Oct	May-Jun	Jul-Oct	-
	Raptor	Bald eagle	Vulnerable Occurrence	C/T		-												Mar-May	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-													-	-	-	Mar-Oct	Mar-Oct
290	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
301	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
328	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
332	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
336	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
411	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
419	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
				S	F		J	F	M	A	M	J	J	A	S	O	N	D
480	Wetland	Tidal Marsh	High Ecological Value			-												
481	Wetland	Rare ecol. community	High Ecological Value			-												
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-												
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-												
486	Upland	Rare upland community	High Ecological Value			-												
503	Wetland	Forested wetland	High Ecological Value			-												
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-												
606	Plant	Velvet sedge	Vulnerable Occurrence	E/-		-												

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
				S	F		J	F	M	A	M	J	J	A	S	O	N	D
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low												
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare												
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low												
	Amphibian	Spotted salamander	Concentration Area			Common												
	Amphibian	Wood Frog	Concentration Area			Common												
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low												
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low												
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low												




INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
				S	F		J	F	M	A	M	J	J	A	S	O	N	D
676	Bivalve	Blue mussel	Harvest Area			-												
677	Crab	Horseshoe crab	Spawning Area	-/C		Common												
679	Bivalve	Atl. jackknife clam	Harvest Area			-												
681	Insect	Rare insect	Vulnerable Occurrence	C/-		-												
686	Bivalve	Northern quahog	Harvest Area			-												
687	Crab	Horseshoe crab	Spawning Area	-/C		-												
691	Bivalve	European flat oyster	Harvest Area			-												
697	Bivalve	Eastern oyster	Harvest Area	-/C		-												
704	Insect	Arrowhead spiketail	Vulnerable Occurrence	C/-		-												



MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
				S	F		J	F	M	A	M	J	J	A	S	O	N	D
744	Pinniped	Harbor seal	Haul Out			-												


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
 Alcide	Razorbill	General Distribution	T/-		-													-	-	-	-
 Diving	Common Loon	General Distribution	-/T		-													-	-	-	-
 Gull/Tern	Great cormorant	General Distribution	T/-		-													-	-	-	-
	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
	Common tern	General Distribution	C/T		-													May-Aug	-	-	-
	Roseate tern	General Distribution	E/E	E	-													-	-	-	-



FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
 Diadromous	Atlantic sturgeon	General Distribution	-/T	T	Rare													-	-	-	Jan-Dec	Jan-Dec
 Estuarine Nursery	Shortnose sturgeon	General Distribution	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low													-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS





Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
 Turtle	Green sea turtle	General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
 Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Crab	Horseshoe crab	General Distribution	-/C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec




BIRDS

Monthly Presence





Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	Black guillemot													May-Aug	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Northern gannet													-	-	-	-

FISH



Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 	Northern quahog													-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Green urchin													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	American lobster													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
														Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	384.42	0.60
10B	Freshwater Marshes	117.15	0.18
10C	Swamps	470.20	0.73
10D	Scrub and Shrub Wetlands	146.01	0.23
9A	Sheltered Tidal Flats	1,276.82	2.00
7	Exposed Tidal Flats	1,293.81	2.02
5	Mixed Sand and Gravel Beaches	14.10	0.02
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	651.36	1.02

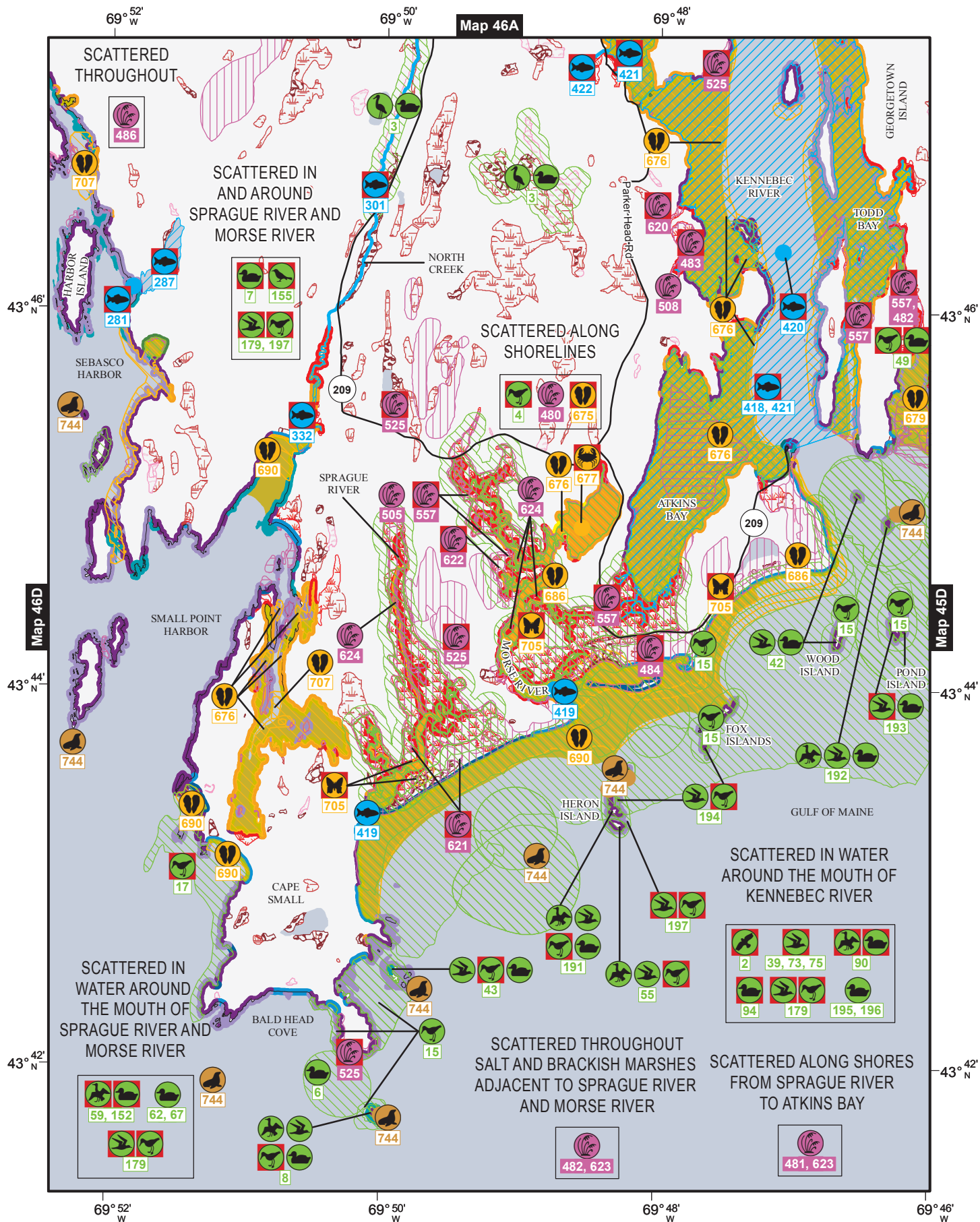
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	41,298.78	25.66	10%
10B	Freshwater Marshes	28.30	0.02	< 1%
10C	Swamps	1,269.29	0.79	< 1%
10D	Scrub and Shrub Wetlands	788.89	0.49	< 1%
9A	Sheltered Tidal Flats	65,366.55	40.62	16%
9B	Vegetated Low Banks	118,025.88	73.34	28%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	201.69	0.13	< 1%
8A	Sheltered, Impermeable, Rocky Shores	11,453.06	7.12	3%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	201.69	0.13	< 1%
8A	Sheltered, Impermeable, Rocky Shores	11,453.06	7.12	3%
8B	Sheltered, Solid Man-Made Structures	194.32	0.12	< 1%
8C	Sheltered Riprap	414.40	0.26	< 1%
7	Exposed Tidal Flats	54,241.67	33.70	13%
6B	Riprap	509.48	0.32	< 1%
5	Mixed Sand and Gravel Beaches	13,300.07	8.26	3%
4	Coarse Grained Sand Beaches	1,200.48	0.75	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	96,336.37	59.86	23%
1A	Exposed, Rocky Shores	8,357.58	5.19	2%
1B	Exposed, Solid Man-Made Structures	1,665.30	1.03	< 1%
Total ESI Shoreline:		414,652.11	257.65	
Total Shoreline:		230,442.40	143.19	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov

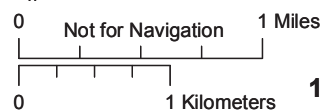




Map 46C
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 46C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area		High												
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-												
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
	Shorebird	Willet	Concentration Area	-/C	Foraging												
6	Waterfowl	American black duck	Rafting		-												
	Waterfowl	Black Scoter	Rafting		-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Waterfowl	Bufflehead	Rafting			-													-	-	-
	Waterfowl	Canada goose	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-
7	Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-												-	-	-	-
	Waterfowl	Bufflehead	Rafting			-												-	-	-	-
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Common merganser	Rafting			-												-	-	-	-
	Waterfowl	Harlequin duck	Rafting			-												-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-												-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-
8	Diving	D. crested cormorant	Roosting			-												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence															-	Apr-May	Oct	-
17	Shorebird	American golden-plover	Concentration Area															-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area															-	-	-	-
	Shorebird	BB sandpiper	Concentration Area															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area															-	Apr-May	Sep-Oct	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence															-	Apr-May	Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C														May-Aug	May-Jun	Jul-Sep	-
39	Gull/Tern	Arctic tern	Vulnerable Occurrence	T/C														May-Oct	-	-	-
42	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
43	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting															-	-	-	-
	Shorebird	American golden-plover	Roosting															-	-	-	-
	Shorebird	American oystercatcher	Roosting															-	Aug	Oct	-
	Shorebird	Baird's sandpiper	Roosting	C/-														May-Jun	May	Sep	-
	Shorebird	BB sandpiper	Roosting															-	-	-	-
	Shorebird	Black-bellied plover	Roosting															-	Aug	Oct	-
	Shorebird	Dunlin	Roosting															-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting															-	May	Aug-Oct	-
	Shorebird	Hudsonian godwit	Roosting															-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting															-	-	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-														-	May-Jun	Jul-Oct	-
			Roosting															-	May-Jun	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Pectoral sandpiper	Roosting															-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
49	Shorebird	American golden-plover	Concentration Area															-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area															-	-	-	-
	Shorebird	BB sandpiper	Concentration Area															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area															-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area	-C														May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Willet	Concentration Area															Apr-Aug	-	-	-
	Waterfowl	American black duck	Rafting															-	-	-	-
	Waterfowl	Black Scoter	Rafting															-	-	-	-
	Waterfowl	Bufflehead	Rafting															-	-	-	-
	Waterfowl	Common eider	Rafting															May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting															-	-	-	-
	Waterfowl	Common merganser	Rafting															-	-	-	-
	Waterfowl	Harlequin duck	Rafting	T/-														-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
55	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-	
	Waterfowl	Red-breasted merganser	Rafting			-												-	-	-	-	
	Waterfowl	Ruddy duck	Rafting			-												-	Dec-Jan	-	-	
	Waterfowl	Scaup	Rafting			-												-	Dec-Jan	-	-	
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-	
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-	
	Diving	D. crested cormorant	Roosting			-												Jun-Sep	-	-	-	
	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-	
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-	
	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-	
	Shorebird	American oystercatcher	Roosting	C/-		-												May-Jun	May	Sep	-	
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-	
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-	
	59	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
Shorebird		Dunlin	Roosting			-												-	May	Aug-Oct	-	
Shorebird		Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-	
Shorebird		Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-	
Shorebird		Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-	
Shorebird		Lesser yellowlegs	Roosting	C/-		-												-	May-Jun	Jul-Oct	-	
Shorebird		Pectoral sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-	
Shorebird		Red Knot	Roosting	C/-	T	-												-	Apr-May	Sep-Oct	-	
Shorebird		Ruddy turnstone	Roosting			-												-	May	Aug-Oct	-	
Shorebird		Sanderling	Roosting			-												-	May-Jun	Jul-Oct	-	
Shorebird		Semipalmated plover	Roosting			-												-	Apr-May	-	-	
Shorebird		Semipalmated sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-	
Shorebird		Short-billed dowitcher	Roosting	C/-		-												-	May-Jun	Jul-Oct	-	
Shorebird		Solitary sandpiper	Roosting			-												-	Jun	-	-	
Shorebird		Stilt sandpiper	Roosting			-												-	Jul	Sep	-	
Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-		
Shorebird	Whimbrel	Roosting	C/-		-												-	-	Jul-Oct	-	-	
Shorebird	White-rumped sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-	-	
Shorebird	Willet	Roosting	-C		-												May-Aug	May-Jun	Jul-Sep	-	-	
Diving	Common Loon	Rafting	-T		-												-	-	-	-	-	
Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-	-	
Waterfowl	Black Scoter	Rafting			-												-	-	-	-	-	
Waterfowl	Brant	Rafting			-												-	Feb	Dec	-	-	
Waterfowl	Bufflehead	Rafting			-												-	-	-	-	-	
Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-	-	
Waterfowl	Goldeneye	Rafting			-												-	-	-	-	-	
Waterfowl	Green-winged teal	Rafting			-												May-Aug	-	-	-	-	
Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-												-	-	-	-	-	
Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-	-	
Waterfowl	Scoters	Rafting			-												-	-	-	-	-	

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
62	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
67	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-	-
73	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	-													May-Aug	May	Aug	-
75	Gull/Tern	Roseate tern	Nesting	E/E	E	-													May-Aug	May	Aug	-
90	Diving	Common Loon	Rafting	-/T		-													-	-	-	-
	Waterfowl	Brant	Rafting			-													-	Feb	Dec	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
94	Waterfowl	Harlequin duck	Rafting	T/-		-													-	-	-	-
152	Diving	Common Loon	Rafting	-/T		-													-	-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Brant	Rafting			-													-	Feb	Dec	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Oct	May-Jun	Jul-Oct	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging													May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging													Apr-Sep	Apr	Sep	-
191	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting	C/-		-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting			-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting			-													-	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-													-	May-Aug	-	-
	Diving	D. crested cormorant	Roosting			-													-	Jun-Sep	-	-
192	Gull/Tern	G. black-backed gull	Roosting			-													-	May-Aug	-	-
	Waterfowl	Common eider	Roosting			-													-	May-Aug	-	-
193	Gull/Tern	Common tern	Vulnerable Occurrence			-													-	May-Aug	-	-
	Waterfowl	Common eider	Roosting			-													-	May-Aug	-	-
194	Gull/Tern	G. black-backed gull	Roosting			-													-	May-Aug	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-													-	May-Jun	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	-	-	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Sanderling	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting			-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting			-													-	May-Aug	Jul-Sep	-
195	Waterfowl	American black duck	Rafting			-													-	May-Aug	-	-
	Waterfowl	Black Scoter	Rafting			-													-	Apr-Aug	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													-	-	-	-
	Waterfowl	Mallard	Rafting			-													-	May-Aug	-	-
	Waterfowl	Surf scoter	Rafting			-													-	Apr-Aug	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Eggs	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
196	Waterfowl	Common goldeneye	Rafting			-												-	-	-	-	-
	Waterfowl	Common merganser	Rafting			-												-	-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-	-
	Waterfowl	Red-breasted merganser	Rafting			-												-	-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-												-	Dec-Jan	-	-	-
197	Waterfowl	Scaup	Rafting			-												-	Dec-Jan	-	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-	-
	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	-												May-Aug	May	Aug	-	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	-												Apr-Sep	Apr	Sep	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
287	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Jul	Apr-Jul	
301	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
332	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
418	Marine Benthic	Atlantic tomcod	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Jul	Apr-Jul	
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Jul	May-Jul	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
419	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
420	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Jul	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Jul	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
421	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Jul	Apr-Jul	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	Atlantic tomcod	Migration			-												-	-	-	Jan-Dec	Jan-Dec	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults							
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					D						
422	Diadromous	Atlantic sturgeon	Migration	-/T		-													-	-							Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-							Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
484	Plant	Endangered plant	Vulnerable Occurrence	E/E		-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-													-	-	-	-
505	Wetland	Brackish marsh	High Ecological Value			-													-	-	-	-
508	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
525	Plant	Appalachian stitchwort	Vulnerable Occurrence	C/-		-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
620	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
621	Plant	Beach plum	Vulnerable Occurrence	E/-		-													-	-	-	-
622	Plant	Dwarf saltwort	Vulnerable Occurrence	C/-		-													-	-	-	-
623	Upland	Coastal dune grassland	High Ecological Value			-													-	-	-	-
624	Upland	Coastal dune grassland	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-






INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
675	Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-													May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common													May-Jul	-	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area			-													May-Jul	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area			-													Jun-Aug	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-													Jun-Aug	-	Jan-Dec	Jan-Dec
705	Insect	Saltmarsh tiger beetle	Vulnerable Occurrence	C/-		-													May-Jul	-	Jan-Dec	Jan-Dec
707	Bivalve	European flat oyster	Harvest Area			-													Aug-Sep	-	Jan-Dec	Jan-Dec
	Bivalve	Northern quahog	Harvest Area			-													Jun-Aug	-	Jan-Dec	Jan-Dec



MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Calving	Pupping	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D			
744	Pinniped	Harbor seal	Haul Out			-													-	-	-


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	General Distribution	T/-	-													-	-	-	-
	Razorbill	General Distribution	T/-	-													-	-	-	-
	Diving	General Distribution	-T/-	-													-	-	-	-
	Great cormorant	General Distribution	T/-	-													-	-	-	-
	Gull/Tern	General Distribution	T/C	-													May-Oct	-	-	-
	Common tern	General Distribution	C/T	-													May-Aug	-	-	-
	Pelagic	General Distribution	E/E E	-													-	-	-	-
	Leach's storm-petrel	General Distribution	C/-	-													-	-	-	-
	Shorebird	General Distribution	C/-	-													-	Jun	-	-


FISH

Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	General Distribution	-T/-	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Concentration Area		High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area		Low													-	-	-	Jan-Dec	Jan-Dec


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Turtle	General Distribution	-/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov






INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Crab	General Distribution	-C	Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Shrimp	General Distribution	-C	Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr





MARINE MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH S F E	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Whale	General Distribution	E/-	Low													-	-	-	-
	Humpback whale	General Distribution	E/-	Low													-	-	-	-
	N.A. right whale	General Distribution	E/-	Low													-	-	-	-
	Sei whale	General Distribution	E/-	Low													-	-	-	-
	Sperm whale	General Distribution	E/-	Rare													-	-	-	-

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-

FISH

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct

FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Ocean pout													-	-	Mar-Oct	Mar-Oct
	Pollock													Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	Mar-Oct	Mar-Oct
	Red hake													Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	Mar-Oct	Mar-Oct
	Skates													-	-	Jan-Dec	Jan-Dec
	Skates													-	-	Mar-Oct	Mar-Oct
	White hake													-	-	Mar-Oct	Mar-Oct
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
Marine Pelagic	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Butterfish													-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
Bivalve	Northern quahog													-	-	Jan-Dec	Jan-Dec
Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
Echinoderm	Green urchin													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
Lobster	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D			
Dolphin	Atl. wh.-side dolphin													-	-	-
	Dolphins													-	-	-
	Harbor porpoise													-	-	-
Pinniped	Gray seal													-	-	-
	Harbor seal													-	-	-
	Harp seal													-	-	-
	Hooded seal													-	-	-
Whale	Lf pilot whale													-	-	-
	Minke whale													-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Small Mammal	Beaver												
	Muskrat												
	Northern river otter												

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	753.57	1.18
10B	Freshwater Marshes	102.25	0.16
10C	Swamps	547.61	0.86
10D	Scrub and Shrub Wetlands	161.81	0.25
9A	Sheltered Tidal Flats	134.09	0.21
7	Exposed Tidal Flats	1,843.51	2.88
5	Mixed Sand and Gravel Beaches	101.48	0.16
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	242.66	0.38

ESI SHORELINE HABITAT TYPES

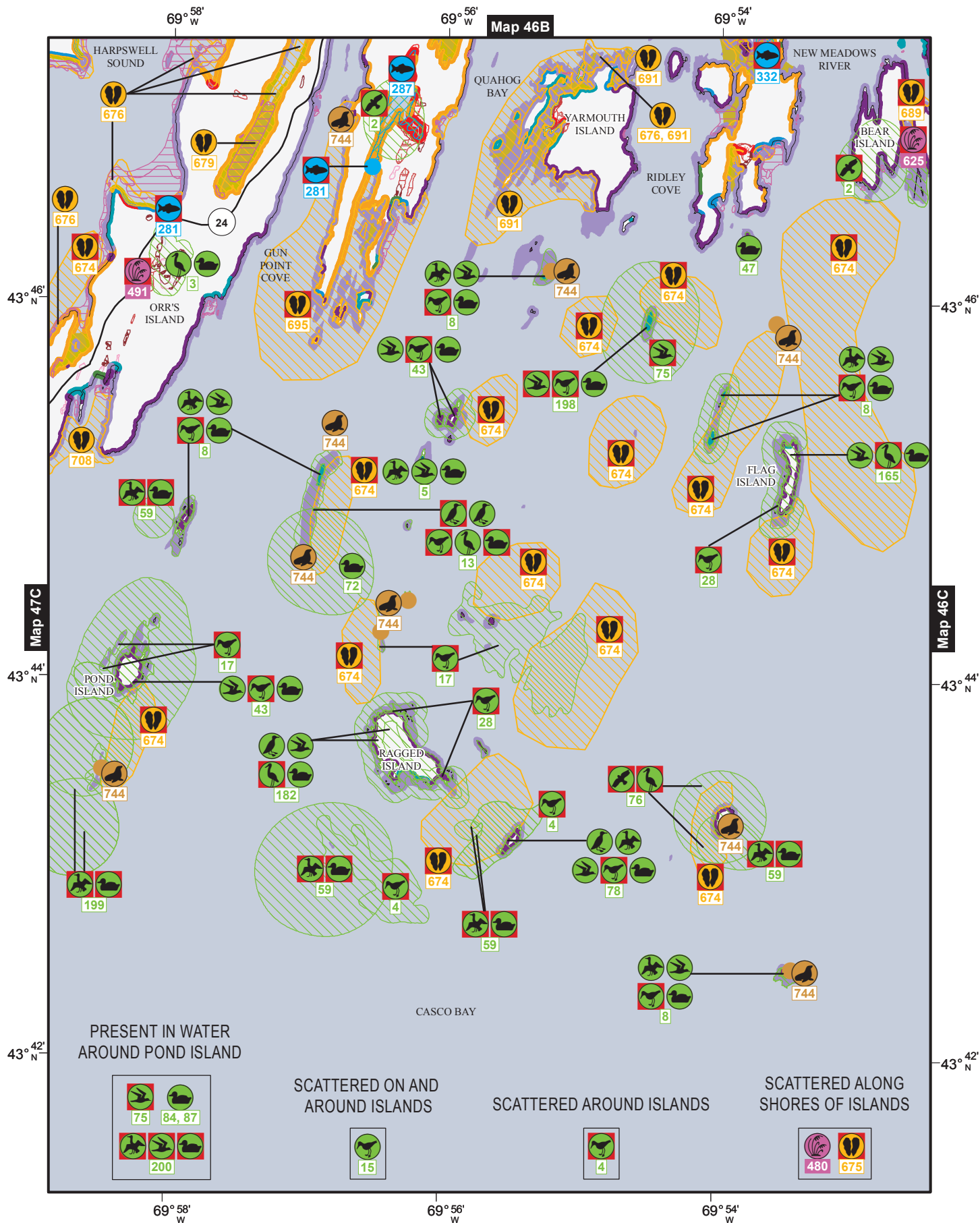
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	59,080.86	36.71	18%
10B	Freshwater Marshes	358.14	0.22	< 1%
10C	Swamps	112.70	0.07	< 1%
10D	Scrub and Shrub Wetlands	611.23	0.38	< 1%
9A	Sheltered Tidal Flats	38,637.68	24.01	12%
9B	Vegetated Low Banks	26,717.82	16.60	8%
8A	Sheltered, Impermeable, Rocky Shores	681.47	0.42	< 1%
8B	Sheltered, Solid Man-Made Structures	6.56	0.00	< 1%
7	Exposed Tidal Flats	66,375.78	41.24	20%
6A	Gravel Beaches	110.90	0.07	< 1%
6B	Riprap	1,454.99	0.90	< 1%
5	Mixed Sand and Gravel Beaches	6,970.34	4.33	2%
4	Coarse Grained Sand Beaches	8,840.85	5.49	3%
3A	Fine to Medium Grained Sand Beaches	4,098.26	2.55	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	60,200.25	37.41	18%
1A	Exposed, Rocky Shores	55,807.44	34.68	17%
1B	Exposed, Solid Man-Made Structures	2,752.47	1.71	1%

Total ESI Shoreline: 332,817.73 Total ESI Shoreline: 206.80
Total Shoreline: 175,788.14 Total Shoreline: 109.23

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov

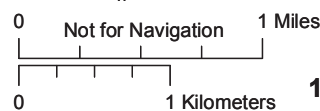




Map 46D
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 46D
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area		High												
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F C/T	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence		-											Mar-May	
3	Wading	Wading birds	Vulnerable Occurrence		-											Apr-Nov	
	Waterfowl	Waterfowl	Vulnerable Occurrence		-											Apr-Nov	
4	Shorebird	American golden-plover	Concentration Area		Foraging											-	Aug Oct
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging											May-Jun	May Sep
	Shorebird	Baird's sandpiper	Concentration Area		Foraging											-	-
	Shorebird	BB sandpiper	Concentration Area		Foraging											-	Aug Oct
	Shorebird	Black-bellied plover	Concentration Area		Foraging											-	May Jul-Oct
	Shorebird	Dunlin	Concentration Area		Foraging											-	May Aug-Oct
	Shorebird	Greater yellowlegs	Concentration Area		Foraging											-	May Jul-Oct
	Shorebird	Hudsonian godwit	Concentration Area		Foraging											-	May Jul-Oct
	Shorebird	Least sandpiper	Concentration Area		Foraging											-	May Jul-Oct
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging											-	May-Jun Jul-Oct
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging											-	May-Jun Jul-Oct
	Shorebird	Red Knot	Concentration Area	C/-	Foraging											-	Apr-May Sep-Oct
	Shorebird	Ruddy turnstone	Concentration Area		Foraging											-	May Aug-Oct
	Shorebird	Sanderling	Concentration Area		Foraging											-	May-Jun Jul-Oct
	Shorebird	Semipalmated plover	Concentration Area		Foraging											-	Apr-May Jul-Oct
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging											-	May-Jun Jul-Oct
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging											-	May-Jun Jul-Oct
	Shorebird	Solitary sandpiper	Concentration Area		Foraging											-	May-Jun Jul-Oct
	Shorebird	Stilt sandpiper	Concentration Area		Foraging											-	Jun Jul
	Shorebird	Western sandpiper	Concentration Area		Foraging											-	Jul Sep
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging											-	Jul Oct
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging											-	May-Jun Jul-Oct
	Shorebird	Willet	Concentration Area	-/C	Foraging											-	May-Aug Jul-Sep
5	Diving	D. crested cormorant	Roosting		-											-	Jun-Sep
	Gull/Tern	G. black-backed gull	Roosting		-											-	May-Aug

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
8	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
	Diving	D. crested cormorant	Roosting			-												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jul	Sep	-
13	Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-												May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
	Alcid	Black guillemot	Roosting			-												May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-		-												-	-	-	-
	Wading	BC night-heron	Roosting	E/-		-												May-Sep	Apr	Oct	-
15	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence			-												-	Apr-May	Oct	-
17	Shorebird	American golden-plover	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-		Foraging												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area			Foraging												-	-	-	-
	Shorebird	BB sandpiper	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area			Foraging												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area			Foraging												-	-	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Least sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area															-	Apr-May	Sep-Oct	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence															-	Apr-May	Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C														May-Aug	May-Jun	Jul-Sep	-
28	Shorebird	American golden-plover	Roosting															-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting															-	-	-	-
	Shorebird	BB sandpiper	Roosting															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting															-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting															-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
43	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting															-	-	-	-
	Shorebird	American golden-plover	Roosting															-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting															-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Shorebird	BB sandpiper	Roosting			-													Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-													May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-
47	Waterfowl	Common eider	Roosting			-													May-Aug	-	-
59	Diving	Common Loon	Rafting	-T		-													-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-
	Waterfowl	Brant	Rafting			-													-	Feb	Dec
	Waterfowl	Bufflehead	Rafting			-													-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-
72	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-
75	Gull/Tern	Roseate tern	Nesting	E/E	E	-													May-Aug	May	Aug
76	Raptor	Bald eagle	Vulnerable Occurrence	C/T		-													Mar-May	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-													May-Sep	-	-
78	Alcid	Black guillemot	Roosting			-													May-Aug	-	-
	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-
	Shorebird	American golden-plover	Roosting			-													Aug	Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	American oystercatcher	Roosting	C/-	-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting		-													-	-	-	-
	Shorebird	BB sandpiper	Roosting		-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting		-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting		-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting		-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting		-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Roosting	C/- T	-													-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Roosting		-													-	May	Aug-Oct	-
	Shorebird	Sanderling	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting		-													-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Stilt sandpiper	Roosting		-													-	Jun	-	-
	Shorebird	Western sandpiper	Roosting		-													-	Jul	Sep	-
	Shorebird	Whimbrel	Roosting	C/-	-													-	Jul	Oct	-
	Shorebird	White-rumped sandpiper	Roosting		-													-	-	Jul-Oct	-
	Shorebird	Willet	Roosting	-C	-													-	May-Jun	Jul-Oct	-
84	Waterfowl	Common eider	Roosting		-													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	American black duck	Rafting		-													May-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Bufflehead	Rafting		-													-	-	-	-
	Waterfowl	Common eider	Rafting		-													-	-	-	-
	Waterfowl	Goldeneye	Rafting		-													-	-	-	-
	Waterfowl	Mallard	Rafting		-													-	-	-	-
87	Waterfowl	Canada goose	Rafting		-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting		-													-	May	Sep	-
	Waterfowl	White-winged scoter	Rafting		-													-	-	-	-
165	Gull/Tern	G. black-backed gull	Roosting		-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting		-													-	-	-	-
	Wading	BC night-heron	Concentration Area	E/-	Foraging													May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area		Foraging													May-Sep	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-	Foraging													May-Sep	-	-	-
	Wading	Great blue heron	Roosting	C/-	-													May-Sep	-	-	-
	Wading	Great egret	Concentration Area		Foraging													-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area		Foraging													May-Sep	Apr	Oct	-
	Wading	Snowy egret	Concentration Area		Foraging													May-Sep	Apr	Oct	-
182	Waterfowl	Common eider	Roosting		-													May-Aug	-	-	-
	Acid	Black guillemot	Roosting		-													May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting		-													May-Aug	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
	Wading	BC night-heron	Concentration Area	E/-		Foraging												May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Foraging												May-Sep	-	-	-
	Wading	Great egret	Concentration Area			Foraging												-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
198	Gull/Tern	Arctic tern	Vulnerable Occurrence	T/C		-												May-Oct	-	-	-
	Gull/Tern	Common tern	Vulnerable Occurrence	C/T		-												May-Aug	-	-	-
	Gull/Tern	Laughing gull	Vulnerable Occurrence	C/-		-												-	-	-	-
	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E E		-												May-Aug	May	Aug	-
	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting			-												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting			-												May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
199	Diving	Common Loon	Rafting			-												-	-	-	-
	Waterfowl	Brant	Rafting			-												-	Feb	Dec	-
	Waterfowl	Green-winged teal	Rafting			-												May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-												-	-	-	-
	Waterfowl	Scoters	Rafting			-												-	-	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
200	Diving	Common Loon	Rafting			-												-	-	-	-
	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E E		-												May-Aug	May	Aug	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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	Waterfowl	Brant	Rafting			-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-													-	-	-	Mar-Oct	Mar-Oct
287	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
332	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T		-													-	-	-	-	-
625	Plant	Striped prince's pine	Vulnerable Occurrence	E/-		-													-	-	-	-	-

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
674	Bivalve	Sea scallop	Harvest Area	-/C		-													Jul-Oct	-	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area			-													-	-	-	Jan-Dec	Jan-Dec
689	Bivalve	Blue mussel	Harvest Area			-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area			-													Aug-Sep	-	-	Jan-Dec	Jan-Dec
695	Bivalve	Eastern oyster	Harvest Area	-/C		-													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Bivalve	European flat oyster	Harvest Area			-													Aug-Sep	-	-	Jan-Dec	Jan-Dec
708	Bivalve	Blue mussel	Harvest Area			-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	European flat oyster	Harvest Area			-													Aug-Sep	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Mating	Calving	Pupping	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			

744	Pinniped	Harbor seal	Haul Out			-													-	-	-	-
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WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				

Alcid	Atlantic puffin	General Distribution	T/-		-													-	-	-	-
	Razorbill	General Distribution	T/-		-													-	-	-	-
Diving	Common Loon	General Distribution	-JT		-													-	-	-	-
	Great cormorant	General Distribution	T/-		-													-	-	-	-
Gull/Tern	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
	Common tern	General Distribution	C/T		-													May-Aug	-	-	-
Pelagic	Roseate tern	General Distribution	E/E	E	-													-	-	-	-
	Leach's storm-petrel	General Distribution	C/-		-													-	-	-	-
Shorebird	Red-necked phalarope	General Distribution	C/-		-													-	Jun	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					

Diadromous	Atlantic sturgeon	General Distribution	-JT	T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shorthose sturgeon	General Distribution	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
Estuarine Nursery	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low													-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					


Turtle	Green sea turtle	General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					






Crab	Horseshoe crab	General Distribution	-C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Northern shrimp	General Distribution	-C		Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS



Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Fin whale	General Distribution	E/- E	Low													-	-	-	-
	Humpback whale	General Distribution	E/- E	Low													-	-	-	-
	N.A. right whale	General Distribution	E/- E	Low													-	-	-	-
	Sei whale	General Distribution	E/- E	Low													-	-	-	-
	Sperm whale	General Distribution	E/- E	Rare													-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-

FISH





Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	Atlantic cod													Nov-Mar	Nov-Jun	Dec-Jun	Jan-Dec	Mar-Nov
														-	-	-	Jan-Dec	Oct-Jul

Southern Maine and New Hampshire: Map 46D




FISH (continued)

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec
	Skates													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog																Jan-Dec
	Atlantic rock crab																Jan-Dec
 Crab	Blue crab																Jan-Dec
	Jonah crab																Jan-Dec
 Echinoderm	Green urchin																Jan-Dec
	American lobster																Jan-Dec
 Lobster																	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin																-
	Dolphins																-
 Pinniped	Harbor porpoise																-
	Gray seal																-
	Harbor seal																-
	Harp seal																-
 Whale	Hooded seal																-
	Lf pilot whale																-
	Minke whale																-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver																-
	Muskrat																-
	Northern river otter																-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	21.64	0.03
10B	Freshwater Marshes	14.08	0.02
10C	Swamps	24.74	0.04
10D	Scrub and Shrub Wetlands	19.56	0.03
7	Exposed Tidal Flats	173.90	0.27
5	Mixed Sand and Gravel Beaches	2.54	0.00
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	691.72	1.08

ESI SHORELINE HABITAT TYPES

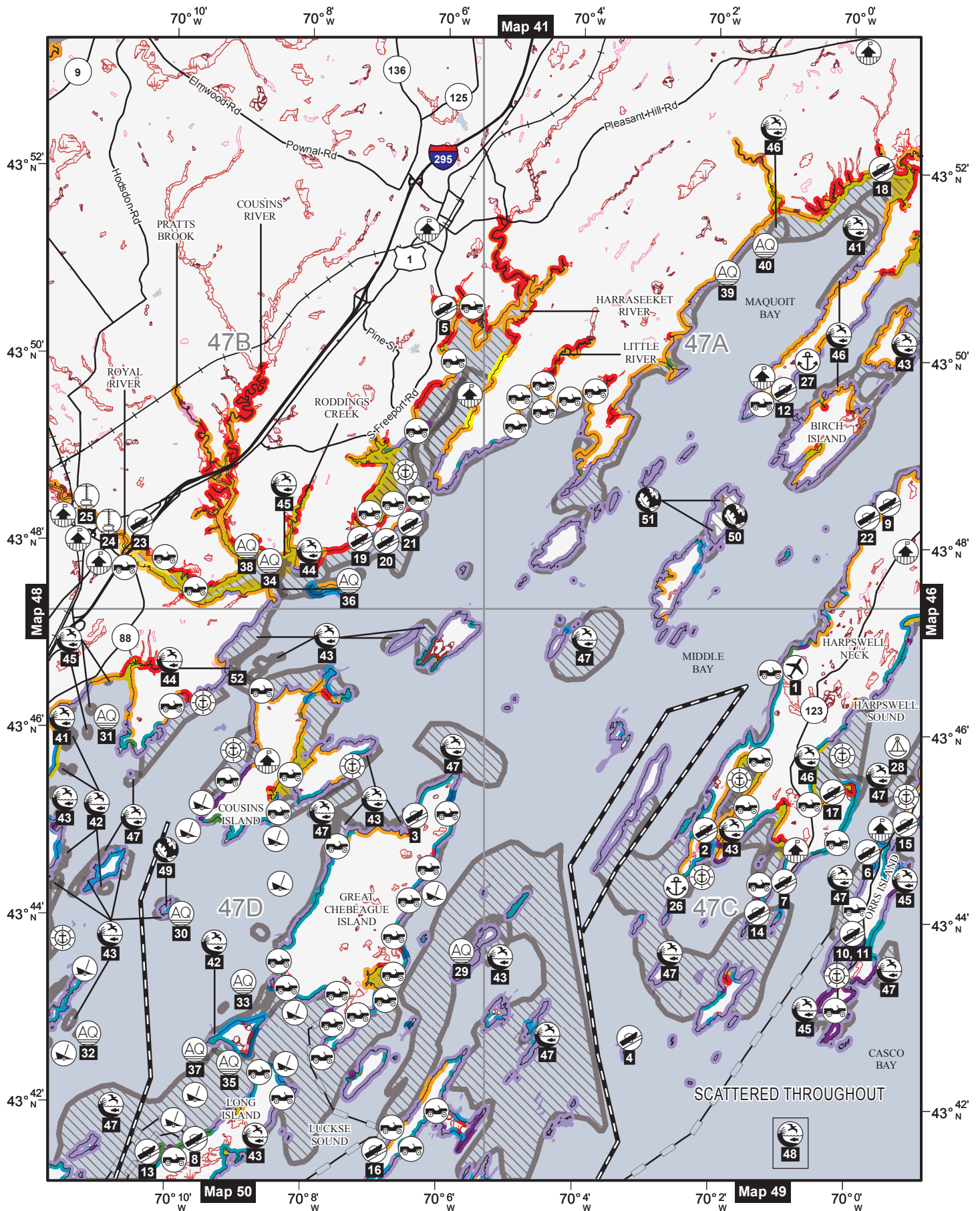
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	2,462.39	1.53	1%
10B	Freshwater Marshes	783.10	0.49	< 1%
10C	Swamps	498.43	0.31	< 1%
10D	Scrub and Shrub Wetlands	79.04	0.05	< 1%
9B	Vegetated Low Banks	25,222.17	15.67	15%
7	Exposed Tidal Flats	9,373.25	5.82	6%
6A	Gravel Beaches	462.19	0.29	< 1%
6B	Riprap	546.39	0.34	< 1%
5	Mixed Sand and Gravel Beaches	10,803.55	6.71	7%
4	Coarse Grained Sand Beaches	2,590.71	1.61	2%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	75,431.45	46.87	46%
1A	Exposed, Rocky Shores	36,386.14	22.61	22%
1B	Exposed, Solid Man-Made Structures	1,041.62	0.65	1%

Total ESI Shoreline: 165,680.43 Total ESI Shoreline: 102.95
 Total Shoreline: 92,862.10 Total Shoreline: 57.70

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 47
S. Maine/ New Hampshire



SEE BACK OF MAP
 for details about mapped resources and
 other resources that occur in mapped area.
 Data Published: October 2016

0 Not for Navigation 2 Miles
 0 2 Kilometers

1:100,000



Map 47
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			
Map ID	Type	Name	Contact Phone
1	AIRPORT	FARR FIELD	J. LLOYD THOMPSON 207-833-2924
2	BOAT RAMP	ASH POINT TOWN LANDING	HARPSWELL
3	BOAT RAMP	CASCO BAY BOAT RAMP 1	CHEBEAGUE ISLAND
4	BOAT RAMP	CASCO BAY BOAT RAMP 2	DOC
5	BOAT RAMP	DUNNING'S BOATYARD	FREEPORT
6	BOAT RAMP	GARRISON COVE TOWN LANDING	HARPSWELL
7	BOAT RAMP	GRAVEYARD TOWN LANDING	HARPSWELL
8	BOAT RAMP	LONG ISLAND TOWN BOAT RAMP	LONG ISLAND
9	BOAT RAMP	LOOKOUT POINT TOWN LANDING	HARPSWELL
10	BOAT RAMP	MACKERAL COVE TOWN LANDING BEACH AREA	HARPSWELL
11	BOAT RAMP	MACKEREL COVE TOWN LANDING	HARPSWELL
12	BOAT RAMP	MEREPOINT BAY BOAT RAMP	DIFW 207-729-3067
13	BOAT RAMP	PONCE LANDING	LONG ISLAND
14	BOAT RAMP	POTT'S POINT TOWN LANDING - LAUNCH AREA	HARPSWELL
15	BOAT RAMP	PRINCES WHARF BOAT LAUNCH AREA	HARPSWELL
16	BOAT RAMP	PROPOSED COMMERCIAL/MUNICIPAL BARGE RAMP	PORTLAND
17	BOAT RAMP	STOVER POINT TOWN LANDING	HARPSWELL
18	BOAT RAMP	WHARTON'S POINT	BRUNSWICK
19	BOAT RAMP	WINSLOW PARK BOAT RAMP	FREEPORT
20	BOAT RAMP	WINSLOW PARK CLAM FLAT ACCESS 1	FREEPORT
21	BOAT RAMP	WINSLOW PARK CLAM FLAT ACCESS 2	FREEPORT
22	BOAT RAMP	WOOD POINT TOWN LANDING	HARPSWELL
23	BOAT RAMP	YARMOUTH TOWN LANDING	YARMOUTH
24	LOCK AND DAM	BRIDGE STREET DAM	TOWN OF YARMOUTH
25	LOCK AND DAM	EAST ELM STREET DAM	TOWN OF YARMOUTH
26	MARINA	DOLPHIN MARINA	207-833-5343
27	MARINA	PAUL'S MARINA	207-729-3067
28	REPEATED MEASUREMENT SITE	LOWERHARPSWELL SOUND DATA BUOY	

DISPLAYED ON MAP (POLYGONS)

Map ID	Type	Name	Contact	Phone
29	AQUACULTURE	CAS BA2 - WEST OF BANGS ISLAND, CASCO BAY	WILD OCEAN AQUACULTURE, LLC.	207-458-6288
30	AQUACULTURE	CAS BASK - SOUTHEAST OF BASKET ISLAND, CASCO BAY	TRUNDY POINT, LLC.	207-899-1232
31	AQUACULTURE	CAS BC - BROAD COVE, CASCO BAY	PEAKS ISLAND SHELLFISH, LLC.	207-233-8505
32	AQUACULTURE	CAS CF2 - SOUTHEAST OF CLAPBOARD ISLAND, CASCO BAY	WILD OCEAN AQUACULTURE, LLC.	207-458-6288
33	AQUACULTURE	CAS CHEB - WEST-SOUTHWEST OF INDIAN POINT, CASCO B	OCEAN APPROVED, LLC.	207-409-6485
34	AQUACULTURE	CAS LAM - SOUTHWEST OF LAMBERT POINT, CASCO BAY	MAINE OYSTER, INC.	
35	AQUACULTURE	CAS LCI - SOUTH OF LITTLE CHEBEAGUE ISLAND, CASCO	AQUA FARMS, LLC.	
36	AQUACULTURE	CAS LNI - WEST OF LANES ISLAND, CASCO BAY	MAINE OYSTER, INC.	
37	AQUACULTURE	CAS LONG - SOUTH OF LITTLE CHEBEAGUE ISLAND, CASCO	TRUNDY POINT, LLC.	207-899-1232
38	AQUACULTURE	COUS BP - BETWEEN LAMBERT AND BROWNS POINTS, COUSI	MAINE OYSTER, INC.	
39	AQUACULTURE	MAQ BR1 - MAQUOIT BAY, CASCO BAY	ERIC HORNE AND VALY STEVERLYNCK	
40	AQUACULTURE	MAQ BR2 - MAQUOIT BAY, CASCO BAY	BRADLEY, EDWARD	
41	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
42	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
43	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
44	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
45	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
46	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
47	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
48	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
49	NATURE CONSERVANCY	BASKET ISLAND PRESERVE	THE NATURE CONSERVANCY	207-729-5181
50	NATURE CONSERVANCY	UPPER GOOSE ISLAND	THE NATURE CONSERVANCY	207-729-5181
51	NATURE CONSERVANCY	UPPER GOOSE ISLAND EASEMENTS	THE NATURE CONSERVANCY	207-729-5181
52	PIPELINE	CABLE AND PIPELINE 2		

ALSO PRESENT IN MAPPED AREA (POLYGONS)

Type	Name	Contact	Phone
STATE PROTECTED AREA	BANGS ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	HASKELL ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	LITTLE BIRCH ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	WEST BROWN COW ISLANDS	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	

JURISDICTIONS

COUNTY: CUMBERLAND
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USACE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	648.13	1.01
10B	Freshwater Marshes	237.29	0.37
10C	Swamps	1,358.03	2.12
10D	Scrub and Shrub Wetlands	423.44	0.66
9A	Sheltered Tidal Flats	89.44	0.14
7	Exposed Tidal Flats	742.11	1.16
5	Mixed Sand and Gravel Beaches	4.04	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,773.11	2.77

ESI SHORELINE HABITAT TYPES

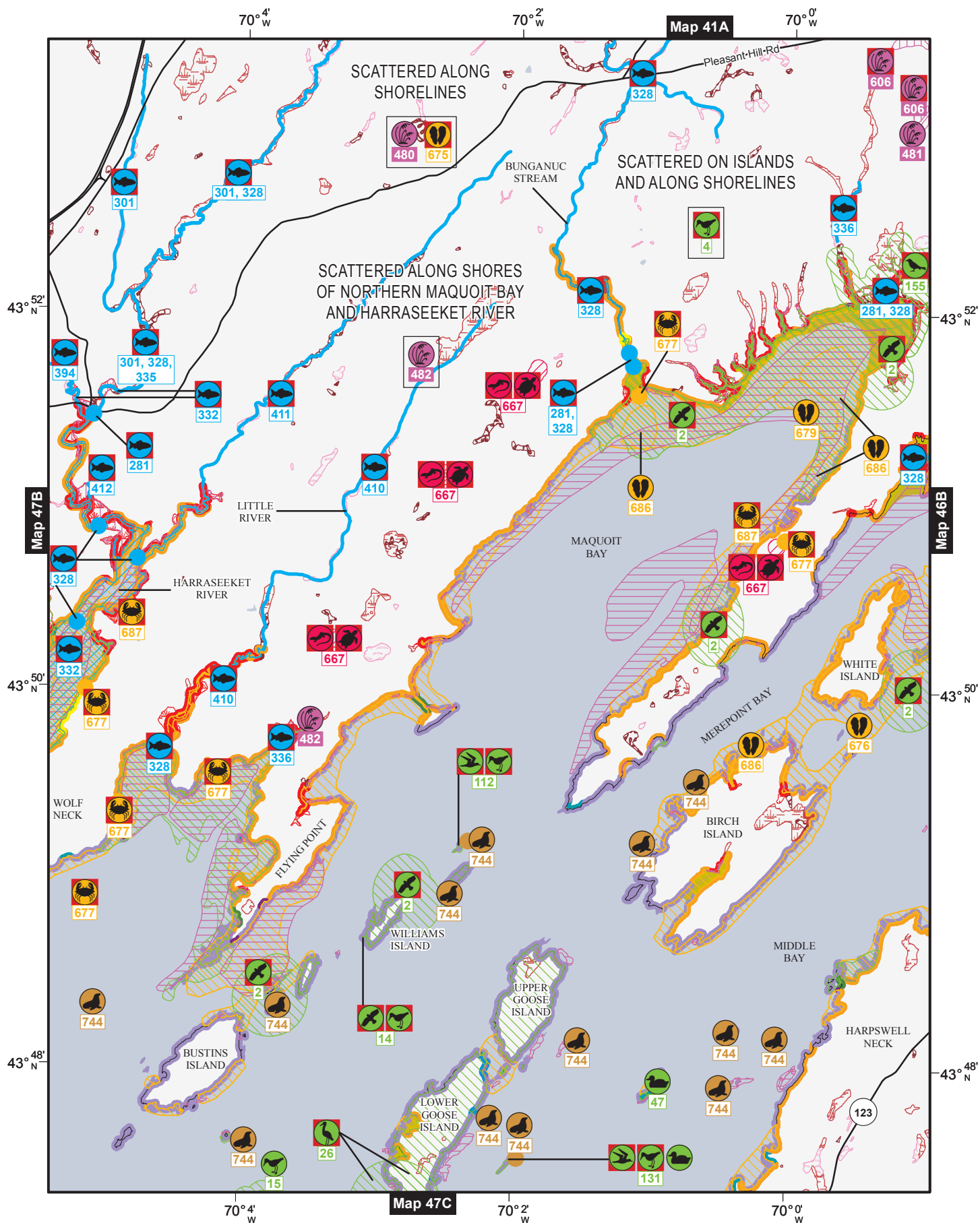
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	66,910.09	41.58	11%
10B	Freshwater Marshes	2,276.65	1.41	< 1%
10C	Swamps	2,713.98	1.69	< 1%
10D	Scrub and Shrub Wetlands	4,612.55	2.87	1%
9A	Sheltered Tidal Flats	19,673.95	12.22	3%
9B	Vegetated Low Banks	110,772.97	68.83	18%
8A	Sheltered, Impermeable, Rocky Shores	1,571.50	0.98	< 1%
8B	Sheltered, Solid Man-Made Structures	2,135.42	1.33	< 1%
8C	Sheltered Riprap	822.57	0.51	< 1%
7	Exposed Tidal Flats	52,008.20	32.32	9%
6A	Gravel Beaches	237.65	0.15	< 1%
6B	Riprap	7,174.31	4.46	1%
5	Mixed Sand and Gravel Beaches	52,055.64	32.35	9%
4	Coarse Grained Sand Beaches	25,630.96	15.93	4%
3A	Fine to Medium Grained Sand Beaches	2,911.84	1.81	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	233,830.10	145.30	39%
1A	Exposed, Rocky Shores	10,164.56	6.32	2%
1B	Exposed, Solid Man-Made Structures	6,022.97	3.74	1%

Total ESI Shoreline: 601,525.90 Total ESI Shoreline: 373.77
 Total Shoreline: 407,966.93 Total Shoreline: 253.50

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 47A
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 47A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
							J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area				High												
SAV	Eelgrass	High Ecological Value				0% To 10% Cover												
SAV	Eelgrass	High Ecological Value				10% To 40% Cover												
SAV	Eelgrass	High Ecological Value				40% To 70% Cover												
SAV	Eelgrass	High Ecological Value				70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
								J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-												
4	Shorebird	American golden-plover	Concentration Area				Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging												
	Shorebird	Baird's sandpiper	Concentration Area				Foraging												
	Shorebird	BB sandpiper	Concentration Area				Foraging												
	Shorebird	Black-bellied plover	Concentration Area				Foraging												
	Shorebird	Dunlin	Concentration Area				Foraging												
	Shorebird	Greater yellowlegs	Concentration Area				Foraging												
	Shorebird	Hudsonian godwit	Concentration Area				Foraging												
	Shorebird	Least sandpiper	Concentration Area				Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	T		Foraging												
	Shorebird	Ruddy turnstone	Concentration Area				Foraging												
	Shorebird	Sanderling	Concentration Area				Foraging												
	Shorebird	Semipalmated plover	Concentration Area				Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging												
	Shorebird	Solitary sandpiper	Concentration Area				Foraging												
	Shorebird	Stilt sandpiper	Concentration Area				Foraging												
	Shorebird	Western sandpiper	Concentration Area				Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging												
	Shorebird	Willet	Concentration Area	-C			Foraging												
14	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-												
	Shorebird	American golden-plover	Concentration Area				Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging												
	Shorebird	Baird's sandpiper	Concentration Area				Foraging												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Shorebird	BB sandpiper	Concentration Area			Foraging													Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Foraging													May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area			Foraging													May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Foraging													May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area			Foraging													-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Foraging													May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area			Foraging													Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T	Foraging													May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Foraging													Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Foraging													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area			Foraging													Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area			Foraging													Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area			Foraging													Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-		Foraging													-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C		Foraging													May-Aug	Jul-Sep	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence			-													Apr-May	Oct	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-		-													May-Sep	-	-
47	Waterfowl	Common eider	Roosting			-													May-Aug	-	-
112	Gull/Tern	Common tern	Roosting	C/T		-													May-Aug	-	-
	Shorebird	American golden-plover	Roosting			-													May-Jun	Aug	Oct
	Shorebird	American oystercatcher	Roosting	C/-		-													May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-
	Shorebird	BB sandpiper	Roosting			-													Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													Jul	Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
131	Gull/Tern	Common tern	Roosting	C/T														May-Aug	-	-	-
	Shorebird	American golden-plover	Roosting															-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting															May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting	C/-														-	-	-	-
	Shorebird	BB sandpiper	Roosting															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting															-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Roosting															-	May	Aug-Oct	-
	Shorebird	Sanderling	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting															-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Stilt sandpiper	Roosting															-	Jun	-	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Whimbrel	Roosting	C/-														-	Jul	Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	-	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														-	May-Jun	Jul-Oct	-
	Waterfowl	Common eider	Roosting															May-Aug	May-Jun	Jul-Sep	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C														May-Oct	May-Jun	Jul-Oct	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-C														-	-	-	Mar-Oct	Mar-Oct
301	Diadromous	American eel	Migration	-C														-	-	-	Mar-Oct	Mar-Oct
328	Freshwater	Rainbow smelt	Migration	-C														-	-	-	Jan-Dec	Oct-Apr
332	Diadromous	American eel	Migration	-C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-J	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-														-	-	-	Jan-May	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C														-	-	-	Jan-Dec	Oct-Apr
335	Marine Benthic	Atlantic tomcod	Migration															Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-J	T													-	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
336	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	Jan-May	Jan-May	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Atlantic sturgeon	Migration	-J	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
394	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	American eel	Migration	-C		-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Migration	-J	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	Jan-May	Jan-May	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
410	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	American eel	Migration	-C		-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Migration	-J	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
411	Freshwater	Rainbow smelt	Migration	-C		-												-	-	Oct-Apr	Oct-Apr	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	American eel	Migration	-C		-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Migration	-J	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
412	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Atlantic sturgeon	Migration	-J	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	S	F
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-												-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value			-												-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-												-	-	-	-
606	Plant	Velvet sedge	Vulnerable Occurrence	E/-		-												-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low												Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common												Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common												Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
675	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area			-												-	-	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec
687	Crab	Horseshoe crab	Spawning Area	-/C		-												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Mating	Calving	Pupping	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
744	Pinniped	Harbor seal	Haul Out			-												-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)



BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Alcid	Razorbill	General Distribution	T/-		-												-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-												-	-	-	-
		Great cormorant	General Distribution	T/-		-												-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-												May-Oct	-	-	-
		Common tern	General Distribution	C/T		-												May-Aug	-	-	-
		Roseate tern	General Distribution	E/E	E	-												-	-	-	-
	Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-
		Black Scoter	Rafting			-												-	-	-	-
		Bufflehead	Rafting			-												-	-	-	-
		Common eider	Rafting			-												May-Aug	-	-	-
		Common goldeneye	Rafting			-												-	-	-	-
		Common merganser	Rafting			-												-	-	-	-
		Harlequin duck	Rafting			-												-	-	-	-
		Long-tailed duck	Rafting			-												-	May	Sep	-
		Mallard	Rafting			-												Apr-Aug	-	-	-


BIRDS (continued)

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Red-breasted merganser	Rafting			-													-	-	-	-	-
	Ruddy duck	Rafting			-													-	Dec-Jan	-	-	-
	Scaup	Rafting			-													-	Dec-Jan	-	-	-
	Surf scoter	Rafting			-													-	-	-	-	-
	White-winged scoter	Rafting			-													-	-	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic sturgeon	General Distribution	-JT	T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low													-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS





Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Green sea turtle	General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Horseshoe crab	General Distribution	-/C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec





ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot																	May-Aug	-	-	-
	Dovekie																	-	-	-	-
	Thick-billed murre																	-	-	-	-
	D. crested cormorant																	Jun-Sep	-	-	-
	Horned grebe																	-	-	-	-
	Red-necked grebe																	-	-	-	-
	Red-throated loon																	-	-	-	-
	G. black-backed gull																	-	-	-	-
	Herring gull																	-	-	-	-
	Ring-billed gull																	-	-	-	-
	Northern gannet																	-	-	-	-



FISH

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct
														-	-	-	-	-

INVERTEBRATES

Monthly Presence


Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
	Small Mammal												
	Beaver												
	Muskrat												
	Northern river otter												

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	226.32	0.35
10B	Freshwater Marshes	111.48	0.17
10C	Swamps	292.68	0.46
10D	Scrub and Shrub Wetlands	126.73	0.20
9A	Sheltered Tidal Flats	19.03	0.03
7	Exposed Tidal Flats	154.42	0.24
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	325.61	0.51

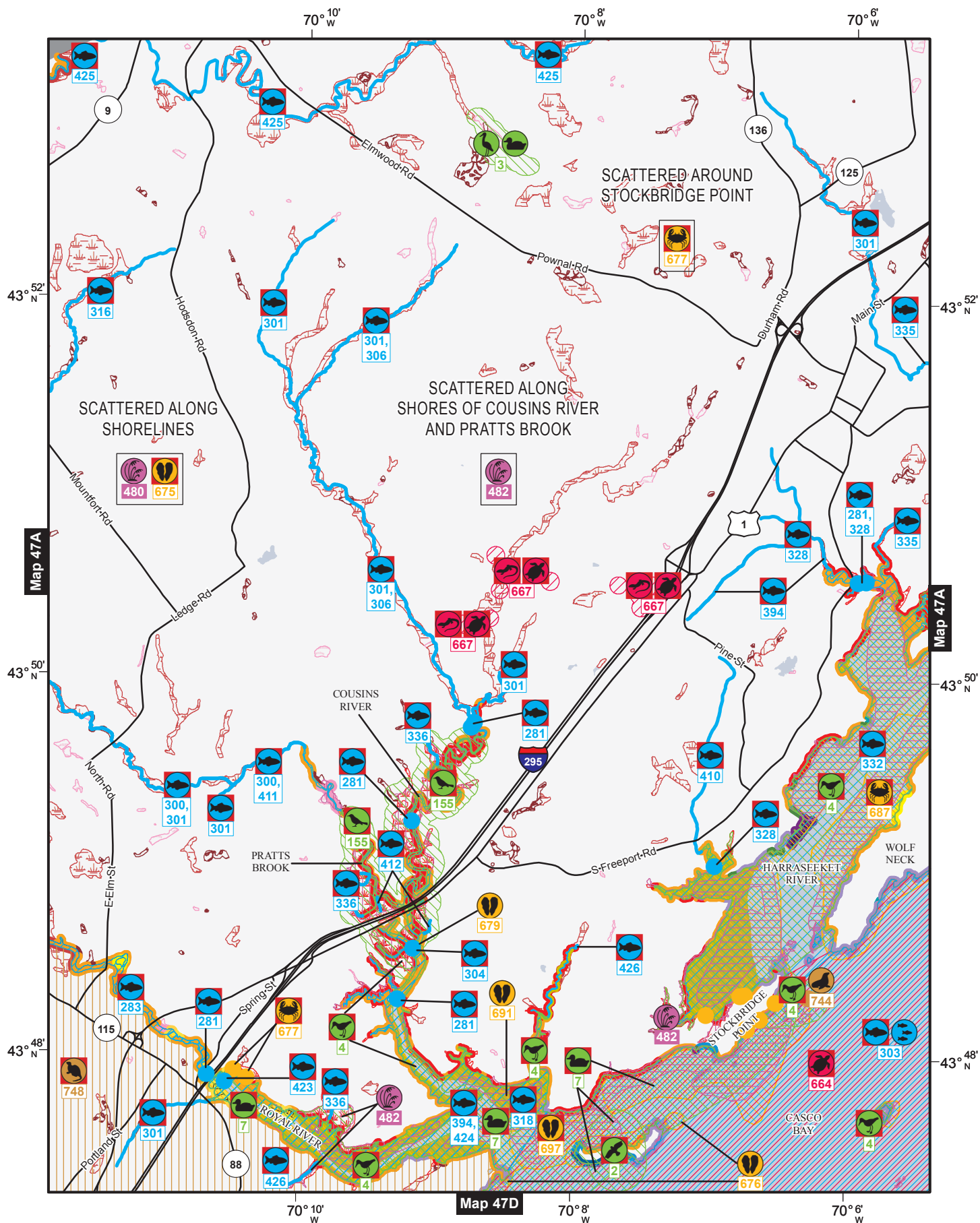
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	24,753.30	15.38	15%
10C	Swamps	1,060.55	0.66	1%
10D	Scrub and Shrub Wetlands	732.48	0.46	< 1%
9A	Sheltered Tidal Flats	5,605.24	3.48	3%
9B	Vegetated Low Banks	48,995.77	30.44	31%
8A	Sheltered, Impermeable, Rocky Shores	779.62	0.48	< 1%
8B	Sheltered, Solid Man-Made Structures	36.70	0.02	< 1%
7	Exposed Tidal Flats	15,805.82	9.82	10%
6B	Riprap	924.24	0.57	1%
5	Mixed Sand and Gravel Beaches	2,260.02	1.40	1%
4	Coarse Grained Sand Beaches	431.80	0.27	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	58,721.26	36.49	37%
1B	Exposed, Solid Man-Made Structures	312.99	0.19	< 1%
Total ESI Shoreline:		160,419.80	Total ESI Shoreline:	99.68
		114,090.40	Total Shoreline:	70.89

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov

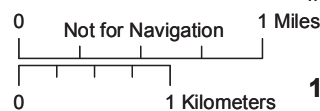




Map 47B
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 47B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
							J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area				High												
SAV	Eelgrass	High Ecological Value				0% To 10% Cover												
SAV	Eelgrass	High Ecological Value				10% To 40% Cover												
SAV	Eelgrass	High Ecological Value				40% To 70% Cover												
SAV	Eelgrass	High Ecological Value				70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
								J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-											Mar-May	
3	Wading	Wading birds	Vulnerable Occurrence				-											Apr-Nov	
	Waterfowl	Waterfowl	Vulnerable Occurrence				-											Apr-Nov	
4	Shorebird	American golden-plover	Concentration Area				Foraging											-	Aug
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging											May-Jun	
	Shorebird	Baird's sandpiper	Concentration Area				Foraging											-	
	Shorebird	BB sandpiper	Concentration Area				Foraging											-	Aug
	Shorebird	Black-bellied plover	Concentration Area				Foraging											May	Sep
	Shorebird	Dunlin	Concentration Area				Foraging											-	
	Shorebird	Greater yellowlegs	Concentration Area				Foraging											-	
	Shorebird	Hudsonian godwit	Concentration Area				Foraging											Aug	Oct
	Shorebird	Least sandpiper	Concentration Area				Foraging											May	Jul-Oct
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging											May	Aug-Oct
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging											May	Jul-Oct
	Shorebird	Red Knot	Concentration Area	C/-	T		Foraging											May	Aug-Oct
	Shorebird	Ruddy turnstone	Concentration Area				Foraging											May-Jun	Jul-Oct
	Shorebird	Sanderling	Concentration Area				Foraging											-	Apr-May
	Shorebird	Semipalmated plover	Concentration Area				Foraging											May-Jun	Jul-Oct
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging											May-Jun	Jul-Oct
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging											May-Jun	Jul-Oct
	Shorebird	Solitary sandpiper	Concentration Area				Foraging											Jun	-
	Shorebird	Stilt sandpiper	Concentration Area				Foraging											Jul	Sep
	Shorebird	Western sandpiper	Concentration Area				Foraging											Jul	Oct
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging											-	Jul-Oct
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging											May-Jun	Jul-Oct
	Shorebird	Willet	Concentration Area	-/C			Foraging											May-Aug	Jul-Sep
7	Waterfowl	American black duck	Rafting				-											Apr-Aug	-
	Waterfowl	Black Scoter	Rafting				-											-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Waterfowl	Bufflehead	Rafting			-												-	-	-	-
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Common merganser	Rafting			-												-	-	-	-
	Waterfowl	Harlequin duck	Rafting			-												-	-	-	-
	Waterfowl	Long-tailed duck	Rafting		T/-	-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-												-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-												May-Oct	May-Jun	Jul-Oct	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults	
				S	F		J	F	M	A	M	J	J	A	S	O	N	D						
281	Diadromous	American eel	Harvest Area	-C		-													-	-	-	Mar-Oct	Mar-Oct	
283	Diadromous	Alewife	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	American shad	Migration	-C		-													-	-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-T	T	-													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-C		-													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May	
	Diadromous	Sea lamprey	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec	
300	Freshwater	Rainbow smelt	Migration	-C		-													-	-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May	
	301	Diadromous	American eel	-C		-													-	-	-	Mar-Oct	Mar-Oct	
	303	Diadromous	Atlantic sturgeon	-T	T	Rare													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shorthose sturgeon	General Distribution	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec	
	Estuarine Nursery	Black Seabass	Concentration Area			Low														-	-	-	Jan-Dec	Jan-Dec
		Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-		-														-	-	-	Jan-May	Jan-May
Freshwater	Rainbow smelt	Migration	-C		-														-	-	-	Jan-Dec	Oct-Apr	
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May	
Freshwater	Rainbow smelt	Migration	-C		-														-	-	-	Jan-Dec	Oct-Apr	
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct	
Diadromous	Brook trout (sea run)	Migration	C/-		-														-	-	-	Jan-May	Jan-May	
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	-	Jan-Dec	May-Mar	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
328	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
332	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
335	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
394	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
410	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
411	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
412	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
423	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Brown trout (sea run)	Migration			-													-	-	-	Oct-Dec	Oct-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr

Southern Maine and New Hampshire: Map 47B

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
424	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-/C	-													-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C	-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	Jan-Dec	Oct-Apr
425	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C	-													-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C	-													-	-	Jan-Dec	Jan-Dec
426	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	Jan-May	Jan-May
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	Jan-Dec	Oct-Apr
	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Jul	Apr-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	E	-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration		-													-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence															
						J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value		-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value		-													-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
664	Turtle	Green sea turtle	General Distribution	-/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	Turtle	K. ridley sea turtle	General Distribution	E/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area		Common													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area		Common													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
675	Bivalve	Softshell clam	Harvest Area	-/C	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area		-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C	Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

INVERTEBRATES (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
679	Bivalve	Atl. jackknife clam	Harvest Area			-													-	-	Jan-Dec	Jan-Dec
687	Crab	Horseshoe crab	Spawning Area	-/C		-													May-Jul	-	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area			-													Aug-Sep	-	Jan-Dec	Jan-Dec
697	Bivalve	Eastern oyster	Harvest Area	-/C		-													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec

MARINE MAMMALS




Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Potential	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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748	Small Mammal	New England cottontail	General Distribution																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

BIRDS



	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Razorbill	General Distribution	T/-		-												-	-	-		
	Diving	Common Loon	General Distribution	-/T		-												-	-	-		
	Gull/Tern	Great cormorant	General Distribution	T/-		-												-	-	-		
		Arctic tern	General Distribution	T/C		-												May-Oct	-	-	-	
		Common tern	General Distribution	C/T		-												May-Aug	-	-	-	
		Roseate tern	General Distribution	E/E	E	-												-	-	-		

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
 Crab	Horseshoe crab	General Distribution	-/C		Low												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec



ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt	
		J	F	M	A	M	J	J	A	S	O	N	D					
	Black guillemot														May-Aug	-	-	-
	Dovekie														-	-	-	-
	Thick-billed murre														-	-	-	-
	D. crested cormorant														Jun-Sep	-	-	-
	Horned grebe														-	-	-	-
	Red-necked grebe														-	-	-	-
	Red-throated loon														-	-	-	-









BIRDS

Monthly Presence





Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Juveniles	Adults
	G. black-backed gull													-	-	-	-	-
	Herring gull													-	-	-	-	-
	Ring-billed gull													-	-	-	-	-
	Northern gannet													-	-	-	-	-

FISH



Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
 Echinoderm	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	American lobster													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
 Lobster														Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Harbor porpoise													-	-	-	-
 Pinniped	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	329.98	0.52
10B	Freshwater Marshes	80.30	0.13
10C	Swamps	729.31	1.14
10D	Scrub and Shrub Wetlands	143.05	0.22
9A	Sheltered Tidal Flats	70.41	0.11
7	Exposed Tidal Flats	385.24	0.60
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	66.92	0.10

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	33,571.34	20.86	28%
10B	Freshwater Marshes	1,129.99	0.70	1%
10C	Swamps	1,176.90	0.73	1%
10D	Scrub and Shrub Wetlands	570.86	0.35	< 1%
9A	Sheltered Tidal Flats	14,069.40	8.74	12%
9B	Vegetated Low Banks	31,178.58	19.37	26%
8A	Sheltered, Impermeable, Rocky Shores	791.88	0.49	1%
8B	Sheltered, Solid Man-Made Structures	2,098.72	1.30	2%
8C	Sheltered Riprap	822.57	0.51	1%
7	Exposed Tidal Flats	19,839.10	12.33	17%
6B	Riprap	702.44	0.44	1%
5	Mixed Sand and Gravel Beaches	198.04	0.12	< 1%
4	Coarse Grained Sand Beaches	665.38	0.41	1%
3A	Fine to Medium Grained Sand Beaches	408.16	0.25	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	9,498.20	5.90	8%
1B	Exposed, Solid Man-Made Structures	1,349.06	0.84	1%

Total ESI Shoreline: 118,070.63 Total ESI Shoreline: 73.37
 Total Shoreline: 80,124.43 Total Shoreline: 49.79

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 47C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F C/I	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
2	Raptor	Bald eagle	Vulnerable Occurrence		-													Mar-May	-	-	-
4	Shorebird	American golden-plover	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area		Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area		Foraging													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area		Foraging													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	Foraging													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area		Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area		Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area		Foraging													-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area		Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-/C	Foraging													May-Aug	May-Jun	Jul-Sep	-
5	Diving	D. crested cormorant	Roosting		-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting		-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting		-													-	-	-	-
	Waterfowl	Common eider	Roosting		-													May-Aug	-	-	-
6	Waterfowl	American black duck	Rafting		-													Apr-Aug	-	-	-

Southern Maine and New Hampshire: Map 47C

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
8	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-
9	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Waterfowl	Common eider	Roosting			-													-	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													May-Aug	-	-	-
11	Alcid	Atlantic puffin	General Distribution	T/-		-													-	-	-	-
	Pelagic	Leach's storm-petrel	General Distribution	C/-		-													-	-	-	-
	Shorebird	Red-necked phalarope	General Distribution	C/-		-													-	Jun	-	-
12	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	American oystercatcher	Roosting	C/-	-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting		-													-	-	-	-
	Shorebird	BB sandpiper	Roosting		-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting		-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting		-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting		-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting		-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Roosting		-													-	May	Aug-Oct	-
	Shorebird	Sanderling	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting		-													-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Stilt sandpiper	Roosting		-													-	Jun	-	-
	Shorebird	Western sandpiper	Roosting		-													-	Jul	Sep	-
	Shorebird	Whimbrel	Roosting	C/-	-													-	Jul	Oct	-
	Shorebird	White-rumped sandpiper	Roosting		-													-	-	Jul-Oct	-
	Shorebird	Willet	Roosting	-C	-													-	May-Jun	Jul-Oct	-
	Waterfowl	Common eider	Roosting		-													May-Aug	May-Jun	Jul-Sep	-
	Alcid	Black guillemot	Roosting		-													May-Aug	-	-	-
13	Gull/Tern	G. black-backed gull	Roosting		-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting		-													-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-	-													-	-	-	-
	Wading	BC night-heron	Roosting	E/-	-													May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting		-													May-Aug	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence		-													-	Apr-May	Oct	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-	-													May-Sep	-	-	-
28	Shorebird	American golden-plover	Roosting		-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-	-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting		-													-	-	-	-
	Shorebird	BB sandpiper	Roosting		-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting		-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting		-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting		-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting		-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting		-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting		-													-	May-Jun	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-												-	May-Aug	Jul-Sep	-
47	Waterfowl	Common eider	Roosting			-												May-Aug	May-Jun	Jul-Sep	-
52	Wading	Great blue heron	Roosting	C/-		-												May-Aug	-	-	-
58	Shorebird	American golden-plover	Roosting			-												May-Sep	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-		-												-	Aug	Oct	-
	Shorebird	Baird's sandpiper	Roosting			-												May-Jun	May	Sep	-
	Shorebird	BB sandpiper	Roosting			-												-	-	-	-
	Shorebird	Black-bellied plover	Roosting			-												-	Aug	Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-												-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Sanderling	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Western sandpiper	Roosting			-												-	Jul	Sep	-
	Shorebird	Whimbrel	Roosting	C/-		-												-	Jul	Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-												-	May-Jun	Jul-Oct	-
	Waterfowl	Common eider	Roosting			-												May-Aug	May-Jun	Jul-Sep	-
59	Diving	Common Loon	Rafting	-T		-												May-Aug	-	-	-
	Waterfowl	American black duck	Rafting			-												-	-	-	-
	Waterfowl	Black Scoter	Rafting			-												-	-	-	-
	Waterfowl	Brant	Rafting			-												-	-	-	-
	Waterfowl	Bufflehead	Rafting			-												-	Feb	Dec	-
	Waterfowl	Common eider	Rafting			-												-	-	-	-
	Waterfowl	Goldeneye	Rafting			-												May-Aug	-	-	-
	Waterfowl	Green-winged teal	Rafting			-												-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-														-	-	-	-
	Waterfowl	Mallard	Rafting															Apr-Aug	-	-	-
	Waterfowl	Scoters	Rafting															-	-	-	-
	Waterfowl	Surf scoter	Rafting															-	-	-	-
72	Waterfowl	Canada goose	Rafting															Apr-Aug	-	-	-
	Waterfowl	Common eider	Rafting															May-Aug	-	-	-
133	Wading	BC night-heron	Concentration Area	E/-														May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area															May-Sep	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-														May-Sep	-	-	-
	Wading	Great egret	Concentration Area															-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area															May-Sep	Apr	Oct	-
191	Wading	Snowy egret	Concentration Area															May-Sep	Apr	Oct	-
	Diving	D. crested cormorant	Roosting															Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Shorebird	American golden-plover	Roosting															-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting															-	-	-	-
	Shorebird	BB sandpiper	Roosting															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting															-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting															-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting															-	-	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting															-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														-	May-Aug	Jul-Sep	-
201	Waterfowl	Common eider	Roosting															May-Aug	May-Jun	Jul-Sep	-
	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting															May-Aug	-	-	-
	Shorebird	American golden-plover	Roosting															-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-														-	Aug	Oct	-
	Shorebird	Baird's sandpiper	Roosting															May-Jun	May	Sep	-
	Shorebird	BB sandpiper	Roosting															-	-	Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-													-	May-Aug	Jul-Sep	-
	Wading	BC night-heron	Concentration Area	E/-		Foraging													-	May-Sep	Oct	-
	Wading	Glossy ibis	Concentration Area			Foraging													-	May-Sep	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Foraging													-	Apr	Oct	-
	Wading	Great egret	Concentration Area			Foraging													-	-	-	-
	Wading	Little blue heron	Concentration Area			Foraging													-	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Foraging													-	May-Sep	Oct	-
	Waterfowl	Common eider	Roosting			-													-	May-Aug	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-C		-													-	-	-	Mar-Oct	Mar-Oct
328	Freshwater	Rainbow smelt	Migration	-C		-													-	-	-	Jan-Dec	Oct-Apr

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-	-
626	Plant	Ramp	Vulnerable Occurrence	C/-		-													-	-	-	-	-

INVERTEBRATES




Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
675	Bivalve	Softshell clam	Harvest Area	-	C	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-		-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-	C	Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
678	Shrimp	Northern shrimp	General Distribution	-	C	Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr
691	Bivalve	European flat oyster	Harvest Area	-		-													Aug-Sep	-	-	Jan-Dec	Jan-Dec
708	Bivalve	Blue mussel	Harvest Area	-		-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	European flat oyster	Harvest Area	-		-													Aug-Sep	-	-	Jan-Dec	Jan-Dec
709	Bivalve	Northern quahog	Harvest Area	-		-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Harvest Area	-	C	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec

MARINE MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Calving	Pupping	Molt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
				S	F		J	F	M	A	M	J	J	A	S	O	N	D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
744	Pinniped	Harbor seal	Haul Out			-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Razorbill	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Diving	Common Loon	General Distribution	-/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Gull/Tern	Great cormorant	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Arctic tern	General Distribution	T/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		Common tern	General Distribution	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		


FISH

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults	
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N						D
	Diadromous	Atlantic sturgeon	General Distribution	-	T	Rare												-	-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	General Distribution	E/E	E	Rare												-	-	-	Jan-Dec	Jan-Dec
		Striped bass	Concentration Area			High												-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area			Low												-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS






Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
	Green sea turtle	General Distribution	-/-	T	Rare												-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare												-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low												-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low												-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Sea scallop	Harvest Area	-/C		-													Jul-Oct	-	-	Jan-Dec	Jan-Dec
	Horseshoe crab	General Distribution	-/C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec



ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS




Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-
														-	-	-	-

FISH




Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
 Echinoderm	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Lobster	American lobster													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
														Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
 Pinniped	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
 Whale	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	26.04	0.04
10B	Freshwater Marshes	11.03	0.02
10C	Swamps	135.33	0.21
10D	Scrub and Shrub Wetlands	62.06	0.10
7	Exposed Tidal Flats	67.29	0.11
5	Mixed Sand and Gravel Beaches	4.04	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	721.39	1.13

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	3,050.96	1.90	2%
10B	Freshwater Marshes	115.61	0.07	< 1%
10D	Scrub and Shrub Wetlands	199.43	0.12	< 1%
9B	Vegetated Low Banks	11,526.70	7.16	8%
7	Exposed Tidal Flats	6,179.64	3.84	4%
6A	Gravel Beaches	237.65	0.15	< 1%
6B	Riprap	1,863.94	1.16	1%
5	Mixed Sand and Gravel Beaches	22,129.83	13.75	15%
4	Coarse Grained Sand Beaches	8,170.26	5.08	6%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	81,259.45	50.49	56%
1A	Exposed, Rocky Shores	6,738.66	4.19	5%
1B	Exposed, Solid Man-Made Structures	3,034.81	1.89	2%
Total ESI Shoreline:		144,506.93	89.79	
Total Shoreline:		100,752.26	62.60	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 47D
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
							J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area				High												
SAV	Eelgrass	High Ecological Value				0% To 10% Cover												
SAV	Eelgrass	High Ecological Value				10% To 40% Cover												
SAV	Eelgrass	High Ecological Value				40% To 70% Cover												
SAV	Eelgrass	High Ecological Value				70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
								J	F	M	A	M	J	J	A	S	O	N	D
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-												
4	Shorebird	American golden-plover	Concentration Area				Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging												
	Shorebird	Baird's sandpiper	Concentration Area				Foraging												
	Shorebird	BB sandpiper	Concentration Area				Foraging												
	Shorebird	Black-bellied plover	Concentration Area				Foraging												
	Shorebird	Dunlin	Concentration Area				Foraging												
	Shorebird	Greater yellowlegs	Concentration Area				Foraging												
	Shorebird	Hudsonian godwit	Concentration Area				Foraging												
	Shorebird	Least sandpiper	Concentration Area				Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	T		Foraging												
	Shorebird	Ruddy turnstone	Concentration Area				Foraging												
	Shorebird	Sanderling	Concentration Area				Foraging												
	Shorebird	Semipalmated plover	Concentration Area				Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging												
	Shorebird	Solitary sandpiper	Concentration Area				Foraging												
	Shorebird	Stilt sandpiper	Concentration Area				Foraging												
	Shorebird	Western sandpiper	Concentration Area				Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging												
	Shorebird	Willet	Concentration Area	-C			Foraging												
6	Waterfowl	American black duck	Rafting				-												
	Waterfowl	Black Scoter	Rafting				-												
	Waterfowl	Bufflehead	Rafting				-												
	Waterfowl	Canada goose	Rafting				-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence			-												-	Apr-May	Oct	-
17	Shorebird	American golden-plover	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-		Foraging												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area			Foraging												-	-	-	-
	Shorebird	BB sandpiper	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area			Foraging												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area			Foraging												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area			Foraging												-	Apr-May	Sep-Oct	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence			-												-	Apr-May	Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T	Foraging												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Foraging												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area			Foraging												-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area			Foraging												-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area			Foraging												-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-		Foraging												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C		Foraging												May-Aug	May-Jun	Jul-Sep	-
58	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Shorebird	Semipalmated plover	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-													May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-
59	Diving	Common Loon	Rafting	-T		-													-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-
	Waterfowl	Brant	Rafting			-													-	Feb	Dec
	Waterfowl	Bufflehead	Rafting			-													-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-
73	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	-													May-Aug	May	Aug
75	Gull/Tern	Roseate tern	Nesting	E/E	E	-													May-Aug	May	Aug
202	Gull/Tern	Herring gull	Roosting			-													-	-	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-
203	Gull/Tern	Common tern	Roosting	C/T		-													May-Aug	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-
	Shorebird	American golden-plover	Roosting			-													Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sep
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-
	Shorebird	BB sandpiper	Roosting			-													Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting			-													May-Jun	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Short-billed dowitcher	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
204	Gull/Tern	Common tern	Roosting	C/T														May-Aug	-	-	-
	Gull/Tern	Roseate tern	Nesting	E/E	E													May-Aug	May	Aug	-
	Shorebird	American golden-plover	Roosting															-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting															-	-	-	-
	Shorebird	BB sandpiper	Roosting															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting															-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T													-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Roosting															-	May	Aug-Oct	-
	Shorebird	Sanderling	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting															-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
205	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
	Waterfowl	American black duck	Rafting															Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting															-	-	-	-
	Waterfowl	Bufflehead	Rafting															-	-	-	-
	Waterfowl	Common eider	Rafting															May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting															-	May	Sep	-
	Waterfowl	Mallard	Rafting															Apr-Aug	-	-	-
	Waterfowl	Surf scoter	Rafting															-	-	-	-
	Waterfowl	White-winged scoter	Rafting															-	-	-	-
206	Waterfowl	Common goldeneye	Rafting															-	-	-	-
	Waterfowl	Common merganser	Rafting															-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Eggs	Larvae	Mig.(S)	Mig.(F)	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D							
	Waterfowl	Harlequin duck	Rafting	-I/-	-													-	-	-	-	-	-	-
	Waterfowl	Red-breasted merganser	Rafting	-	-													-	-	-	-	-	-	-
	Waterfowl	Ruddy duck	Rafting	-	-													-	Dec-Jan	-	-	-	-	-
	Waterfowl	Scaup	Rafting	-	-													-	Dec-Jan	-	-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults	
				S	F	J	F	M	A	M	J	J	A	S	O	N	D						
281	Diadromous	American eel	Harvest Area	-I/-	-													-	-	-	Mar-Oct	Mar-Oct	
301	Diadromous	American eel	Migration	-I/-	-													-	-	-	Mar-Oct	Mar-Oct	
328	Freshwater	Rainbow smelt	Migration	-I/-	-													-	-	-	Jan-Dec	Oct-Apr	
336	Diadromous	Atlantic sturgeon	Migration	-I/T	-													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	-													-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration	E/E	-													-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration	-	-													Dec-Feb	-	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
480	Wetland	Tidal Marsh	High Ecological Value	-	-													-	-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-													-	-	-	-	-
604	Plant	Limber honeysuckle	Vulnerable Occurrence	E/-	-													-	-	-	-	-
626	Plant	Ramp	Vulnerable Occurrence	C/-	-													-	-	-	-	-

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
675	Bivalve	Softshell clam	Harvest Area	-I/-	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-	-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-I/-	Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area	-	-													-	-	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area	-	-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
687	Crab	Horseshoe crab	Spawning Area	-I/-	-													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
689	Bivalve	Blue mussel	Harvest Area	-	-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Harvest Area	-I/-	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area	-	-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area	-	-													Aug-Sep	-	-	Jan-Dec	Jan-Dec
697	Bivalve	Eastern oyster	Harvest Area	-I/-	-													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
710	Bivalve	Atlantic surfclam	Harvest Area	-	-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Harvest Area	-I/-	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec

MARINE MAMMALS




Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence J F M A M J J A S O N D												Mating	Calving	Pupping	Molt
744	Pinniped	Harbor seal	Haul Out		-													-	-	-	-

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F E/E	Concentration Potential	Monthly Presence J F M A M J J A S O N D															
748	Small Mammal	New England cottontail	General Distribution															-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F T/- -/T T/- T/C C/T E/E E	Concentration	Monthly Presence J F M A M J J A S O N D												Nest	Mig.(S)	Mig.(F)	Molt
	Alcid	Razorbill	General Distribution	T/-	-												-	-	-	-
	Diving	Common Loon	General Distribution	-/T	-												-	-	-	-
		Great cormorant	General Distribution	T/-	-												-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C	-												May-Oct	-	-	-
		Common tern	General Distribution	C/T	-												May-Aug	-	-	-
		Roseate tern	General Distribution	E/E E	-												-	-	-	-



FISH

Subelement	Species	Mapping Qualifier	ME/NH S F -/T E/E E	Concentration	Monthly Presence J F M A M J J A S O N D												Spawn	Eggs	Larvae	Juveniles	Adults
	Diadromous	Atlantic sturgeon	General Distribution	-/T	Rare												-	-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	General Distribution	E/E E	Rare												-	-	-	Jan-Dec	Jan-Dec
		Striped bass	Concentration Area		High												-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area		Low												-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS





Subelement	Species	Mapping Qualifier	ME/NH S F -/- E/- E/- E/- T	Concentration	Monthly Presence J F M A M J J A S O N D												Nest	Hatch	Internest	Juveniles	Adults
	Turtle	Green sea turtle	General Distribution	-/-	Rare												-	-	-	Jun-Nov	Jun-Nov
		K. ridley sea turtle	General Distribution	E/-	Rare												-	-	-	Jun-Nov	Jun-Nov
		Leatherback sea turtle	General Distribution	E/-	Low												-	-	-	Jun-Nov	Jun-Nov
		Loggerhead sea turtle	General Distribution	E/- T	Low												-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH S F -/C -/C	Concentration	Monthly Presence J F M A M J J A S O N D												Spawn	Eggs	Larvae	Juveniles	Adults
	Bivalve	Sea scallop	Harvest Area	-/C	-												Jul-Oct	-	-	Jan-Dec	Jan-Dec
	Crab	Horseshoe crab	General Distribution	-/C	Low												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec







BIRDS

Monthly Presence



Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Northern gannet													-	-	-	-

FISH


Monthly Presence

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Crab	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
 Lobster	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Pinniped	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	65.79	0.10
10B	Freshwater Marshes	34.58	0.05
10C	Swamps	200.64	0.31
10D	Scrub and Shrub Wetlands	91.66	0.14
7	Exposed Tidal Flats	135.15	0.21
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	659.04	1.03

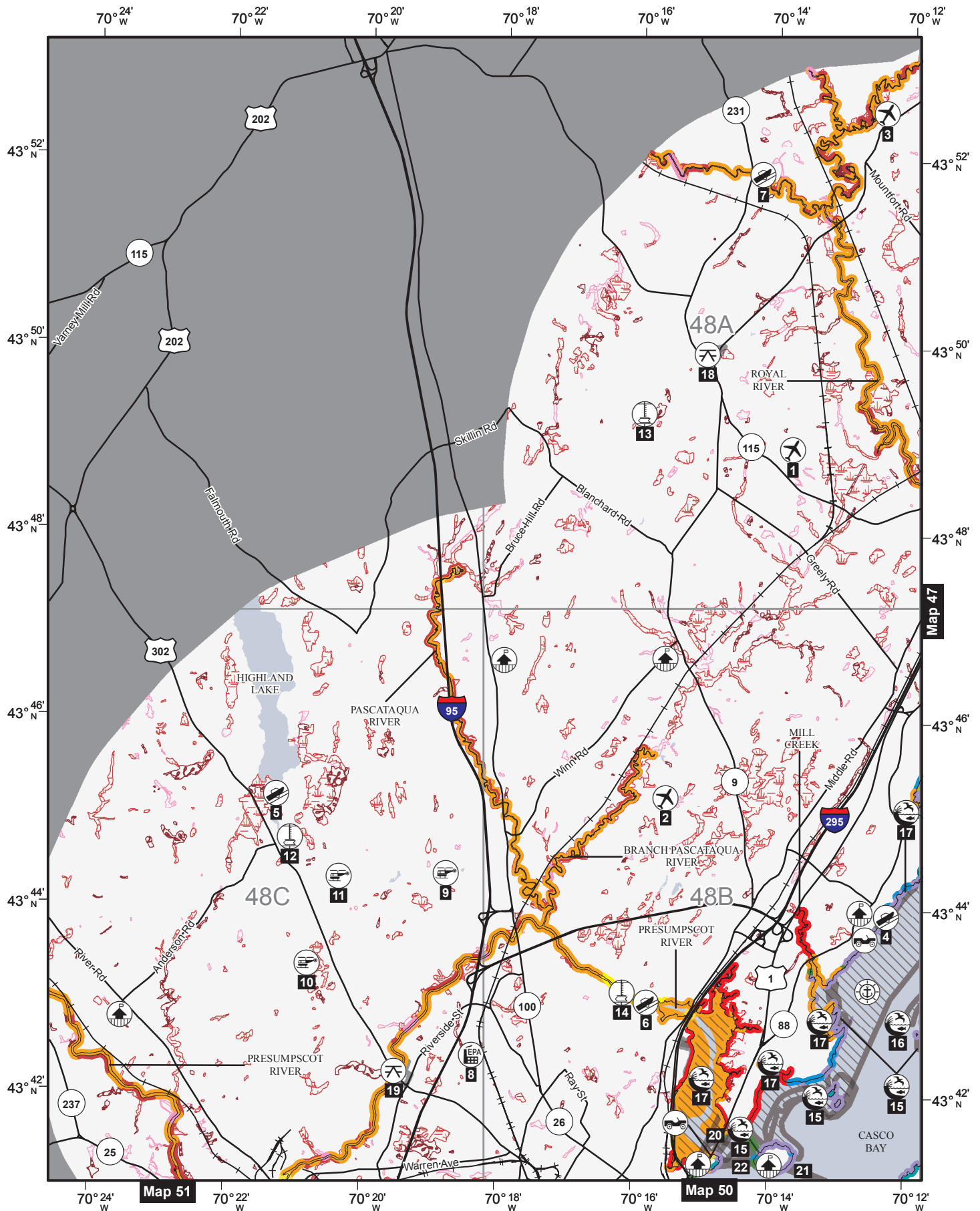
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	5,535.38	3.44	3%
10B	Freshwater Marshes	1,031.04	0.64	1%
10C	Swamps	475.83	0.30	< 1%
10D	Scrub and Shrub Wetlands	3,109.77	1.93	2%
9B	Vegetated Low Banks	19,069.43	11.85	11%
7	Exposed Tidal Flats	10,180.92	6.33	6%
6B	Riprap	3,683.68	2.29	2%
5	Mixed Sand and Gravel Beaches	27,459.92	17.06	15%
4	Coarse Grained Sand Beaches	16,355.64	10.16	9%
3A	Fine to Medium Grained Sand Beaches	2,503.68	1.56	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	84,334.37	52.40	47%
1A	Exposed, Rocky Shores	3,426.29	2.13	2%
1B	Exposed, Solid Man-Made Structures	1,326.11	0.82	1%
Total ESI Shoreline:		178,492.06	Total ESI Shoreline: 110.91	
		112,979.57	Total Shoreline: 70.20	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 48

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 48
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)				
Map ID	Type	Name	Contact	Phone
1	AIRPORT	EAGLE FIELD AIRPORT	KENNETH L. CIANCHETTE	207-829-3260
2	AIRPORT	ERIC'S FIELD AIRPORT	ERIC CIANCHETTE	207-776-1000
3	AIRPORT	POWNAI AIRPORT		
4	BOAT RAMP	FALMOUTH TOWN LANDING	FALMOUTH	
5	BOAT RAMP	HIGHLAND LAKE BOAT RAMP	DOC	
6	BOAT RAMP	PRESUMSCOT RIVER BOAT RAMP	FALMOUTH	
7	BOAT RAMP	ROYAL RIVER BOAT RAMP	NORTH YARMOUTH	
8	EPA FACILITY	BARBER FOODS 56 MILLIKEN STREET		207-541-2800
9	HELIPORT	DAVE LIBBY	DAVID H. LIBBY	207-878-7759
10	HELIPORT	STA-KEL	STEPHEN SHAW	207-854-5324
11	HELIPORT	WESTBROOK	MICHAEL T. MCCAFFREY	207-324-2600
12	LOCK AND DAM	HIGHLAND LAKE DAM	CITY OF WESTBROOK	
13	LOCK AND DAM	KNIGHTS POND DAM	RICHARD KNIGHT	
14	LOCK AND DAM	SMELT HILL DAM		

DISPLAYED ON MAP (POLYGONS)				
Map ID	Type	Name	Contact	Phone
15	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
16	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
17	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
18	PARK	MEMORIAL PARK	TOWN OF NORTH YARMOUTH	
19	PARK	RIVERTON PARK	CITY OF PORTLAND	
20	PIPELINE	CABLE AND PIPELINE 1		
21	PIPELINE	CABLE AND PIPELINE 12		
22	PIPELINE	CABLE AND PIPELINE 13		

ALSO PRESENT IN MAPPED AREA (POLYGONS)			
Type	Name	Contact	Phone
STATE PROTECTED AREA	PRESUMSCOT RIVER TIDAL PROPERTY	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	

JURISDICTIONS

COUNTY: CUMBERLAND
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USACE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	155.32	0.24
10B	Freshwater Marshes	641.28	1.00
10C	Swamps	3,452.92	5.40
10D	Scrub and Shrub Wetlands	765.16	1.20
9A	Sheltered Tidal Flats	555.14	0.87
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	79.92	0.12

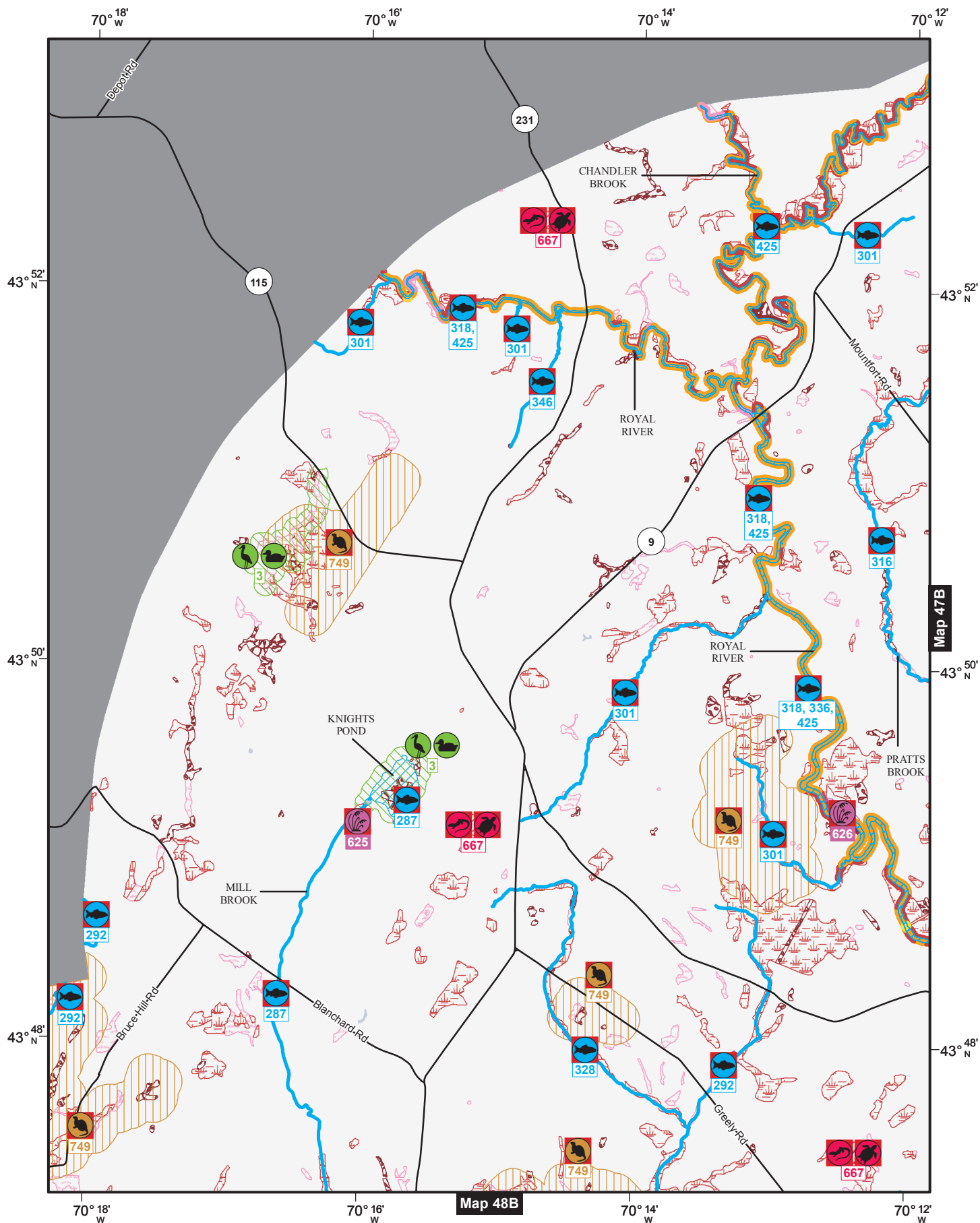
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	20,998.37	13.05	7%
10B	Freshwater Marshes	2,439.65	1.52	1%
10C	Swamps	58,095.32	36.10	19%
10D	Scrub and Shrub Wetlands	1,940.83	1.21	1%
9A	Sheltered Tidal Flats	59,033.52	36.68	19%
9B	Vegetated Low Banks	134,590.67	83.63	44%
8A	Sheltered, Impermeable, Rocky Shores	2,089.34	1.30	1%
8B	Sheltered, Solid Man-Made Structures	819.09	0.51	< 1%
8C	Sheltered Riprap	2,472.84	1.54	1%
7	Exposed Tidal Flats	342.03	0.21	< 1%
6A	Gravel Beaches	86.60	0.05	< 1%
6B	Riprap	2,137.12	1.33	1%
5	Mixed Sand and Gravel Beaches	1,890.49	1.17	1%
4	Coarse Grained Sand Beaches	3,162.10	1.96	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	12,418.33	7.72	4%
1B	Exposed, Solid Man-Made Structures	281.40	0.17	< 1%
Total ESI Shoreline:		302,797.71	188.15	
Total Shoreline:		178,021.14	110.62	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 48A S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 48A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
3	Wading	Wading birds	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
287	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
292	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-/C	E													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
301	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
316	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	-	Jan-May	Jan-May
318	Diadromous	Atlantic salmon	Migration	-/C	E													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
328	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration		-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
346	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C	-													-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C	-													-	-	-	Jan-Dec	Jan-Dec
425	Diadromous	Alewife	Migration	-/C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C	-													-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	-	Jan-May	Jan-May
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	-	Jan-Dec	Oct-Apr

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
625	Plant	Striped prince's pine	Vulnerable Occurrence	E/-	-												
626	Plant	Ramp	Vulnerable Occurrence	C/-	-												

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low												Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common												Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common												Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low												-	-	-	-	-


WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
	Small Mammal	New England cottontail	General Distribution	E/E	Potential												-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
	Small Mammal	Beaver															-	-	-	-	-
		Muskrat															-	-	-	-	-
		Northern river otter															-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10B	Freshwater Marshes	270.50	0.42
10C	Swamps	1,132.34	1.77
10D	Scrub and Shrub Wetlands	222.34	0.35



ESI SHORELINE HABITAT TYPES

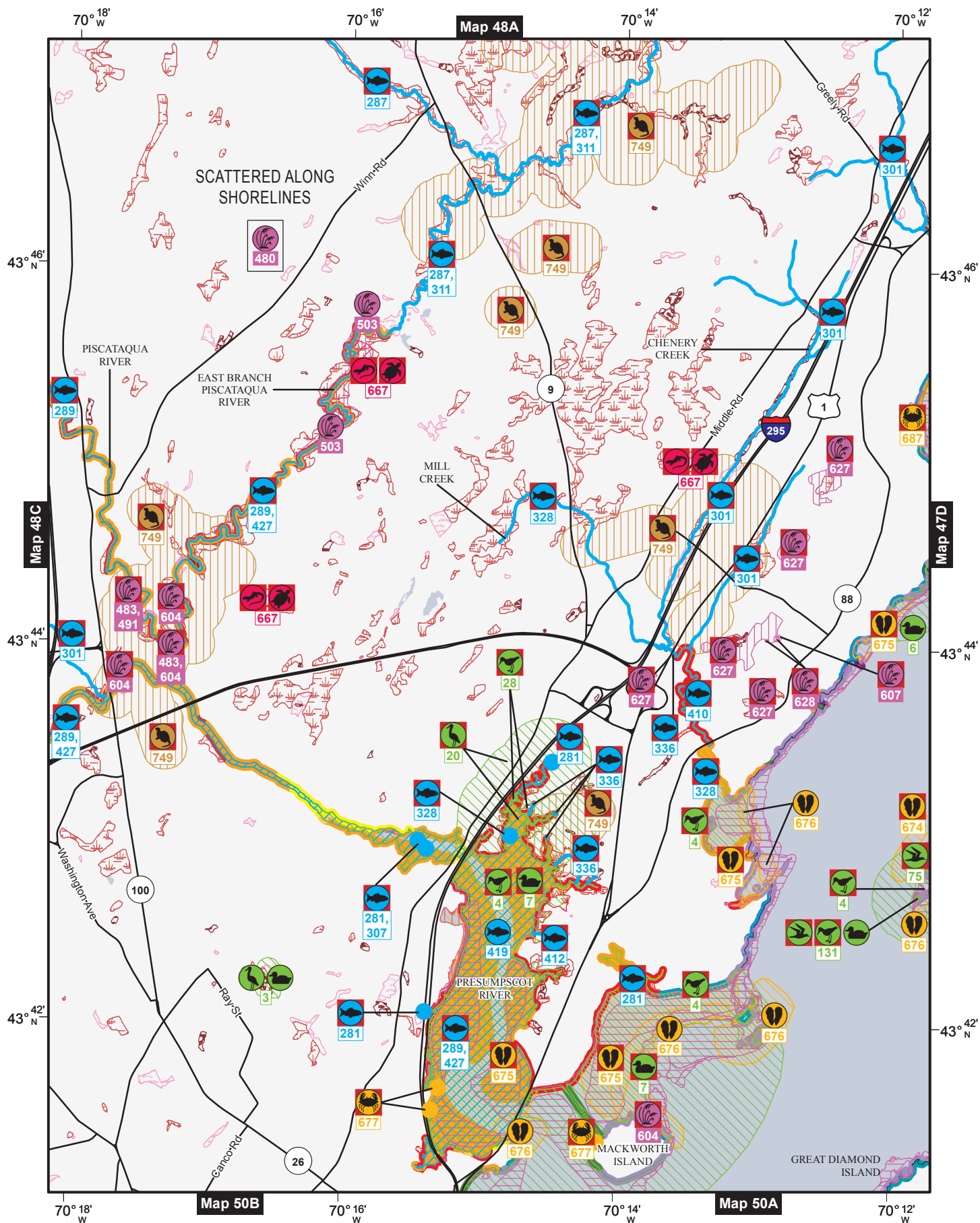
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10B	Freshwater Marshes	1,302.23	0.81	2%
10C	Swamps	20,236.22	12.57	26%
10D	Scrub and Shrub Wetlands	1,280.98	0.80	2%
9B	Vegetated Low Banks	55,754.58	34.64	71%
8B	Sheltered, Solid Man-Made Structures	111.91	0.07	< 1%
8C	Sheltered Riprap	80.07	0.05	< 1%

Total ESI Shoreline: 78,765.99 Total ESI Shoreline: 48.94
 Total Shoreline: 57,248.79 Total Shoreline: 35.57

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 48B

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 48B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area		High												
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/- T	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
6	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
	Shorebird	Willet	Concentration Area	-C	Foraging												
	Waterfowl	American black duck	Rafting		-												
	Waterfowl	Black Scoter	Rafting		-												
	Waterfowl	Bufflehead	Rafting		-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
7	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting	T/-		-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C		-													May-Sep	-	-	-
28	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-/C		-													May-Aug	May-Jun	Jul-Sep	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	E/E	C/T	C/-	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
75	Gull/Tern	Roseate tern	Nesting						-									May-Aug	May	Aug	-
131	Gull/Tern	Common tern	Roosting						-									May-Aug	-	-	-
	Shorebird	American golden-plover	Roosting						-									-	Aug	Oct	-
	Shorebird	Baird's oystercatcher	Roosting						-									May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting						-									-	-	-	-
	Shorebird	BB sandpiper	Roosting						-									-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting						-									-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting						-									-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting						-									-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting						-									-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting						-									-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting						-									-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting						-									-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting						-									-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting						-									-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting						-									-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting						-									-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting						-									-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting						-									May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting						-									May-Aug	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-											-	-	Mar-Oct	Mar-Oct			
287	Diadromous	Alewife	Migration	-/C		-											-	-	Apr-Dec	Apr-Jul			
289	Diadromous	Alewife	Migration	-/C		-											-	-	Apr-Dec	Apr-Jul			
	Diadromous	American eel	Migration	-/C		-											-	-	Mar-Oct	Mar-Oct			
	Diadromous	American shad	Migration	-/C		-											-	-	May-Feb	May-Jul			
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-	-	Jan-Dec	May-Mar			
	Diadromous	Blueback herring	Migration	-/C		-											-	-	Jan-Dec	Jan-Dec			
	Diadromous	Brook trout (sea run)	Migration	C/-		-											-	-	Jan-May	Jan-May			
	Diadromous	Sea lamprey	Migration	-/C		-											-	-	Apr-Dec	Apr-Jul			
301	Diadromous	American eel	Migration	-/C		-											-	-	Mar-Oct	Mar-Oct			
307	Diadromous	American eel	Migration	-/C		-											-	-	Mar-Oct	Mar-Oct			
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-	-	Jan-Dec	May-Mar			
	Freshwater	Rainbow smelt	Migration	-/C		-											-	-	Jan-Dec	Oct-Apr			
311	Diadromous	American eel	Migration	-/C		-											-	-	Mar-Oct	Mar-Oct			

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					D
328	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	Apr-Jul	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	Jan-Dec	Jan-Dec
410	Diadromous	American eel	Migration	-/C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
412	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
419	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
427	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	S	F
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value															-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C														-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T														-	-	-	-
503	Wetland	Forested wetland	High Ecological Value															-	-	-	-
604	Plant	Limber honeysuckle	Vulnerable Occurrence	E/-														-	-	-	-
607	Plant	Foxtail clubmoss	Vulnerable Occurrence	E/-														-	-	-	-
627	Plant	Variable sedge	Vulnerable Occurrence	E/E														-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-														-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low												Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common												Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common												Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
674	Bivalve	Sea scallop	Harvest Area	-/C		-												Jul-Oct	-	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
687	Crab	Horseshoe crab	Spawning Area	-/C		-												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration
				S	F	E/E	J	F	M	A	M	J	J	A	S	O	N	
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E														Low

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Alcid	Razorbill	General Distribution	T/-		-											-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-											-	-	-	-
	Great cormorant	General Distribution	T/-		-												-	-	-	-
		General Distribution	T/C		-												May-Oct	-	-	-
	Arctic tern	General Distribution	C/T		-												May-Aug	-	-	-
	Common tern	General Distribution	E/E		-												-	-	-	-
	Roseate tern	General Distribution	E/E		-												-	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
	Diadromous	Atlantic sturgeon	-/T		Rare												-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E		Rare												-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area			High												-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low												-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Green sea turtle	General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES





Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Horseshoe crab	General Distribution	-/C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	New England cottontail	General Distribution	E/E		Potential													-	-	-	-	-







ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot																	May-Aug	-	-	-
	Dovekie																	-	-	-	-
	Thick-billed murre																	-	-	-	-
	D. crested cormorant																	Jun-Sep	-	-	-
	Horned grebe																	-	-	-	-
	Red-necked grebe																	-	-	-	-
	Red-throated loon																	-	-	-	-
	G. black-backed gull																	-	-	-	-
	Herring gull																	-	-	-	-
	Ring-billed gull																	-	-	-	-
	Northern gannet																	-	-	-	-



FISH

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

INVERTEBRATES

Monthly Presence


Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
	Small Mammal												
	Beaver												
	Muskrat												
	Northern river otter												

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	155.32	0.24
10B	Freshwater Marshes	185.86	0.29
10C	Swamps	1,149.81	1.80
10D	Scrub and Shrub Wetlands	146.91	0.23
9A	Sheltered Tidal Flats	538.46	0.84
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	79.92	0.12

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	20,998.37	13.05	14%
10B	Freshwater Marshes	358.14	0.22	< 1%
10C	Swamps	15,283.30	9.50	10%
10D	Scrub and Shrub Wetlands	360.92	0.22	< 1%
9A	Sheltered Tidal Flats	44,933.84	27.92	31%
9B	Vegetated Low Banks	39,591.49	24.60	27%
8A	Sheltered, Impermeable, Rocky Shores	2,089.34	1.30	1%
8B	Sheltered, Solid Man-Made Structures	120.69	0.07	< 1%
8C	Sheltered Riprap	2,229.49	1.39	2%
7	Exposed Tidal Flats	342.76	0.21	< 1%
6A	Gravel Beaches	86.60	0.05	< 1%
6B	Riprap	2,134.39	1.33	1%
5	Mixed Sand and Gravel Beaches	1,890.52	1.17	1%
4	Coarse Grained Sand Beaches	3,163.64	1.97	2%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	12,419.21	7.72	8%
1B	Exposed, Solid Man-Made Structures	281.40	0.17	< 1%
Total ESI Shoreline:		146,284.09	Total ESI Shoreline:	90.90
		79,998.02	Total Shoreline:	49.71

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 48C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
1	Acid	Razorbill	General Distribution	T/-		-													-	-	-	-
	Diving	Common Loon	General Distribution	-JT		-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-		-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T		-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E	E	-													-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence			-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence			-													Apr-Nov	Apr-Jun	Jul-Nov	-
22	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E		-													Apr-Oct	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
289	Diadromous	Alewife	Migration	-C		-													-	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Sea lamprey	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul
296	Diadromous	Alewife	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
301	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
309	Diadromous	Alewife	Migration	-C		-													-	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul
318	Freshwater	Rainbow smelt	Migration	-C	E	-													-	-	-	Jan-Dec	Oct-Apr
	Diadromous	Atlantic salmon	Migration	-C		-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul
327	Diadromous	American shad	Migration	-C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-C		-													-	-	-	Jan-Dec	Jan-Dec
330	Diadromous	Alewife	Migration	-C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-C		-													-	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
428	Diadromous	Sea lamprey	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C	-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E													-	-	Jan-Dec	Jan-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	Jan-May	Jan-May
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	Jan-Dec	Jan-Dec
429	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	Jan-Dec	Oct-Apr
	Diadromous	American eel	Migration	-/C	-													-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-/C	E													-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value		-													-	-	-	-
556	FAV	Spotted pondweed	Vulnerable Occurrence	T/-	-													-	-	-	-
604	Plant	Limber honeysuckle	Vulnerable Occurrence	E/-	-													-	-	-	-
606	Plant	Velvet sedge	Vulnerable Occurrence	E/-	-													-	-	-	-
629	Plant	Rare plant	Vulnerable Occurrence	C/C	-													-	-	-	-
	Upland	Rare upland community	High Ecological Value		-													-	-	-	-


REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low													Apr-May	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare													Apr-May	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low													Apr-Jun	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area		Common													Mar-May	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area		Common													Mar-Apr	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E	Very Low													May-Jul	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low													May-Jul	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low													May-Jul	-	Jan-Dec	Jan-Nov

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E	Low													-	-	-	-





TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
			S	F		J	F	M	A	M	J	J	A	S	O	N	D
 Small Mammal	New England cottontail	General Distribution	E/E	Potential													

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)


BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Alcid	Black guillemot													May-Aug	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre																
 Diving	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
 Gull/Tern	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
 Pelagic	Northern gannet													-	-	-	-

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Pinniped	Harbor seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10B	Freshwater Marshes	157.60	0.25
10C	Swamps	1,047.64	1.64
10D	Scrub and Shrub Wetlands	376.49	0.59
9A	Sheltered Tidal Flats	12.51	0.02

ESI SHORELINE HABITAT TYPES

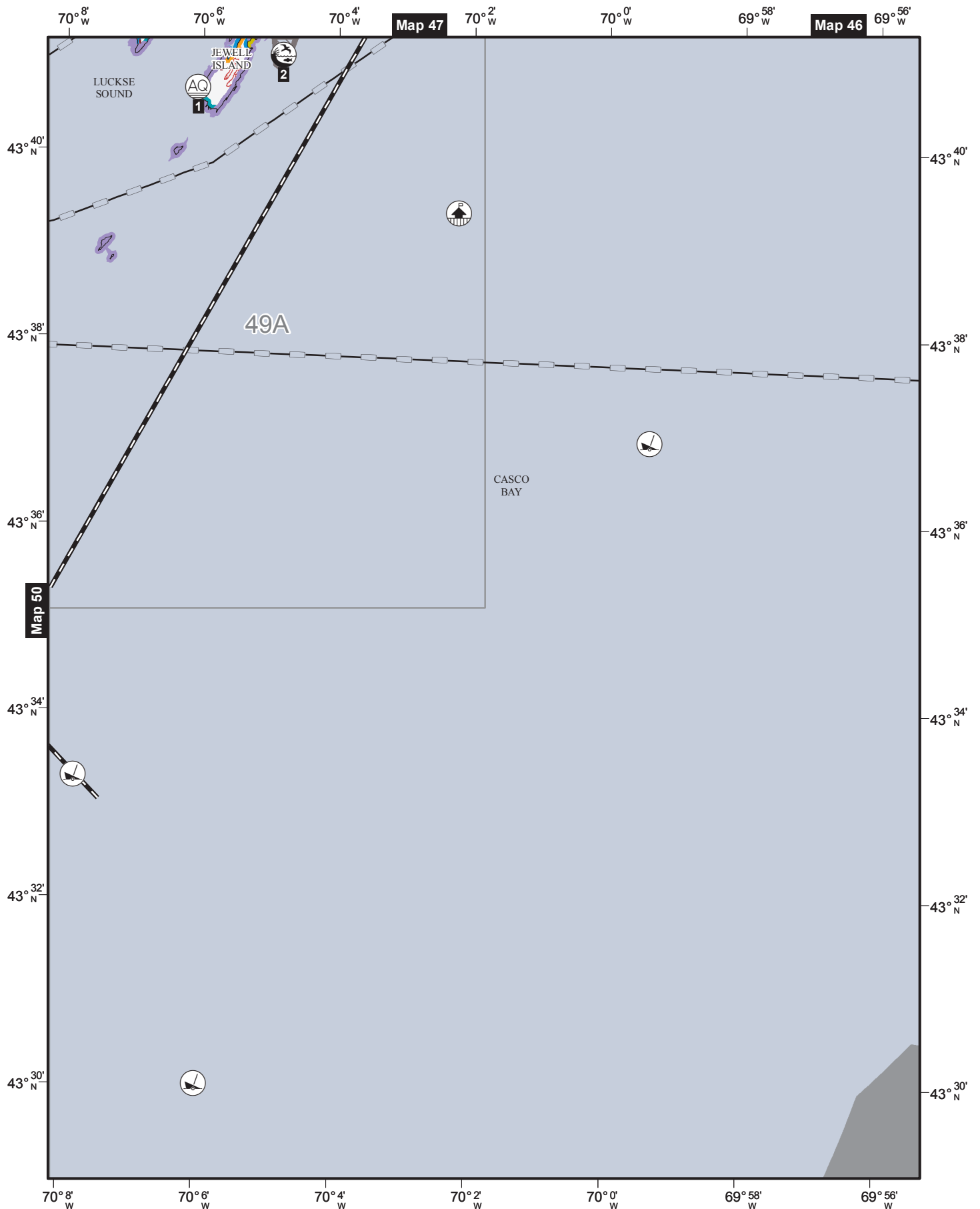
<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10B	Freshwater Marshes	779.28	0.48	1%
10C	Swamps	18,665.53	11.60	28%
10D	Scrub and Shrub Wetlands	298.92	0.19	< 1%
9A	Sheltered Tidal Flats	10,031.82	6.23	15%
9B	Vegetated Low Banks	35,257.12	21.91	54%
8B	Sheltered, Solid Man-Made Structures	506.17	0.31	1%
8C	Sheltered Riprap	163.28	0.10	< 1%

Total ESI Shoreline: 65,702.13 Total ESI Shoreline: 40.83
 Total Shoreline: 36,705.85 Total Shoreline: 22.81

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 49

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 49
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POLYGONS)			
Map ID	Type	Name	Contact
1	AQUACULTURE	CAS JEWEL - SOUTHWEST OF JEWELL ISLAND, CASCO BAY	OCEAN APPROVED, LLC.
2	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)

Phone
207-409-6485
207-624-6550

ALSO PRESENT IN MAPPED AREA (POLYGONS)			
Type	Name	Contact	Phone
STATE PROTECTED AREA	OUTER GREEN ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	

JURISDICTIONS

COUNTY: CUMBERLAND
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USACE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES			
ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10B	Freshwater Marshes	0.26	0.00
10C	Swamps	13.60	0.02
10D	Scrub and Shrub Wetlands	1.26	0.00
7	Exposed Tidal Flats	3.39	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	89.95	0.14

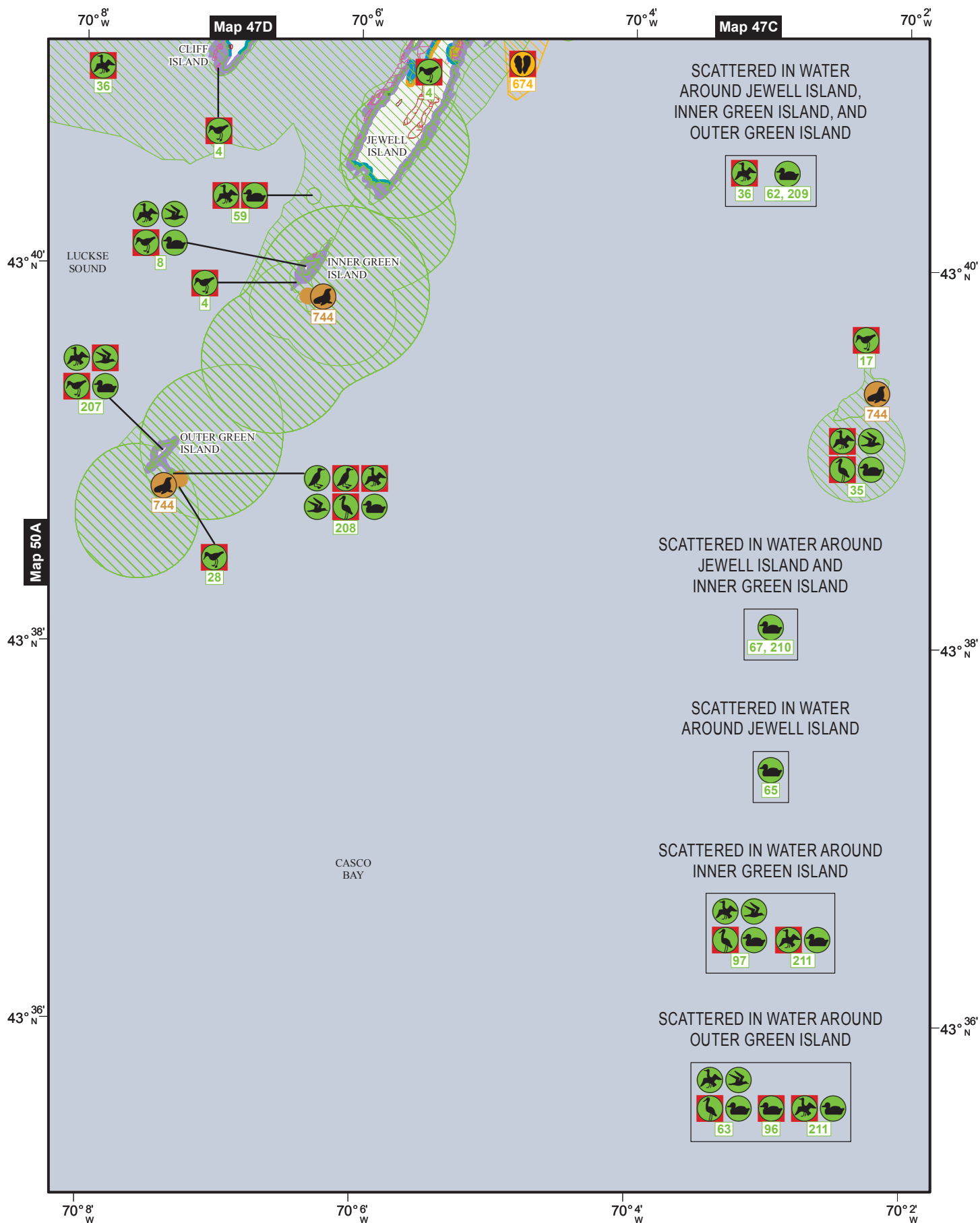
ESI SHORELINE HABITAT TYPES			
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)
10D	Scrub and Shrub Wetlands	49.23	0.03
9B	Vegetated Low Banks	591.61	0.37
7	Exposed Tidal Flats	245.46	0.15
6B	Riprap	70.97	0.04
5	Mixed Sand and Gravel Beaches	1,340.32	0.83
4	Coarse Grained Sand Beaches	1,027.82	0.64
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	6,973.25	4.33
Total ESI Shoreline:		10,298.66	6.40
Total Shoreline:		7,893.19	4.90

% of ESI Shoreline
< 1%
6%
2%
1%
13%
10%
68%

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



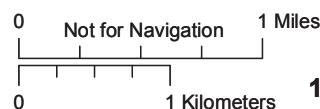


Map 49A

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 49A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence																				
			S	F	Concentration	Monthly Presence																			
						J	F	M	A	M	J	J	A	S	O	N	D								
SAV	Eelgrass	High Ecological Value			10% To 40% Cover																				
SAV	Eelgrass	High Ecological Value			40% To 70% Cover																				
SAV	Eelgrass	High Ecological Value			70% To 100% Cover																				

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt	
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
4	Shorebird	American golden-plover	Concentration Area																-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-														May-Jun	May	Sep	-	
	Shorebird	Baird's sandpiper	Concentration Area															-	-	-	-	
	Shorebird	BB sandpiper	Concentration Area															-	Aug	Oct	-	
	Shorebird	Black-bellied plover	Concentration Area															-	May	Jul-Oct	-	
	Shorebird	Dunlin	Concentration Area															-	May	Aug-Oct	-	
	Shorebird	Greater yellowlegs	Concentration Area															-	May	Jul-Oct	-	
	Shorebird	Hudsonian godwit	Concentration Area															-	-	Jul-Oct	-	
	Shorebird	Least sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-	
	Shorebird	Lesser yellowlegs	Concentration Area	C/-														-	May-Jun	Jul-Oct	-	
	Shorebird	Pectoral sandpiper	Concentration Area															-	Apr-May	Sep-Oct	-	
	Shorebird	Red Knot	Concentration Area	C/-	T													-	May	Aug-Oct	-	
	Shorebird	Ruddy turnstone	Concentration Area															-	May-Jun	Jul-Oct	-	
	Shorebird	Sanderling	Concentration Area															-	Apr-May	-	-	
8	Shorebird	Semipalmated plover	Concentration Area															-	May-Jun	Jul-Oct	-	
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-	May-Jun	Jul-Oct	-	
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	-	
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-	
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-	
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-	
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-	
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-	
	Shorebird	Willlet	Concentration Area	-/C														May-Aug	May-Jun	Jul-Sep	-	
	Diving	D. crested cormorant	Roosting															Jun-Sep	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-	-
	Gull/Tern	Herring gull	Roosting															-	-	-	-	-
	Shorebird	American golden-plover	Roosting															-	Aug	Oct	-	-
	Shorebird	American oystercatcher	Roosting	C/-														May-Jun	May	Sep	-	-
Shorebird	Baird's sandpiper	Roosting															-	-	-	-	-	
Shorebird	BB sandpiper	Roosting															-	Aug	Oct	-	-	

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Shorebird	Black-bellied plover	Roosting			-													May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-/C		-													May-Aug	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-
17	Shorebird	American golden-plover	Concentration Area			Foraging													Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-		Foraging													May-Jun	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area			Foraging													-	-	-
	Shorebird	BB sandpiper	Concentration Area			Foraging													Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Foraging													May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area			Foraging													May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Foraging													May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area			Foraging													-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Foraging													May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area			Foraging													Apr-May	Sep-Oct	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence			-													Apr-May	Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T	Foraging													May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Foraging													Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Foraging													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area			Foraging													Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area			Foraging													Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area	C/-		Foraging													Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area			Foraging													-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Foraging													May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-/C		Foraging													May-Aug	May-Jun	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
28	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	Apr-May	Sep-Oct	-
35	Shorebird	Red Knot	Roosting	C/-	T	-												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
36	Shorebird	Willet	Roosting	-IC		-												May-Aug	May-Jun	Jul-Sep	-
	Diving	Common Loon	Rafting	-IT		-												-	-	-	-
	Diving	D. crested cormorant	Rafting			-												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting			-												-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-												May-Sep	-	-	-
	Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-												-	-	-	-
	Waterfowl	Bufflehead	Rafting			-												-	-	-	-
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-												-	-	-	-
59	Waterfowl	Green-winged teal	Rafting			-												May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence			-												-	Dec-Jan	-	-
	Waterfowl	Scoters	Rafting			-												-	-	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
	Diving	Common Loon	General Distribution	-IT		-												-	-	-	-
	Diving	Common Loon	Rafting	-IT		-												-	-	-	-
	Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-												-	-	-	-
	Waterfowl	Brant	Rafting			-												-	Feb	Dec	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
62	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
63	Diving	D. crested cormorant	Rafting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting			-													-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-													May-Sep	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Scaup	Vulnerable Occurrence			-													-	Dec-Jan	-	-
65	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
67	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-	-
96	Waterfowl	Brant	Rafting			-													-	Feb	Dec	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
97	Diving	D. crested cormorant	Rafting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting			-													-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-													May-Sep	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence			-													-	Dec-Jan	-	-
207	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-
	Gull/Tern	Common tern	Vulnerable Occurrence	C/T		-													May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	-													May-Aug	May	Aug	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-/C		-													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-
208	Acid	Black guillemot	Roosting			-													May-Aug	-	-	-
	Diving	Common Loon	General Distribution	-/T		-													-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-		-													-	-	-	-
	Wading	BC night-heron	Roosting	E/-		-													May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-
209	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
210	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
211	Diving	Common Loon	Rafting	-/T		-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-





INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
674	Bivalve	Sea scallop	Harvest Area	-/C		-													Jul-Oct	-	-	-	Jan-Dec



MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
744	Pinniped	Harbor seal	Haul Out			-													-	-	-	-



BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Atlantic puffin	General Distribution	T/-		-													-	-	-	
	Razorbill	General Distribution	T/-		-													-	-	-	
	Great cormorant	General Distribution	T/-		-													-	-	-	
	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	
	Common tern	General Distribution	C/T		-													May-Aug	-	-	
	Roseate tern	General Distribution	E/E	E	-													-	-	-	
	Leach's storm-petrel	General Distribution	C/-		-													-	-	-	
	Red-necked phalarope	General Distribution	C/-		-													Jun	-	-	


FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic sturgeon	General Distribution	-/T	T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low													-	-	-	Jan-Dec	Jan-Dec


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Green sea turtle	General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov





INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Horseshoe crab	General Distribution	-/C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Northern shrimp	General Distribution	-/C		Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr




MARINE MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Fin whale	General Distribution	E/-	E	Low													-	-	-	
	Humpback whale	General Distribution	E/-	E	Low													-	-	-	
	N.A. right whale	General Distribution	E/-	E	Low													-	-	-	
	Sei whale	General Distribution	E/-	E	Low													-	-	-	
	Sperm whale	General Distribution	E/-	E	Rare													-	-	-	

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-

FISH

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct

FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Ocean pout													-	-	Mar-Oct	Mar-Oct
	Pollock													Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	Mar-Oct	Mar-Oct
	Red hake													Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Jan-May	Jan-Dec	Jan-Dec
	Rock gunnel													-	-	Mar-Oct	Mar-Oct
	Shorthorn sculpin													-	-	Mar-Oct	Mar-Oct
	Shorthorn sculpin													-	-	Sep-May	Sep-May
	Silver hake													-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	Mar-Oct	Mar-Oct
	Skates													-	-	Mar-Oct	Mar-Oct
	Skates													-	-	Jan-Dec	Jan-Dec
	White hake													-	-	Mar-Oct	Mar-Oct
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Butterfish													-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Northern quahog													-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10B	Freshwater Marshes	0.26	0.00
10C	Swamps	13.60	0.02
10D	Scrub and Shrub Wetlands	1.26	0.00
7	Exposed Tidal Flats	3.41	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	90.09	0.14

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10D	Scrub and Shrub Wetlands	49.23	0.03	< 1%
9B	Vegetated Low Banks	594.51	0.37	6%
7	Exposed Tidal Flats	248.11	0.15	2%
6B	Riprap	70.97	0.04	1%
5	Mixed Sand and Gravel Beaches	1,347.81	0.84	13%
4	Coarse Grained Sand Beaches	1,034.51	0.64	10%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	6,990.79	4.34	68%
Total ESI Shoreline:		10,335.94	6.42	
Total Shoreline:		7,913.64	4.92	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 50
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)				
Map ID	Type	Name	Contact	Phone
1	AIRPORT	PORTLAND INTERNATIONAL JETPORT	PAUL BRADBURY	207-874-8300
2	AIRPORT	SPURWINK FARM AIRPORT		
3	BOAT RAMP	CASCO BAY BOAT RAMP 3	PORTLAND	
4	BOAT RAMP	CASCO BAY BOAT RAMP 4	PORTLAND	
5	BOAT RAMP	CENTENNIAL STREET RAMP	PORTLAND	
6	BOAT RAMP	CLAY PIT'S ROAD BOAT RAMP	SCARBOROUGH	
7	BOAT RAMP	EAST END COMMERCIAL BARGE RAMP	PORTLAND	
8	BOAT RAMP	EAST END RECREATIONAL BOAT RAMP EASTERN PROM.	PORTLAND	
9	BOAT RAMP	FORE RIVER BOAT RAMP 1	SOUTH PORTLAND	
10	BOAT RAMP	FORE RIVER BOAT RAMP 2	SOUTH PORTLAND	
11	BOAT RAMP	FOREST CITY LANDING	PORTLAND	
12	BOAT RAMP	NONESUCH RIVER BOAT RAMP	DOC	
13	BOAT RAMP	PINE POINT TOWN LANDING	SCARBOROUGH	
14	BOAT RAMP	SCARBOROUGH FERRY BEACH	SCARBOROUGH	
15	BOAT RAMP	SCARBOROUGH RIVER@ FB BOAT RAMP	SCARBOROUGH	
16	BOAT RAMP	SCARBOROUGH RIVER@PP BOAT RAMP	SCARBOROUGH	
17	BOAT RAMP	SEAVY LANDING	SCARBOROUGH	717-792-1999
18	EPA FACILITY	AMERIGAS TRANSFLOW OPERATION		207-541-2800
19	EPA FACILITY	BARBER FOODS		207-761-6189
20	EPA FACILITY	FAIRCHILD SEMICONDUCTOR CORPORATION		207-482-5760
21	EPA FACILITY	HANNAFORD BROTHERS		207-252-3970
22	EPA FACILITY	PORTLAND LPG TERMINAL		
23	LOCK AND DAM	CAPISIC POND DAM		
24	LOCK AND DAM	CLARK POND DAM	ROBERT HARRISBURG	
25	LOCK AND DAM	CUMBERLAND DAM	S D WARREN CO	
26	LOCK AND DAM	MILL BROOK DAM 2	R WHITING + C MITCHELL	
27	LOCK AND DAM	STROUDWATER DAM	CITY OF PORTLAND	
28	MARINA	CENTERBOARD YACHT CLUB		207-799-7084
29	MARINA	DIAMOND'S EDGE MARINA		207-766-5694
30	MARINA	DIMILLO'S OLD PORT MARINA		207-773-7632
31	MARINA	JONES LANDING MARINA		207-766-3040
32	MARINA	PEAKS ISLAND MARINA		207-766-2508
33	MARINA	PORTLAND TOWN DOCKS		207-773-1613
34	MARINA	PORTLAND YACHT SERVICES		207-774-1067
35	MARINA	SPRING POINT MARINA		207-767-3213
36	MARINA	SUNSET MARINA		207-767-4729
37	MARINA	YACHT HAVEN MARINA		207-842-9000
38	PORT	PORTLAND, ME - C0128		

DISPLAYED ON MAP (POLYGONS)

Map ID	Type	Name	Contact	Phone
39	AQUACULTURE	SCAR ELS - SOUTH OF THE RAILROAD TRESTLE, SCAROBOR	PERRY, NATE	
40	AQUACULTURE	SCAR NELS - LITTLE SPLIT, SCARBOROUGH RIVER	NONESUCH OYSTERS, LLC.	207-749-5585
41	AQUACULTURE	SCAR WLS - LITTLE SPLIT, SCARBOROUGH RIVER	NONESUCH OYSTERS, LLC.	207-749-5585
42	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
43	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
44	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
45	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
46	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
47	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
48	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
49	PARK	BAXTER STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-723-5140
50	PARK	CAPISIC POND PARK	CITY OF PORTLAND	
51	PARK	CRESCENT BEACH/KETTLE COVE STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-799-5871
52	PARK	PAYSON PARK	CITY OF PORTLAND	
53	PARK	PRESUMPSHOT PARK	CITY OF PORTLAND	
54	PARK	SCARBOROUGH BEACH STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207.883.2416
55	PARK	TWO LIGHTS STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-799-5871
56	PIPELINE	CABLE AND PIPELINE 9		
57	PIPELINE	CABLE AND PIPELINE 10		
58	PIPELINE	CABLE AND PIPELINE 11		
59	PIPELINE	CABLE AND PIPELINE 12		
60	PIPELINE	PIPELINE 2		
61	PIPELINE	PIPELINE 3		
62	PIPELINE	PIPELINE 4		
63	PIPELINE	PIPELINE 5		
64	PIPELINE	PIPELINE 6		
65	PIPELINE	PIPELINE 7		
66	PIPELINE	PIPELINE 8		
67	PIPELINE	PIPELINE 9		
68	PIPELINE	PIPELINE 10		

ALSO PRESENT IN MAPPED AREA (POLYGONS)

Type	Name	Contact	Phone
STATE PROTECTED AREA	PEAKS ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	RAM ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	
STATE PROTECTED AREA	SCARBOROUGH MARSH WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-657-2345

JURISDICTIONS

COUNTY: CUMBERLAND, YORK
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USAGE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	1,880.56	2.94
10B	Freshwater Marshes	705.22	1.10
10C	Swamps	3,174.86	4.96
10D	Scrub and Shrub Wetlands	836.55	1.31
9A	Sheltered Tidal Flats	1,034.04	1.62
7	Exposed Tidal Flats	118.93	0.19
5	Mixed Sand and Gravel Beaches	3.46	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	763.49	1.19

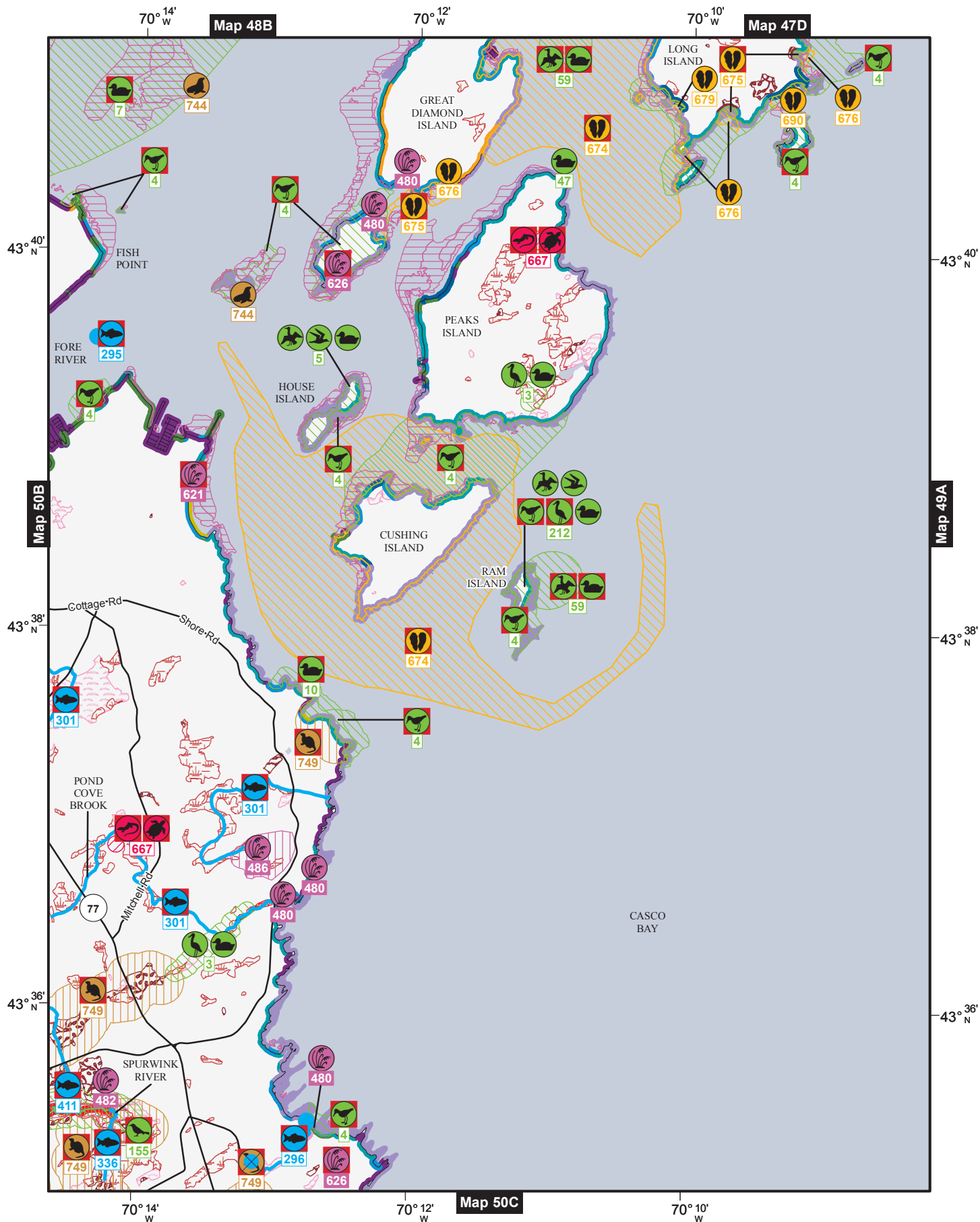
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	124,653.87	77.46	27%
10B	Freshwater Marshes	2,791.00	1.73	1%
10C	Swamps	5,503.44	3.42	1%
10D	Scrub and Shrub Wetlands	6,550.03	4.07	1%
9A	Sheltered Tidal Flats	104,393.17	64.87	22%
9B	Vegetated Low Banks	38,203.47	23.74	8%
8A	Sheltered, Impermeable, Rocky Shores	187.02	0.12	< 1%
8B	Sheltered, Solid Man-Made Structures	3,454.73	2.15	1%
8C	Sheltered Riprap	11,625.54	7.22	2%
7	Exposed Tidal Flats	10,347.97	6.43	2%
6A	Gravel Beaches	131.12	0.08	< 1%
6B	Riprap	11,931.74	7.41	3%
5	Mixed Sand and Gravel Beaches	28,498.16	17.71	6%
4	Coarse Grained Sand Beaches	13,351.25	8.30	3%
3A	Fine to Medium Grained Sand Beaches	9,870.99	6.13	2%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	64,805.96	40.27	14%
1A	Exposed, Rocky Shores	9,359.24	5.82	2%
1B	Exposed, Solid Man-Made Structures	21,784.82	13.54	5%
Total ESI Shoreline:		467,443.52	290.46	
Total Shoreline:		295,337.41	183.51	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 50A

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 50A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S
Softbottom	Worm bed	Harvest Area				High									
SAV	Eelgrass	High Ecological Value				0% To 10% Cover									
SAV	Eelgrass	High Ecological Value				10% To 40% Cover									
SAV	Eelgrass	High Ecological Value				40% To 70% Cover									
SAV	Eelgrass	High Ecological Value				70% To 100% Cover									

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
3	Wading	Wading birds	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
4	Shorebird	American golden-plover	Concentration Area				Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area			C/-	Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area				Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area				Foraging													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area				Foraging													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area				Foraging													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area				Foraging													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area				Foraging													-	-	-	-
	Shorebird	Least sandpiper	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area			C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area			C/-	Foraging													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area				Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area			C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area				Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area				Foraging													-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area				Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area			C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area			-/C	Foraging													-	May-Aug	May-Jun	Jul-Sep
5	Diving	D. crested cormorant	Roosting				-													-	Jun-Sep	-	-
	Gull/Tern	G. black-backed gull	Roosting				-													-	May-Aug	-	-
	Gull/Tern	Herring gull	Roosting				-													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
7	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting	T/-		-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sept	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
47	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-
59	Diving	Common Loon	Rafting	-/T		-													-	-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Brant	Rafting			-													-	Feb	Dec	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Oct	May-Jun	Jul-Oct	-
212	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sept	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sept-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Red Knot	Roosting	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting															-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C														May-Aug	May-Jun	Jul-Sep	-
	Wading	BC night-heron	Concentration Area	E/-														May-Sep	Apr	Oct	-
	Wading	BC night-heron	Roosting	E/-														May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area															May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Roosting															May-Sep	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-														May-Sep	-	-	-
	Wading	Great egret	Concentration Area															-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area															May-Sep	Apr	Oct	-
	Wading	Snowy egret	Concentration Area															May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting															May-Aug	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
295	Diadromous	Alewife	Migration	-C														-	-	-	Apr-Dec	Mar-Oct
	Diadromous	American eel	Migration	-C														-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-C														-	-	-	Jan-Dec	Oct-Apr
296	Diadromous	Alewife	Migration	-C														-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C														-	-	-	Mar-Oct	Mar-Oct
301	Diadromous	American eel	Migration	-C														-	-	-	Mar-Oct	Mar-Oct
336	Diadromous	Atlantic sturgeon	Migration	-JT	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration															Dec-Feb	-	-	Jan-Dec	Jan-Dec
411	Diadromous	American eel	Migration	-C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-JT	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration															Dec-Feb	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F
						J	F	M	A	M	J	J	A	S	O	N	D			
480	Wetland	Tidal Marsh	High Ecological Value															-		-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value															-		-
486	Upland	Rare upland community	High Ecological Value															-		-
621	Plant	Beach plum	Vulnerable Occurrence	E/-														-		-
626	Plant	Ramp	Vulnerable Occurrence	C/-														-		-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D							
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C														Very Low			Apr-May	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C														Rare			Apr-May	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C														Low			Apr-Jun	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area															Common			Mar-May	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area															Common			Mar-Apr	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E														Very Low			May-Jul	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T														Very Low			May-Jul	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C														Very Low			May-Jul	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D							
674	Bivalve	Sea scallop	Harvest Area	-/C														-			Jul-Oct	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C														-			May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area															-			May-Nov	May-Nov	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area															-			-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area															-			Jun-Aug	-	Jan-Dec	Jan-Dec





MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Calving	Pupping	Molt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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744	Pinniped	Harbor seal	Haul Out																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						



TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	E/E																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
				Vulnerable Occurrence	Occurrence	J	F	M	A	M	J	J	A	S	O	N	D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
749	Small Mammal	New England cottontail	Vulnerable Occurrence																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic puffin	General Distribution	T/-	-													-	-	-	-	-
	Razorbill	General Distribution	T/-	-													-	-	-	-	-
	Common Loon	General Distribution	-/T	-													-	-	-	-	-
	Great cormorant	General Distribution	T/-	-													-	-	-	-	-
	Arctic tern	General Distribution	T/C	-													May-Oct	-	-	-	-
	Common tern	General Distribution	C/T	-													May-Aug	-	-	-	-
	Roseate tern	General Distribution	E/E	E													-	-	-	-	-
	Leach's storm-petrel	General Distribution	C/-	-													-	-	-	-	-
	Red-necked phalarope	General Distribution	C/-	-													-	Jun	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic sturgeon	General Distribution	-/T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area		High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area		Low													-	-	-	Jan-Dec	Jan-Dec


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Green sea turtle	General Distribution	-/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Horseshoe crab	General Distribution	-/C	Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Northern shrimp	General Distribution	-/C	Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS






Subelement	Species	Mapping Qualifier	ME/NH S F E	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Fin whale	General Distribution	E/-	Low													-	-	-	-
	Humpback whale	General Distribution	E/-	Low													-	-	-	-
	N.A. right whale	General Distribution	E/-	Low													-	-	-	-
	Sei whale	General Distribution	E/-	Low													-	-	-	-
	Sperm whale	General Distribution	E/-	Rare													-	-	-	-

TERRESTRIAL MAMMALS




Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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 Small Mammal	New England cottontail	General Distribution	E/E		Potential																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Alcid	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
 Diving	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
 Gull/Tern	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
 Pelagic	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
 Shorebird	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-

FISH

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Diadromous	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
 Marine Benthic	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
 Atlantic cod	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-





FISH (continued)

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec
	Skates													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct






Marine Pelagic


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Echinoderm	Green urchin													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
 Lobster	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
 Pinniped	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
 Whale	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	30.10	0.05
10B	Freshwater Marshes	156.09	0.24
10C	Swamps	357.63	0.56
10D	Scrub and Shrub Wetlands	116.52	0.18
5	Mixed Sand and Gravel Beaches	3.46	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	377.57	0.59

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	1,831.72	1.14	2%
10B	Freshwater Marshes	481.69	0.30	1%
10D	Scrub and Shrub Wetlands	290.97	0.18	< 1%
9B	Vegetated Low Banks	2,092.40	1.30	2%
7	Exposed Tidal Flats	784.98	0.49	1%
6A	Gravel Beaches	131.12	0.08	< 1%
6B	Riprap	3,974.62	2.47	4%
5	Mixed Sand and Gravel Beaches	21,412.11	13.30	23%
4	Coarse Grained Sand Beaches	6,515.28	4.05	7%
3A	Fine to Medium Grained Sand Beaches	1,825.15	1.13	2%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	41,012.05	25.48	44%
1A	Exposed, Rocky Shores	4,281.84	2.66	5%
1B	Exposed, Solid Man-Made Structures	7,944.58	4.94	9%

Total ESI Shoreline:
Total Shoreline:

92,578.49
62,377.84

57.53
38.76

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 50B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
							J	F	M	A	M	J	J	A	S	O	N	D				
Softbottom	Worm bed	Harvest Area				High													-	-	-	-
SAV	Eelgrass	High Ecological Value				70% To 100% Cover													-	-	-	-

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
1	Alcid	Razorbill	General Distribution	T/-			-													-	-	-	-
	Diving	Common Loon	General Distribution	-/T			-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-			-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C			-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T			-													May-Aug	-	-	-
3	Gull/Tern	Roseate tern	General Distribution	E/E	E		-													-	-	-	-
	Wading	Wading birds	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
4	Waterfowl	Waterfowl	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Shorebird	American golden-plover	Concentration Area	C/-			Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area				Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area				Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area				Foraging													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area				Foraging													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area				Foraging													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area				Foraging													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area				Foraging													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T		Foraging													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area				Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area				Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area				Foraging													-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area				Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-/C			Foraging													May-Aug	May-Jun	Jul-Sep	-

Southern Maine and New Hampshire: Map 50B

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
7	Waterfowl	American black duck	Rafting															Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting															-	-	-	-
	Waterfowl	Bufflehead	Rafting															-	-	-	-
	Waterfowl	Common eider	Rafting															May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting															-	-	-	-
	Waterfowl	Common merganser	Rafting															-	-	-	-
	Waterfowl	Harlequin duck	Rafting															-	-	-	-
	Waterfowl	Long-tailed duck	Rafting															-	May	Sep	-
	Waterfowl	Mallard	Rafting															Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting															-	-	-	-
	Waterfowl	Ruddy duck	Rafting															-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting															-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting															-	-	-	-
	Waterfowl	White-winged scoter	Rafting															-	-	-	-
	Raptor	Peregrine falcon	Vulnerable Occurrence	E/T														-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C														May-Oct	May-Jun	Jul-Oct	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C														-	-	-	Mar-Oct	Mar-Oct
287	Diadromous	Alewife	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
290	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration															Dec-Feb	-	-	Jan-Dec	Jan-Dec
301	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
303	Diadromous	Atlantic sturgeon	General Distribution	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	General Distribution	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Concentration Area															-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area															-	-	-	Jan-Dec	Jan-Dec
305	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
306	Diadromous	Brook trout (sea run)	Migration	C/-														-	-	-	Jan-May	Jan-May
	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
316	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-														-	-	-	Jan-May	Jan-May
328	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration															Dec-Feb	-	-	Jan-Dec	Jan-Dec
394	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
410	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
411	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
428	Marine Benthic	Alewife	Migration	-/C		-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
430	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
431	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
432	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Oct-Apr

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	S	F
				J	F	J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value		-													-	-	-	
482	Wetland	SM cordgrass/wiregrass	High Ecological Value		-													-	-	-	
483	Plant	Rare plant	Vulnerable Occurrence	C/C														-	-	-	
503	Wetland	Forested wetland	High Ecological Value		-													-	-	-	
507	Wetland	Salt marsh	High Ecological Value		-													-	-	-	
	Wetland	SM cordgrass/wiregrass	High Ecological Value		-													-	-	-	
508	Wetland	Salt marsh	High Ecological Value		-													-	-	-	
527	Plant	Pursh seepweed	Vulnerable Occurrence	T/-		-												-	-	-	
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-												-	-	-	

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH			Monthly Presence												Concentration	Mapping Qualifier	S	F	T	E	I	N	D	Hatch	Internest	Juveniles	Adults																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
				J	F	M	A	M	J	J	A	S	O	N																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
664	Turtle	Green sea turtle	General Distribution	-/-		Rare																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</


INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	S	F																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
				-/C	-/C	J	F	M	A	M	J	J	A	S	O	N	D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
673	Crab	Horseshoe crab	General Distribution	-/C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

TERRESTRIAL MAMMALS





Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	S	F	
				Vulnerable Occurrence	E/E	J	F	M	A	M	J	J	A	S	O	N						
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low													-	-	-	-

TERRESTRIAL MAMMALS




Subelement	Species	ME/NH		Mapping Qualifier	Monthly Presence											
		S	F		J	F	M	A	M	J	J	A	S	O	N	D
 Small Mammal	New England cottontail			General Distribution												
		E/E	Potential													

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS



Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Acid	Black guillemot													May-Aug	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
 Diving	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
 Gull/Tern	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
 Pelagic	Northern gannet													-	-	-	-

FISH


Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Estuarine Nursery	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder													-	-	-	Jan-Dec	-
 Marine Benthic	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
 Marine Pelagic	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

Southern Maine and New Hampshire: Map 50B


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Crab	Northern quahog													-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Lobster	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	American lobster													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
														Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Pinniped	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	522.02	0.82
10B	Freshwater Marshes	297.18	0.46
10C	Swamps	1,623.56	2.54
10D	Scrub and Shrub Wetlands	405.72	0.63
9A	Sheltered Tidal Flats	255.59	0.40
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	4.63	0.01

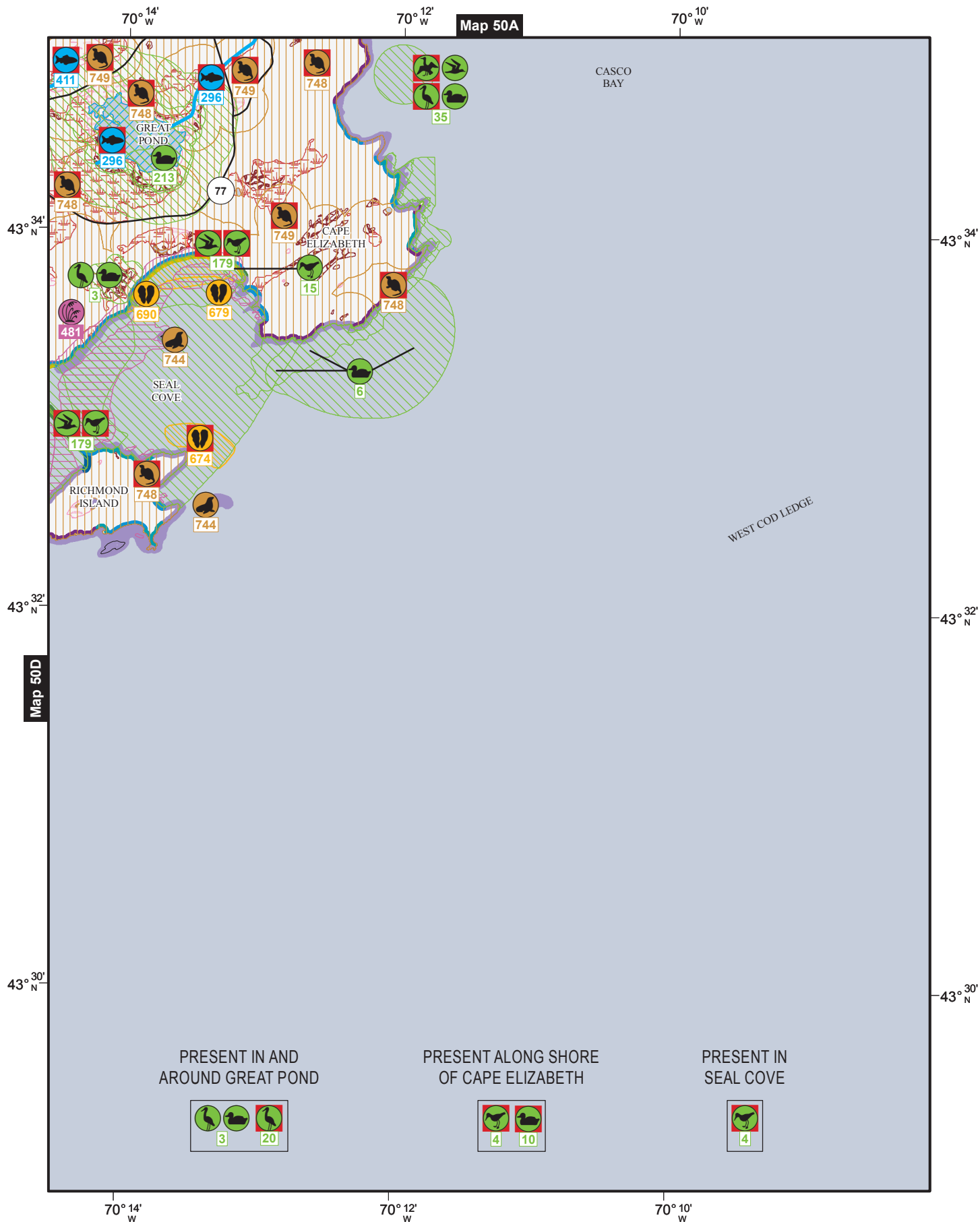
ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	39,798.30	24.73	28%
10B	Freshwater Marshes	2,214.96	1.38	2%
10C	Swamps	3,859.88	2.40	3%
10D	Scrub and Shrub Wetlands	6,132.80	3.81	4%
9A	Sheltered Tidal Flats	23,698.27	14.73	17%
9B	Vegetated Low Banks	30,532.72	18.97	22%
8A	Sheltered, Impermeable, Rocky Shores	187.02	0.12	< 1%
8B	Sheltered, Solid Man-Made Structures	3,182.28	1.98	2%
8C	Sheltered Riprap	9,597.50	5.96	7%
6B	Riprap	5,079.92	3.16	4%
5	Mixed Sand and Gravel Beaches	1,627.23	1.01	1%
4	Coarse Grained Sand Beaches	510.02	0.32	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	500.55	0.31	< 1%
1B	Exposed, Solid Man-Made Structures	13,389.71	8.32	10%
Total ESI Shoreline:		140,311.15	87.19	
Total Shoreline:		104,859.91	65.16	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 50C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
							J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value				0% To 10% Cover												
SAV	Eelgrass	High Ecological Value				10% To 40% Cover												
SAV	Eelgrass	High Ecological Value				40% To 70% Cover												
SAV	Eelgrass	High Ecological Value				70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
								J	F	M	A	M	J	J	A	S	O	N	D
3	Wading	Wading birds	Vulnerable Occurrence				-												
	Waterfowl	Waterfowl	Vulnerable Occurrence				-												
4	Shorebird	American golden-plover	Concentration Area				Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging												
	Shorebird	Baird's sandpiper	Concentration Area				Foraging												
	Shorebird	BB sandpiper	Concentration Area				Foraging												
	Shorebird	Black-bellied plover	Concentration Area				Foraging												
	Shorebird	Dunlin	Concentration Area				Foraging												
	Shorebird	Greater yellowlegs	Concentration Area				Foraging												
	Shorebird	Hudsonian godwit	Concentration Area				Foraging												
	Shorebird	Least sandpiper	Concentration Area				Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	T		Foraging												
	Shorebird	Ruddy turnstone	Concentration Area				Foraging												
	Shorebird	Sanderling	Concentration Area				Foraging												
	Shorebird	Semipalmated plover	Concentration Area				Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging												
	Shorebird	Solitary sandpiper	Concentration Area				Foraging												
	Shorebird	Stilt sandpiper	Concentration Area				Foraging												
	Shorebird	Western sandpiper	Concentration Area				Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging												
	Shorebird	Willet	Concentration Area	-C			Foraging												
6	Waterfowl	American black duck	Rafting				-												
	Waterfowl	Black Scoter	Rafting				-												
	Waterfowl	Bufflehead	Rafting				-												
	Waterfowl	Canada goose	Rafting				-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Common eider	Rafting															May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting															-	-	-	-
	Waterfowl	Long-tailed duck	Rafting															-	May	Sep	-
	Waterfowl	Mallard	Rafting															Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting															-	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-														-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence															-	Apr-May	Oct	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C														May-Sep	-	-	-
35	Diving	Common Loon	Rafting	-/T														-	-	-	-
	Diving	D. crested cormorant	Rafting															Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting															-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-														May-Sep	-	-	-
	Waterfowl	American black duck	Rafting															Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting															-	-	-	-
	Waterfowl	Bufflehead	Rafting															-	-	-	-
	Waterfowl	Common eider	Rafting															May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting															-	-	-	-
	Waterfowl	Green-winged teal	Rafting															May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting															-	May	Sep	-
	Waterfowl	Mallard	Rafting															Apr-Aug	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence															-	Dec-Jan	-	-
	Waterfowl	Scoters	Rafting															-	-	-	-
	Waterfowl	Surf scoter	Rafting															-	-	-	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E													May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E													Apr-Sep	Apr	Sep	-
213	Waterfowl	Common gallinule	Vulnerable Occurrence															-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
296	Diadromous	Alewife	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
411	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration															Dec-Feb	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Value	
				S	F	J	F	M	A	M	J	J	A	S	O	N	D			
481	Wetland	Rare ecol. community	High Ecological Value															-	-	-

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F -IC	Concentration	Monthly Presence J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
674	Bivalve	Sea scallop	Harvest Area		-		Jul-Oct	-	-	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area		-		-	-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area		-		Jun-Aug	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence J F M A M J J A S O N D	Mating	Calving	Pupping	Molt
744	Pinniped	Harbor seal	Haul Out		-		-	-	-	-

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F E/E	Concentration Potential	Monthly Presence J F M A M J J A S O N D				
748	Small Mammal	New England cottontail	General Distribution				-	-	-	-
749	Small Mammal	New England cottontail	Vulnerable Occurrence		Low		-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F T/-	Concentration	Monthly Presence J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt
Alcid	Atlantic puffin	General Distribution		-		-	-	-	-
	Razorbill	General Distribution		-		-	-	-	-
Diving	Common Loon	General Distribution		-		-	-	-	-
	Great cormorant	General Distribution		-		-	-	-	-
Gull/Tern	Arctic tern	General Distribution		-		May-Oct	-	-	-
	Common tern	General Distribution		-		May-Aug	-	-	-
	Roseate tern	General Distribution		-		-	-	-	-
Pelagic	Leach's storm-petrel	General Distribution		-		-	-	-	-
Shorebird	Red-necked phalarope	General Distribution		-		-	Jun	-	-

FISH


Subelement	Species	Mapping Qualifier	ME/NH S F -JT T E/E E	Concentration	Monthly Presence J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
Diadromous	Atlantic sturgeon	General Distribution		Rare		-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution		Rare		-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area		High		-	-	-	Jan-Dec	Jan-Dec
Estuarine Nursery	Black Seabass	Concentration Area		Low		-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS


Subelement	Species	Mapping Qualifier	ME/NH S F -I/- T E/- E E/- E E/- T	Concentration	Monthly Presence J F M A M J J A S O N D	Nest	Hatch	Internest	Juveniles	Adults
Turtle	Green sea turtle	General Distribution		Rare		-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution		Rare		-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution		Low		-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution		Low		-	-	-	Jun-Nov	Jun-Nov

Southern Maine and New Hampshire: Map 50C

INVERTEBRATES






Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
 Crab	Horseshoe crab	General Distribution	-/C		Low													May-Jul	-	Jan-Dec	Jan-Dec
	Northern shrimp	General Distribution	-/C		Low													Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D			
 Whale	Fin whale	General Distribution	E/-	E	Low													-	-	-
	Humpback whale	General Distribution	E/-	E	Low													-	-	-
	N.A. right whale	General Distribution	E/-	E	Low													-	-	-
	Sei whale	General Distribution	E/-	E	Low													-	-	-
	Sperm whale	General Distribution	E/-	E	Rare													-	-	-




ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS





Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
 Alcid	Black guillemot																	May-Aug	-	-	-
	Common murre																	-	-	-	-
	Dovekie																	-	-	-	-
 Diving	Thick-billed murre																	-	-	-	-
	D. crested cormorant																	Jun-Sep	-	-	-
	Horned grebe																	-	-	-	-
	Red-necked grebe																	-	-	-	-
 Gull/Tern	Red-throated loon																	-	-	-	-
	G. black-backed gull																	-	-	-	-
	Herring gull																	-	-	-	-
	Ring-billed gull																	-	-	-	-
 Pelagic	Cory's shearwater																	-	-	-	-
	Great shearwater																	-	-	-	-
	Manx shearwater																	-	-	-	-
	Northern fulmar																	-	-	-	-
 Shorebird	Northern gannet																	-	-	-	-
	Sooty shearwater																	-	-	-	-
	Wilson's storm-petrel																	-	-	-	-
	Red phalarope																	-	-	-	-

FISH




Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
 	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	Atlantic cod													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic Wolffish													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Cunner													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec
	Skates													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog																Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Crab	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Echinoderm	Green urchin													Mar-Jun	Mar-Jun	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jan-Dec	Jan-Dec
 Lobster																	

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
 Pinniped	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
 Whale	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	3.87	0.01
10B	Freshwater Marshes	114.09	0.18
10C	Swamps	275.61	0.43
10D	Scrub and Shrub Wetlands	98.24	0.15
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	155.56	0.24

ESI SHORELINE HABITAT TYPES

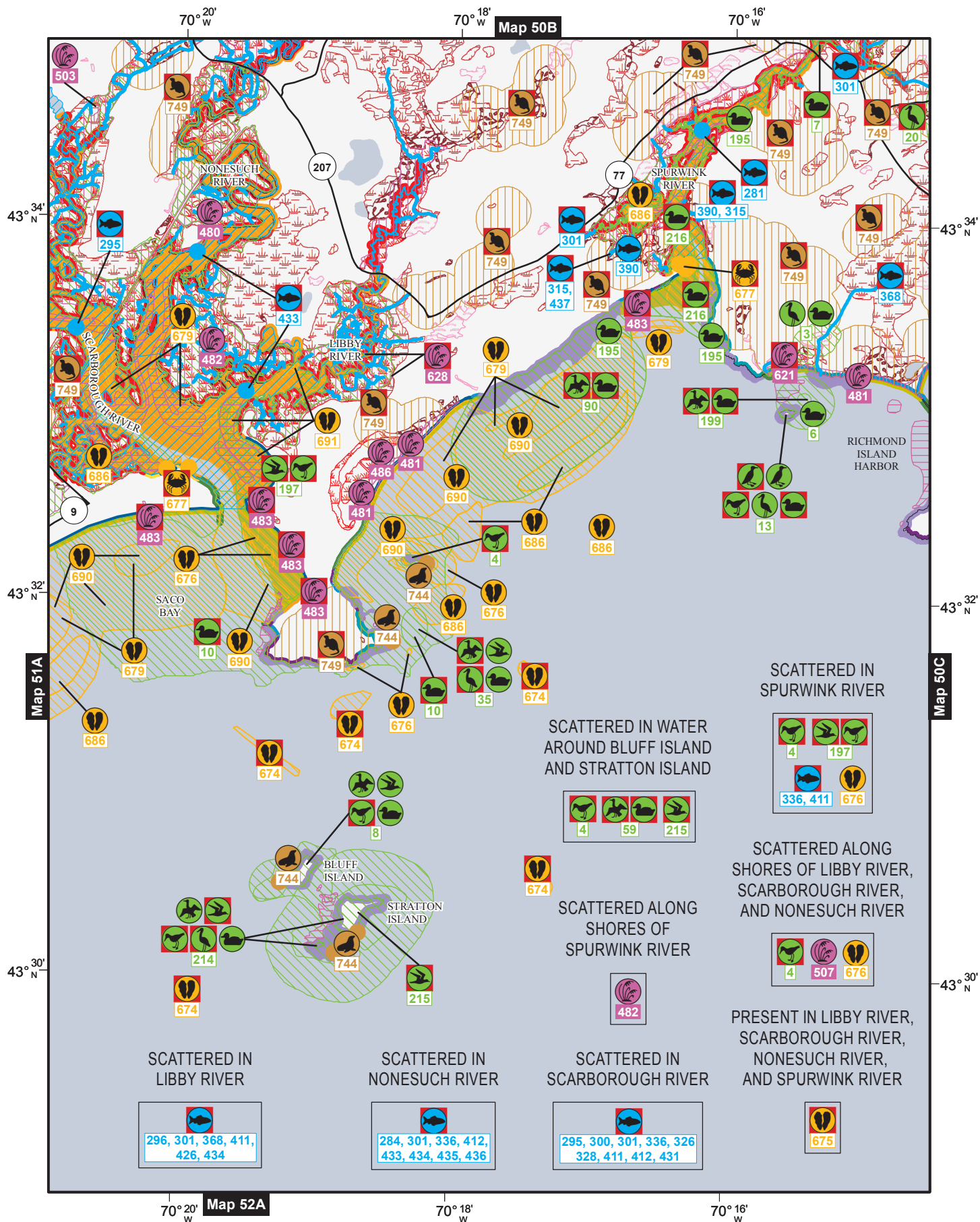
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
7	Exposed Tidal Flats	1,461.62	0.91	6%
6B	Riprap	1,099.97	0.68	4%
5	Mixed Sand and Gravel Beaches	2,960.26	1.84	12%
4	Coarse Grained Sand Beaches	3,763.79	2.34	15%
3A	Fine to Medium Grained Sand Beaches	235.98	0.15	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	12,657.31	7.86	50%
1A	Exposed, Rocky Shores	3,210.33	1.99	13%
1B	Exposed, Solid Man-Made Structures	126.66	0.08	< 1%

Total ESI Shoreline: 25,515.92 Total ESI Shoreline: 15.85
 Total Shoreline: 16,126.04 Total Shoreline: 10.02

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



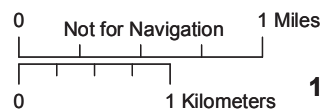


Map 50D

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 50D
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area		High												
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/- T	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
6	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
	Shorebird	Willet	Concentration Area	-C	Foraging												
	Waterfowl	American black duck	Rafting		-												
	Waterfowl	Black Scoter	Rafting		-												
	Waterfowl	Bufflehead	Rafting		-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
7	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting	T/-		-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
8	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	Aug	Oct	-
	Shorebird	Baird's sandpiper	Roosting			-													-	May	Sep	-
	Shorebird	BB sandpiper	Roosting			-													-	-	-	-
	Shorebird	Black-bellied plover	Roosting			-													-	Aug	Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	White-rumped sandpiper	Roosting		-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-I/-	-													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting		-													May-Aug	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-													-	-	-	-
13	Alcid	Black guillemot	Roosting		-													May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting		-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting		-													-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-	-													-	-	-	-
	Wading	BC night-heron	Roosting	E/-	-													May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting		-													May-Aug	-	-	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C	-													May-Sep	-	-	-
35	Diving	Common Loon	Rafting	-I/-	-													-	-	-	-
	Diving	D. crested cormorant	Rafting		-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting		-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting		-													-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-													May-Sep	-	-	-
	Waterfowl	American black duck	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting		-													-	-	-	-
	Waterfowl	Bufflehead	Rafting		-													-	-	-	-
	Waterfowl	Common eider	Rafting		-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting		-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting		-													May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting		-													-	May	Sep	-
	Waterfowl	Mallard	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence		-													-	Dec-Jan	-	-
	Waterfowl	Scoters	Rafting		-													-	-	-	-
	Waterfowl	Surf scoter	Rafting		-													-	-	-	-
59	Diving	Common Loon	Rafting	-I/-	-													-	-	-	-
	Waterfowl	American black duck	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting		-													-	-	-	-
	Waterfowl	Brant	Rafting		-													-	Feb	Dec	-
	Waterfowl	Bufflehead	Rafting		-													-	-	-	-
	Waterfowl	Common eider	Rafting		-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting		-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting		-													May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-													-	-	-	-
	Waterfowl	Mallard	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Scoters	Rafting		-													-	-	-	-
	Waterfowl	Surf scoter	Rafting		-													-	-	-	-
90	Diving	Common Loon	Rafting	-I/-	-													-	-	-	-
	Waterfowl	Brant	Rafting		-													-	Feb	Dec	-
	Waterfowl	Goldeneye	Rafting		-													May-Aug	-	-	-
	Waterfowl	Green-winged teal	Rafting		-													-	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
195	Waterfowl	Scoters	Rafting			-													-	-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
197	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	-													May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	-													Apr-Sep	Apr	Sep	-
	Diving	Common Loon	Rafting	-/T		-													-	-	-	-
199	Waterfowl	Brant	Rafting			-													-	Feb	Dec	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-													-	-	-	-
	Waterfowl	Scoters	Rafting			-													-	-	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
214	Waterfowl	D. crested cormorant	Rafting			-													-	-	-	-
	Diving	Common tern	Vulnerable Occurrence	C/T		-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	-													May-Aug	May	Aug	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	-	-	-
	Shorebird	Black-bellied plover	Roosting			-													-	Aug	Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting			-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting			-													May-Aug	May-Jun	Jul-Sep	-
	Wading	BC night-heron	Concentration Area	E/-		-													May-Sep	Apr	Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Wading	BC night-heron	Vulnerable Occurrence	E/-		-												May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Glossy ibis	Roosting			-												May-Sep	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Foraging												May-Sep	-	-	-
	Wading	Great egret	Concentration Area			Foraging												-	Apr	Oct	-
	Wading	Great egret	Roosting			-												Apr	Oct	-	-
	Wading	Little blue heron	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Little blue heron	Roosting			-												May-Sep	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Foraging												May-Sep	Apr	Oct	-
	Wading	Snowy egret	Roosting			-												May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
215	Gull/Tern	Arctic tern	Vulnerable Occurrence	T/C		-												May-Oct	-	-	-
	Gull/Tern	Roseate tern	Nesting	E/E	E	-												May-Aug	May	Aug	-
216	Waterfowl	Common goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Common merganser	Rafting			-												-	-	-	-
	Waterfowl	Harlequin duck	Rafting	T/-		-												-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Red-breasted merganser	Rafting			-												-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
284	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
295	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
296	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
300	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May	
301	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
315	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
326	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Jul	May-Jul	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
328	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	

Monthly Presence

Southern Maine and New Hampshire: Map 50D

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
436	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul		
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec		
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Oct-Apr		
437	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec		
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	Jan-Dec	Jan-Dec		

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	C/C
				J	F	M	A	M	J	J	A	S	O	N	D						
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
481	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
482	Wetland	SM cordgrass/wiregrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
483	Plant	Rare plant	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
486	Upland	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
503	Wetland	Forested wetland	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
507	Wetland	Salt marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Wetland	SM cordgrass/wiregrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
621	Plant	Beach plum	Vulnerable Occurrence	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
674	Bivalve	Sea scallop	Harvest Area	-/C		-													Jul-Oct	-	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area			-													-	-	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area			-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area			-													Aug-Sep	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
744	Pinniped	Harbor seal		Haul Out			-													-	-	-	-

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
749	Small Mammal	New England cottontail		Vulnerable Occurrence	E/E		Low													-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

BIRDS

Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	Alcid		General Distribution	T/-		-													-	-	-	-
	Razorbill		General Distribution	T/-		-													-	-	-	-
	Diving		General Distribution	-/T		-													-	-	-	-
	Great cormorant		General Distribution	T/-		-													-	-	-	-
	Gull/Tern		General Distribution	T/C		-													May-Oct	-	-	-
	Common tern		General Distribution	C/T		-													May-Aug	-	-	-
	Least tern		Vulnerable Occurrence	E/E	E	Foraging													May-Aug	May	Aug	-
	Roseate tern		General Distribution	E/E	E	-													-	-	-	-
	Passerine		Saltmarsh sharp-tailed sparrow	C/C		-													May-Oct	May-Jun	Jul-Oct	-
	Pelagic		Leach's storm-petrel	C/-		-													-	-	-	-
	Shorebird		Piping plover	E/E	E	Foraging													Apr-Sep	Apr	Sep	-
			Red-necked phalarope	C/-		-													-	Jun	-	-

FISH

Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Diadromous		General Distribution	-/T	T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon		General Distribution	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery		Striped bass			High													-	-	-	Jan-Dec	Jan-Dec
			Black Seabass			Low													-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults
	Turtle		General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle		General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle		General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle		General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
Crab	Horseshoe crab	General Distribution	-/C		Low													May-Jul	-	Jan-Dec	Jan-Dec
Shrimp	Northern shrimp	General Distribution	-/C		Low													Dec-Apr	Jan-Dec		Dec-Apr

MARINE MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
Whale	Fin whale	General Distribution	E/-	E	Low													-	-	-	-
	Humpback whale	General Distribution	E/-	E	Low													-	-	-	-
	N.A. right whale	General Distribution	E/-	E	Low													-	-	-	-
	Sei whale	General Distribution	E/-	E	Low													-	-	-	-
	Sperm whale	General Distribution	E/-	E	Rare													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
Small Mammal	New England cottontail	General Distribution	E/E		Potential													-	-	-	-




ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS



Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
Alcid	Black guillemot																	May-Aug	-	-	-
	Common murre																	-	-	-	-
	Dovekie																	-	-	-	-
Diving	Thick-billed murre																	-	-	-	-
	D. crested cormorant																	Jun-Sep	-	-	-
	Horned grebe																	-	-	-	-
	Red-necked grebe																	-	-	-	-
	Red-throated loon																	-	-	-	-
Gull/Tern	G. black-backed gull																	-	-	-	-
	Herring gull																	-	-	-	-
Pelagic	Ring-billed gull																	-	-	-	-
	Cory's shearwater																	-	-	-	-
	Great shearwater																	-	-	-	-
	Manx shearwater																	-	-	-	-
	Northern fulmar																	-	-	-	-
	Northern gannet																	-	-	-	-
	Sooty shearwater																	-	-	-	-
Shorebird	Wilson's storm-petrel																	-	-	-	-
	Red phalarope																	-	-	-	-

FISH




Monthly Presence

	Subelement	Species	J F M A M J J A S O N D												Spawn	Eggs	Larvae	Juveniles	Adults
			J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Atlantic herring														-	Oct-May	Jan-Dec	Apr-Dec
		Black Seabass														-	-	Jan-Dec	Jan-Dec
		Winter flounder														-	-	Mar-Oct	Mar-Oct
		Winter flounder														-	-	Jan-Dec	-
	Marine Benthic	American plaice														-	-	Mar-Oct	Mar-Oct
		American plaice														-	Mar-Jun	Mar-Jul	Mar-Nov
		American sand lance														-	-	Mar-Oct	Mar-Oct
		American sand lance														-	-	Dec-Jun	Mar-Nov
		Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
		Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	
		Cunner													-	-	-	Mar-Oct	Mar-Oct
		Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
		Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
		Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
		Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
		Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
		Northern searobin													-	-	-	Mar-Oct	Mar-Oct
		Northern searobin													-	-	-	Jul-Oct	Jul-Oct
		Ocean pout													-	-	-	Mar-Oct	Mar-Oct
		Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
		Red hake													-	-	-	Mar-Oct	Mar-Oct
		Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
		Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
		Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
		Shorthorn sculpin													-	-	-	Sep-May	Sep-May
		Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
		Silver hake													-	-	-	Apr-Nov	Apr-Nov
		Silver hake													-	-	-	Mar-Oct	Mar-Oct
		Skates													-	-	-	Jan-Dec	Jan-Dec
		Skates													-	-	-	Mar-Oct	Mar-Oct
		White hake													-	-	-	Mar-Oct	Mar-Oct
		White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
		Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
		Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Marine Pelagic	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
		Atlantic mackerel													-	-	-	May-Nov	May-Nov
		Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog																Jan-Dec
	Atlantic rock crab																Jan-Dec
	Blue crab																Jan-Dec
 Echinoderm	Jonah crab																Jan-Dec
	Green urchin																Jan-Dec
	American lobster																Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin																-
	Dolphins																-
	Harbor porpoise																-
 Pinniped	Gray seal																-
	Harbor seal																-
	Harp seal																-
 Whale	Hooded seal																-
	Lf pilot whale																-
	Minke whale																-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver																-
	Muskrat																-
	Northern river otter																-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	1,324.43	2.07
10B	Freshwater Marshes	137.85	0.22
10C	Swamps	918.27	1.43
10D	Scrub and Shrub Wetlands	216.01	0.34
9A	Sheltered Tidal Flats	778.38	1.22
7	Exposed Tidal Flats	118.93	0.19
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	225.73	0.35

ESI SHORELINE HABITAT TYPES

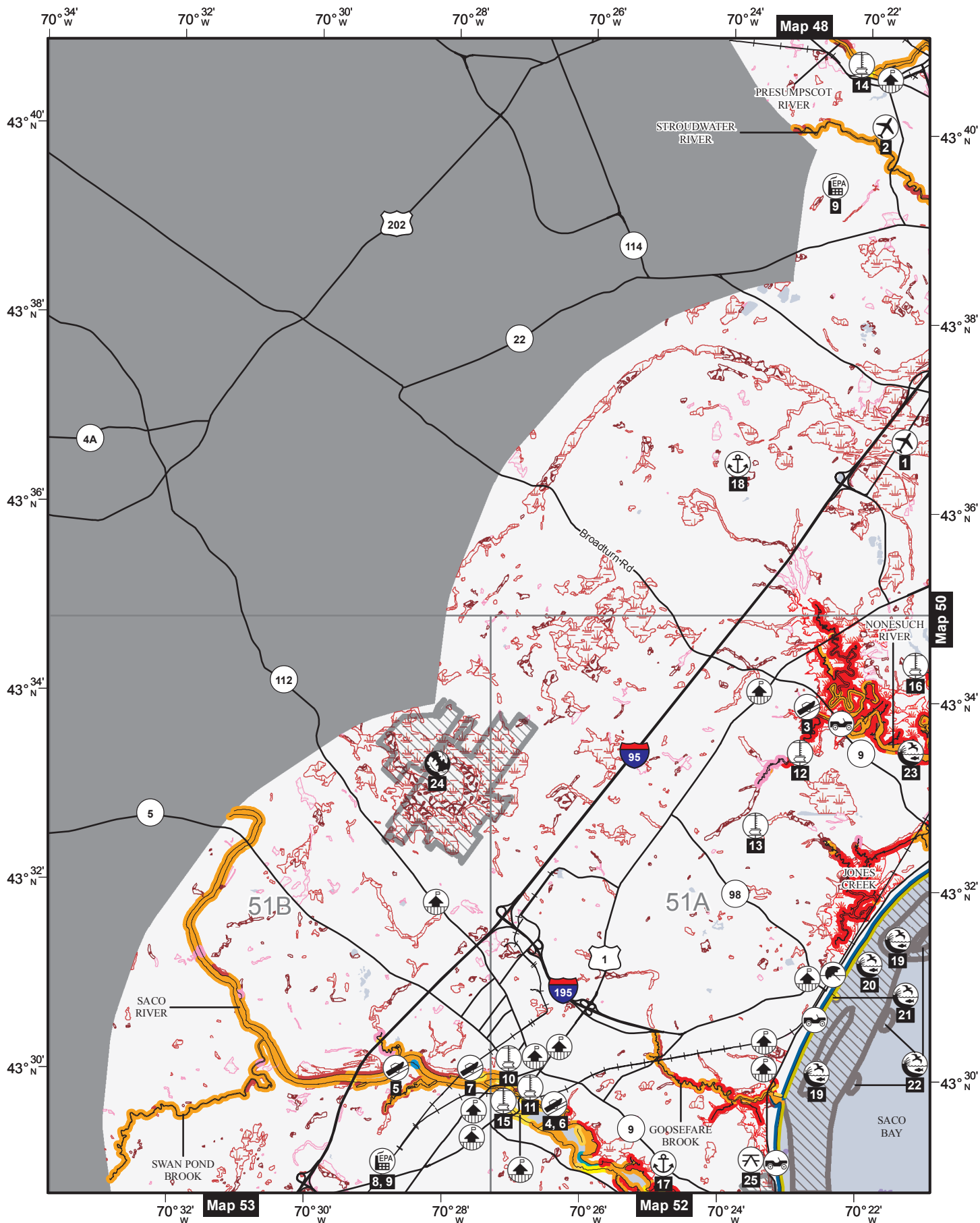
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	83,014.07	51.58	40%
10B	Freshwater Marshes	94.35	0.06	< 1%
10C	Swamps	1,643.38	1.02	1%
10D	Scrub and Shrub Wetlands	126.27	0.08	< 1%
9A	Sheltered Tidal Flats	80,685.12	50.14	39%
9B	Vegetated Low Banks	5,577.99	3.47	3%
8B	Sheltered, Solid Man-Made Structures	272.76	0.17	< 1%
8C	Sheltered Riprap	2,028.04	1.26	1%
7	Exposed Tidal Flats	8,101.07	5.03	4%
6B	Riprap	1,779.96	1.11	1%
5	Mixed Sand and Gravel Beaches	2,498.88	1.55	1%
4	Coarse Grained Sand Beaches	2,562.16	1.59	1%
3A	Fine to Medium Grained Sand Beaches	7,809.56	4.85	4%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	10,636.38	6.61	5%
1A	Exposed, Rocky Shores	1,867.06	1.16	1%
1B	Exposed, Solid Man-Made Structures	323.87	0.20	< 1%

Total ESI Shoreline: 209,020.92 Total ESI Shoreline: 129.88
Total Shoreline: 111,966.53 Total Shoreline: 69.57

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 51

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 51
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			
Map ID	Type	Name	Contact Phone
1	AIRPORT	SCOTTOW BOG ULTRALIGHT FLIGHTPARK	CHARLES H/ELAINE S WARREN 207-883-4538
2	AIRPORT	SUPER CUB FIELD AIRPORT	DANIEL F CHICK 207-854-8067
3	BOAT RAMP	DUNSTAN LANDING ROAD	SCARBOROUGH
4	BOAT RAMP	RIVERFRONT PARK BOAT RAMP	SACO
5	BOAT RAMP	SACO RIVER BOAT RAMP 2	BIDDEFORD
6	BOAT RAMP	SACO RIVER BOAT RAMP 3	DIFW
7	BOAT RAMP	SACO RIVER BOAT RAMP 4	SACO
8	EPA FACILITY	CHS PROPANE TERMINAL - BIDDEFORD	207-423-7777
9	EPA FACILITY	WESTBROOK ENERGY CENTER	207-464-0490
10	LOCK AND DAM	BRADLEY-SPRINGS ISLAND DAM	CENTRAL MAINE POWER CO
11	LOCK AND DAM	CATARACT DAM	CENTRAL MAINE POWER CO
12	LOCK AND DAM	FOXWELLS BRIDGE BROOK DAM	STATE OF ME DIFG
13	LOCK AND DAM	MILLIKEN MILL POND DAM	
14	LOCK AND DAM	SACCARAPPA DAM	S D WARREN CO
15	LOCK AND DAM	WEST CHANNEL DAM	CENTRAL MAINE POWER CO
16	LOCK AND DAM	WILLOW BROOK DAM	
17	MARINA	MARSTON'S MARINA	207-282-9893
18	MARINA	PROUTS NECK YACHT	207-883-4596

DISPLAYED ON MAP (POLYGONS)			
Map ID	Type	Name	Contact Phone
19	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
20	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
21	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
22	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
23	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
24	NATURE CONSERVANCY	SACO HEATH PRESERVE	THE NATURE CONSERVANCY 207-729-5181
25	PARK	FERRY BEACH STATE PARK	MAINE DEPARTMENT OF CONSERVATION 207-283-0067

ALSO PRESENT IN MAPPED AREA (POLYGONS)			
Type	Name	Contact	Phone
STATE PROTECTED AREA	SCARBOROUGH MARSH AUDUBON CENTER	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-657-2345
STATE PROTECTED AREA	SCARBOROUGH MARSH WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-657-2345

JURISDICTIONS

COUNTY: CUMBERLAND, YORK
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USACE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	1,398.31	2.18
10B	Freshwater Marshes	605.97	0.95
10C	Swamps	4,286.65	6.70
10D	Scrub and Shrub Wetlands	1,097.01	1.71
9A	Sheltered Tidal Flats	284.76	0.44
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	8.20	0.01

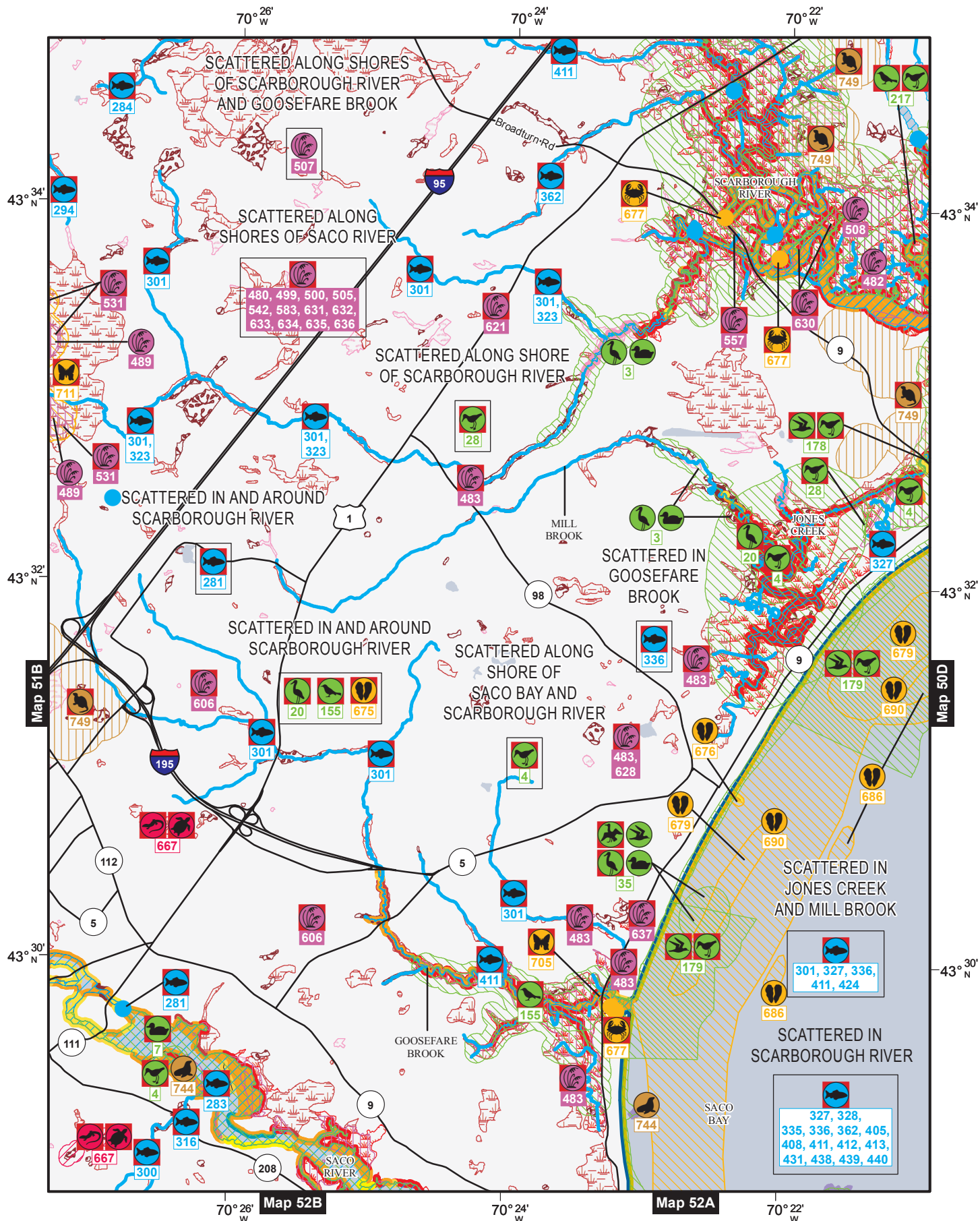
ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	72,192.98	44.86	30%
10B	Freshwater Marshes	4,866.60	3.02	2%
10C	Swamps	13,013.90	8.09	5%
10D	Scrub and Shrub Wetlands	2,851.05	1.77	1%
9A	Sheltered Tidal Flats	56,375.90	35.03	23%
9B	Vegetated Low Banks	67,487.20	41.93	28%
8A	Sheltered, Impermeable, Rocky Shores	1,108.59	0.69	< 1%
8B	Sheltered, Solid Man-Made Structures	4,662.32	2.90	2%
8C	Sheltered Riprap	2,235.08	1.39	1%
7	Exposed Tidal Flats	7,124.26	4.43	3%
5	Mixed Sand and Gravel Beaches	595.15	0.37	< 1%
4	Coarse Grained Sand Beaches	78.68	0.05	< 1%
3A	Fine to Medium Grained Sand Beaches	7,600.50	4.72	3%
Total ESI Shoreline:		240,192.21	149.25	
Total Shoreline:		159,984.33	99.41	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 51A
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 51A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
							J	F	M	A	M	J	J	A	S	O	N	D				
Softbottom	Worm bed	Harvest Area				High													-	-	-	-

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
3	Wading	Wading birds	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
4	Shorebird	American golden-plover	Concentration Area				Foraging													May-Jun	May	Oct	-
	Shorebird	American oystercatcher	Concentration Area			C/-	Foraging													-	-	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area				Foraging													-	-	Oct	-
	Shorebird	BB sandpiper	Concentration Area				Foraging													-	-	Oct	-
	Shorebird	Black-bellied plover	Concentration Area				Foraging													-	-	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area				Foraging													-	-	May	-
	Shorebird	Greater yellowlegs	Concentration Area				Foraging													-	-	May	-
	Shorebird	Hudsonian godwit	Concentration Area				Foraging													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area				Foraging													-	-	May-Jun	-
	Shorebird	Lesser yellowlegs	Concentration Area			C/-	Foraging													-	-	May-Jun	-
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging													-	-	Apr-May	-
	Shorebird	Red Knot	Concentration Area			C/-	Foraging													-	-	May	-
	Shorebird	Ruddy turnstone	Concentration Area				Foraging													-	-	May-Jun	-
	Shorebird	Sanderling	Concentration Area				Foraging													-	-	Apr-May	-
	Shorebird	Semipalmated plover	Concentration Area				Foraging													-	-	May-Jun	-
	Shorebird	Semipalmated sandpiper	Concentration Area			C/-	Foraging													-	-	May-Jun	-
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging													-	-	May-Jun	-
	Shorebird	Solitary sandpiper	Concentration Area				Foraging													-	-	Jun	-
	Shorebird	Stilt sandpiper	Concentration Area				Foraging													-	-	Jul	-
	Shorebird	Western sandpiper	Concentration Area				Foraging													-	-	Jul	-
7	Shorebird	Whimbrel	Concentration Area			C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area				Foraging													-	-	May-Jun	-
	Shorebird	Willlet	Concentration Area			-/C	Foraging													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	American black duck	Rafting				-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting				-													-	-	-	-
	Waterfowl	Bufflehead	Rafting				-													-	-	-	-
	Waterfowl	Common eider	Rafting				-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting				-													-	-	-	-
	Waterfowl	Common merganser	Rafting				-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting			T/-	-													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C		-													May-Sep	-	-	-
28	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-													May-Aug	May-Jun	Jul-Sep	-
35	Diving	Common Loon	Rafting	-T		-													-	-	-	-
	Diving	D. crested cormorant	Rafting			-													-	Jun-Sep	-	-
	Gull/Tern	G. black-backed gull	Rafting			-													-	May-Aug	-	-
	Gull/Tern	Herring gull	Rafting			-													-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-													May-Sep	-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-													May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Waterfowl	Scaup	Vulnerable Occurrence			-												-	Dec-Jan	-	-
	Waterfowl	Scoters	Rafting			-												-	-	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-												May-Oct	May-Jun	Jul-Oct	-
178	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging												May-Aug	May	Aug	-
	Shorebird	American golden-plover	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-		Foraging												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area			Foraging												-	-	-	-
	Shorebird	BB sandpiper	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area			Foraging												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area			Foraging												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging												Apr-Sep	Apr	Sep	-
	Shorebird	Red Knot	Concentration Area	C/-	T	Foraging												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Foraging												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area			Foraging												-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area			Foraging												-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area			Foraging												-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-		Foraging												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C		Foraging												May-Aug	May-Jun	Jul-Sep	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging												May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging												Apr-Sep	Apr	Sep	-
217	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-												May-Oct	May-Jun	Jul-Oct	-
	Shorebird	American golden-plover	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-		Foraging												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area			Foraging												-	-	-	-
	Shorebird	BB sandpiper	Concentration Area			Foraging												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area			Foraging												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Foraging												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area			Foraging												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area			Foraging												-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T	Foraging												-	May	Aug-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Shorebird	Ruddy turnstone	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Foraging												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area			Foraging												-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area			Foraging												-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area			Foraging												-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-		Foraging												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Foraging												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-/C		Foraging												May-Aug	May-Jun	Jul-Sep	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
281	Diadromous	American eel	Harvest Area	-/C		-												-	-	-	Mar-Oct	Mar-Oct
283	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration	-/C		-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
284	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul
294	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul
300	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May
301	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct
316	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May
323	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr
327	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec
328	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr
335	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-		-												-	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D																		
336	Marine Benthic	Atlantic tomcod	Migration																										Dec-Feb	-	-	Jan-Dec	Jan-Dec		
	Diadromous	Atlantic sturgeon	Migration	-J	T																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Shortnose sturgeon	Migration	E/E	E																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Striped bass	Migration																									-	-	Jan-Dec	Jan-Dec				
362	Marine Benthic	Atlantic tomcod	Migration																										Dec-Feb	-	-	Jan-Dec	Jan-Dec		
	Diadromous	American eel	Migration	-C																								-	-	Jan-Dec	Jan-Dec				
	Diadromous	American shad	Migration	-C																								-	-	Mar-Oct	Mar-Oct				
	Diadromous	Atlantic sturgeon	Migration	-J	T																							-	-	May-Feb	May-Jul				
	Diadromous	Blueback herring	Migration	-C																								-	-	Jan-Dec	Jan-Dec				
	Diadromous	Brook trout (sea run)	Migration	C/-																								-	-	Jan-Dec	Jan-Dec				
	Diadromous	Shortnose sturgeon	Migration	E/E	E																							-	-	Jan-May	Jan-May				
	Diadromous	Striped bass	Migration																									-	-	Jan-Dec	Jan-Dec				
405	Marine Benthic	Atlantic tomcod	Migration																										Dec-Feb	-	-	Jan-Dec	Jan-Dec		
	Diadromous	Alewife	Migration	-C																								-	-	Apr-Jul	Apr-Jul				
	Diadromous	American shad	Migration	-C																								-	-	May-Feb	May-Jul				
	Diadromous	Atlantic sturgeon	Migration	-J	T																							-	-	Jan-Dec	Jan-Dec				
408	Diadromous	Blueback herring	Migration	-C																								-	-	Jan-Dec	Jan-Dec				
	Diadromous	Shortnose sturgeon	Migration	E/E	E																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Striped bass	Migration																									-	-	Jan-Dec	Jan-Dec				
	Diadromous	Atlantic tomcod	Migration																									-	-	Jan-Dec	Jan-Dec				
411	Marine Benthic	Atlantic tomcod	Migration																										Dec-Feb	-	-	Jan-Dec	Jan-Dec		
	Diadromous	American eel	Migration	-C																								-	-	Mar-Oct	Mar-Oct				
	Diadromous	Atlantic sturgeon	Migration	-J	T																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Shortnose sturgeon	Migration	E/E	E																							-	-	Jan-Dec	Jan-Dec				
412	Diadromous	Striped bass	Migration																									-	-	Jan-Dec	Jan-Dec				
	Marine Benthic	Atlantic tomcod	Migration																									-	-	Jan-Dec	Jan-Dec				
	Diadromous	Atlantic sturgeon	Migration	-J	T																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Shortnose sturgeon	Migration	E/E	E																							-	-	Jan-Dec	Jan-Dec				
413	Diadromous	Striped bass	Migration																									-	-	Jan-Dec	Jan-Dec				
	Diadromous	Alewife	Migration	-C																								-	-	Apr-Jul	Apr-Jul				
	Diadromous	American eel	Migration	-C																								-	-	Mar-Oct	Mar-Oct				
	Diadromous	American shad	Migration	-C																								-	-	May-Feb	May-Jul				
	Diadromous	Atlantic sturgeon	Migration	-J	T																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Blueback herring	Migration	-C																								-	-	Jan-Dec	Jan-Dec				
	Diadromous	Brook trout (sea run)	Migration	C/-																								-	-	Jan-May	Jan-May				
	Diadromous	Shortnose sturgeon	Migration	E/E	E																							-	-	Jan-Dec	Jan-Dec				
	Diadromous	Striped bass	Migration																									-	-	Jan-Dec	Jan-Dec				
	Freshwater	Rainbow smelt	Migration	-C																								-	-	Jan-Dec	Jan-Dec				
	Marine Benthic	Atlantic tomcod	Migration																									-	-	Dec-Feb	Jan-Dec				

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
424	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
431	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
438	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb		-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
439	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb		-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic tomcod	Migration			-													Dec-Feb		-	Jan-Dec	Jan-Dec
440	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	-	Jan-May	Jan-May
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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480	Wetland	Tidal Marsh	High Ecological Value			-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

HABITATS & RARE PLANTS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	
						J	F	M	A	M	J	J	A	S	O	N	D				
499	Plant	Welsh mudwort	Vulnerable Occurrence	C/-														-			-
500	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-														-			-
505	Wetland	Brackish marsh	High Ecological Value															-			-
507	Wetland	Salt marsh	High Ecological Value															-			-
	Wetland	SM cordgrass/wiregrass	High Ecological Value															-			-
508	Wetland	Salt marsh	High Ecological Value															-			-
531	Plant	Atlantic white cedar	Vulnerable Occurrence	C/-														-			-
542	Wetland	Freshwater tidal marsh	High Ecological Value															-			-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-														-			-
583	Plant	Eastern grasswort	Vulnerable Occurrence	C/-														-			-
606	Plant	Velvet sedge	Vulnerable Occurrence	E/-														-			-
621	Plant	Beach plum	Vulnerable Occurrence	E/-														-			-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-														-			-
630	Plant	Dwarf saltwort	Vulnerable Occurrence	C/-														-			-
	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-														-			-
631	Plant	Eastern grasswort	Vulnerable Occurrence	C/-														-			-
	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-														-			-
	Plant	Estuary pipewort	Vulnerable Occurrence	C/-														-			-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-														-			-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E														-			-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-														-			-
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-														-			-
632	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-														-			-
	Plant	Estuary pipewort	Vulnerable Occurrence	C/-														-			-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-														-			-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-														-			-
633	Plant	Eastern grasswort	Vulnerable Occurrence	C/-														-			-
	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-														-			-
	Plant	Estuary pipewort	Vulnerable Occurrence	C/-														-			-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-														-			-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-														-			-
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-														-			-
634	Plant	Eastern grasswort	Vulnerable Occurrence	C/-														-			-
	Plant	Estuary pipewort	Vulnerable Occurrence	C/-														-			-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-														-			-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-														-			-
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-														-			-
635	Plant	Seaside brookweed	Vulnerable Occurrence	C/-														-			-
	Plant	Sessilefruit arrowhead	Vulnerable Occurrence	C/-														-			-
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-														-			-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-														-			-
636	Plant	Eastern grasswort	Vulnerable Occurrence	C/-														-			-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E														-			-
637	Plant	Meadow spikemoss	Vulnerable Occurrence	E/-														-			-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low												Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common												Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common												Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
675	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
686	Bivalve	Atl. jackknife clam	Harvest Area			-												-	-	-	Jan-Dec	Jan-Dec
	Bivalve	Northern quahog	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-												Jun-Aug	-	-	Jan-Dec	Jan-Dec
705	Insect	Saltmarsh tiger beetle	Vulnerable Occurrence	C/-		-												May-Jul	-	-	Jan-Dec	Jan-Dec
711	Insect	Hessel's hairstreak	Vulnerable Occurrence	E/-		-												May-Jul	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Mating	Calving	Pupping	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
744	Pinniped	Harbor seal	Haul Out			-												-	-	-	-

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low												-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Alcid	Razorbill	General Distribution	T/-		-												-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-												-	-	-	-
	Gull/Tern	Great cormorant	General Distribution	T/-		-												-	-	-	-
		Arctic tern	General Distribution	T/C		-												May-Oct	-	-	-
		Common tern	General Distribution	C/T		-												May-Aug	-	-	-
		Roseate tern	General Distribution	E/E		-												-	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Atlantic sturgeon	General Distribution	-/T	T	Rare													-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E	E	Rare													-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area			High													-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low													-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Green sea turtle	General Distribution	-/-	T	Rare													-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	Jun-Nov	Jun-Nov

INVERTEBRATES





Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
	Horseshoe crab	General Distribution	-/C		Low														May-Jul	May-Jul	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence															
	New England cottontail	General Distribution	E/E		Potential														-	-	-	-



ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
	Black guillemot																		May-Aug	-	-	-
	Dovekie																		-	-	-	-
	Thick-billed murre																		-	-	-	-
	D. crested cormorant																		Jun-Sep	-	-	-
	Horned grebe																		-	-	-	-
	Red-necked grebe																		-	-	-	-
	Red-throated loon																		-	-	-	-
	G. black-backed gull																		-	-	-	-
	Herring gull																		-	-	-	-
	Ring-billed gull																		-	-	-	-
	Northern gannet																		-	-	-	-




FISH

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
 Estuarine Nursery	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
 Marine Benthic	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

INVERTEBRATES

Monthly Presence


Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
 Bivalve	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Echinoderm	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
 Dolphin	Harbor porpoise													-	-	-	-
 Pinniped	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
	Small Mammal												
	Beaver												
	Muskrat												
	Northern river otter												


For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
 10A	Salt and Brackish Water Marshes	1,363.85	2.13
10B	Freshwater Marshes	176.25	0.28
10C	Swamps	1,430.19	2.23
10D	Scrub and Shrub Wetlands	372.25	0.58
9A	Sheltered Tidal Flats	268.47	0.42
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	8.16	0.01

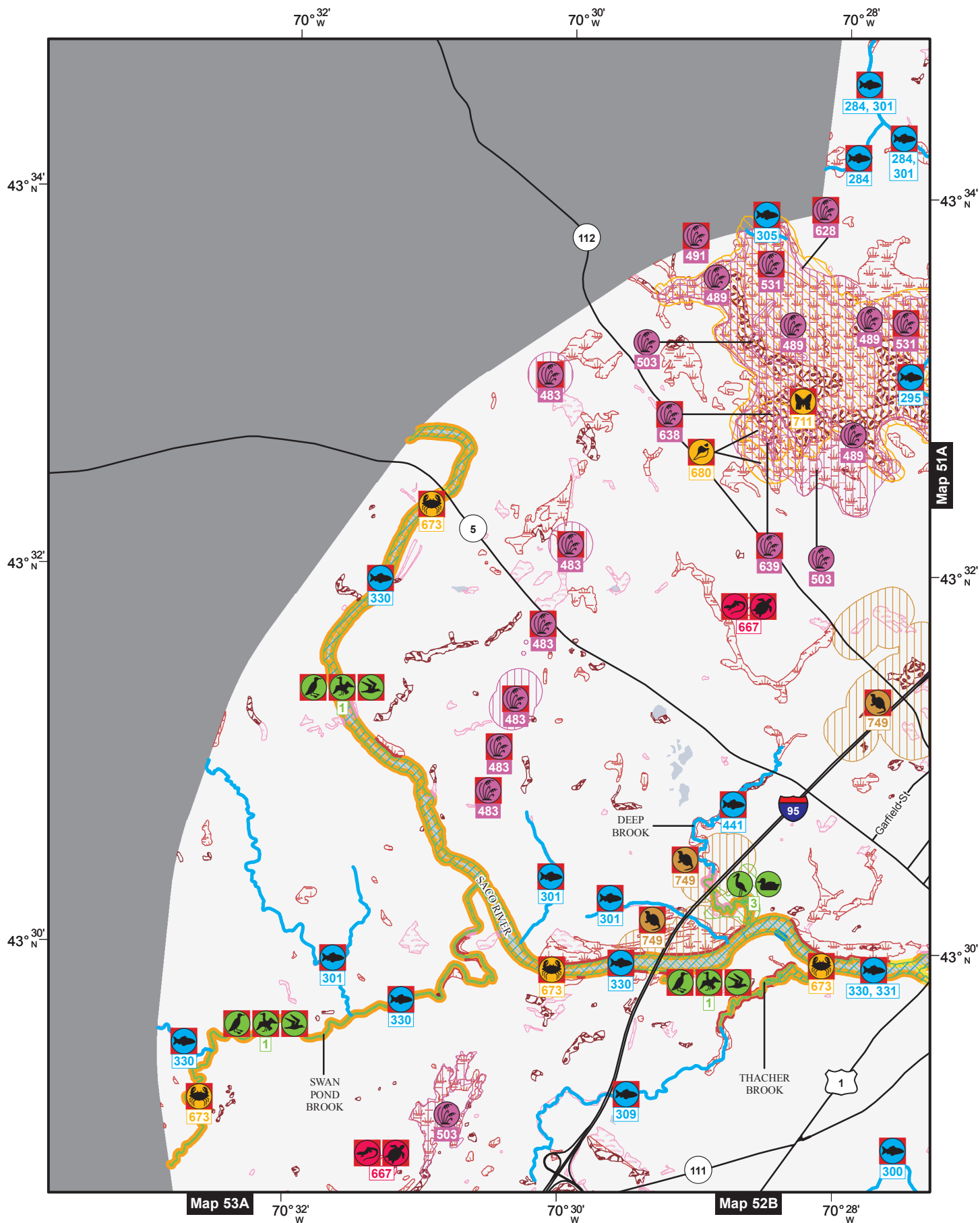
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
 10A	Salt and Brackish Water Marshes	71,457.27	44.40	44%
10B	Freshwater Marshes	2,674.55	1.66	2%
10C	Swamps	2,748.99	1.71	2%
10D	Scrub and Shrub Wetlands	2,221.41	1.38	1%
9A	Sheltered Tidal Flats	49,487.73	30.75	30%
9B	Vegetated Low Banks	12,878.46	8.00	8%
8A	Sheltered, Impermeable, Rocky Shores	868.83	0.54	1%
8B	Sheltered, Solid Man-Made Structures	3,086.51	1.92	2%
8C	Sheltered Riprap	2,040.00	1.27	1%
7	Exposed Tidal Flats	7,122.68	4.43	4%
5	Mixed Sand and Gravel Beaches	595.15	0.37	< 1%
3A	Fine to Medium Grained Sand Beaches	7,598.92	4.72	5%
Total ESI Shoreline:		162,780.48	Total ESI Shoreline:	101.15
		100,356.90	Total Shoreline:	62.36

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 51B

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 51B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
1	Acid	Razorbill	General Distribution	T/-	-													-	-	-	-
	Diving	Common Loon	General Distribution	-JT	-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-	-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C	-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T	-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E E	-													-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
284	Diadromous	Sea lamprey	Migration	-C	-													-	-	-	Apr-Dec	Apr-Jul
295	Diadromous	Alewife	Migration	-C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C	-													-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-C	-													-	-	-	Jan-Dec	Oct-Apr
300	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	-	Jan-May	Jan-May
301	Diadromous	American eel	Migration	-C	-													-	-	-	Mar-Oct	Mar-Oct
305	Diadromous	American eel	Migration	-C	-													-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-C	-													-	-	-	Jan-Dec	Oct-Apr
309	Diadromous	Alewife	Migration	-C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-C E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-C	-													-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-C	-													-	-	-	Jan-Dec	Oct-Apr
330	Diadromous	Alewife	Migration	-C	-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C	-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-C	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-C	-													-	-	-	Apr-Dec	Apr-Jul
331	Diadromous	Atlantic sturgeon	Migration	-JT T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-													-	-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C	-													-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration		-													Dec-Feb	-	-	Jan-Dec	Jan-Dec

Southern Maine and New Hampshire: Map 51B

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
441	Diadromous	American eel	Migration	-C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-C		-													-	-	Apr-Dec	Apr-Jul

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
489	Wetland	Rare wetland community	High Ecological Value			-													-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T		-													-	-	-	-
503	Wetland	Forested wetland	High Ecological Value			-													-	-	-	-
531	Plant	Atlantic white cedar	Vulnerable Occurrence	C/-		-													-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
638	Plant	Button sedge	Vulnerable Occurrence	C/-		-													-	-	-	-
639	Wetland	Long's bulrush	Vulnerable Occurrence	T/-		-													-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
673	Crab	Horseshoe crab	General Distribution	-C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
680	Gastropod	Rare snail	Vulnerable Occurrence	C/-		-													May-Jul	-	-	Jan-Dec	Jan-Dec
711	Insect	Hessel's hairstreak	Vulnerable Occurrence	E/-		-													May-Jul	-	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS





Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low													-	-	-	-

TERRESTRIAL MAMMALS





Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence													
			S	F	Concentration		J	F	M	A	M	J	J	A	S	O	N	D
		General Distribution	E/E	Potential														
 Small Mammal	New England cottontail																	

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Alcids	Black guillemot													May-Aug	-	-	-	-
	Dovekie													-	-	-	-	-
	Thick-billed murre																	
 Diving	D. crested cormorant													Jun-Sep	-	-	-	-
	Horned grebe													-	-	-	-	-
	Red-necked grebe													-	-	-	-	-
	Red-throated loon													-	-	-	-	-
 Gull/Tern	G. black-backed gull													-	-	-	-	-
	Herring gull													-	-	-	-	-
	Ring-billed gull													-	-	-	-	-
 Pelagic	Northern gannet													-	-	-	-	-


INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Bivalve	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec	Jan-Dec
 Echinoderm	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
 Lobster	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Pinniped	Harbor seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10B	Freshwater Marshes	221.43	0.35
10C	Swamps	1,325.66	2.07
10D	Scrub and Shrub Wetlands	414.85	0.65
9A	Sheltered Tidal Flats	16.31	0.03

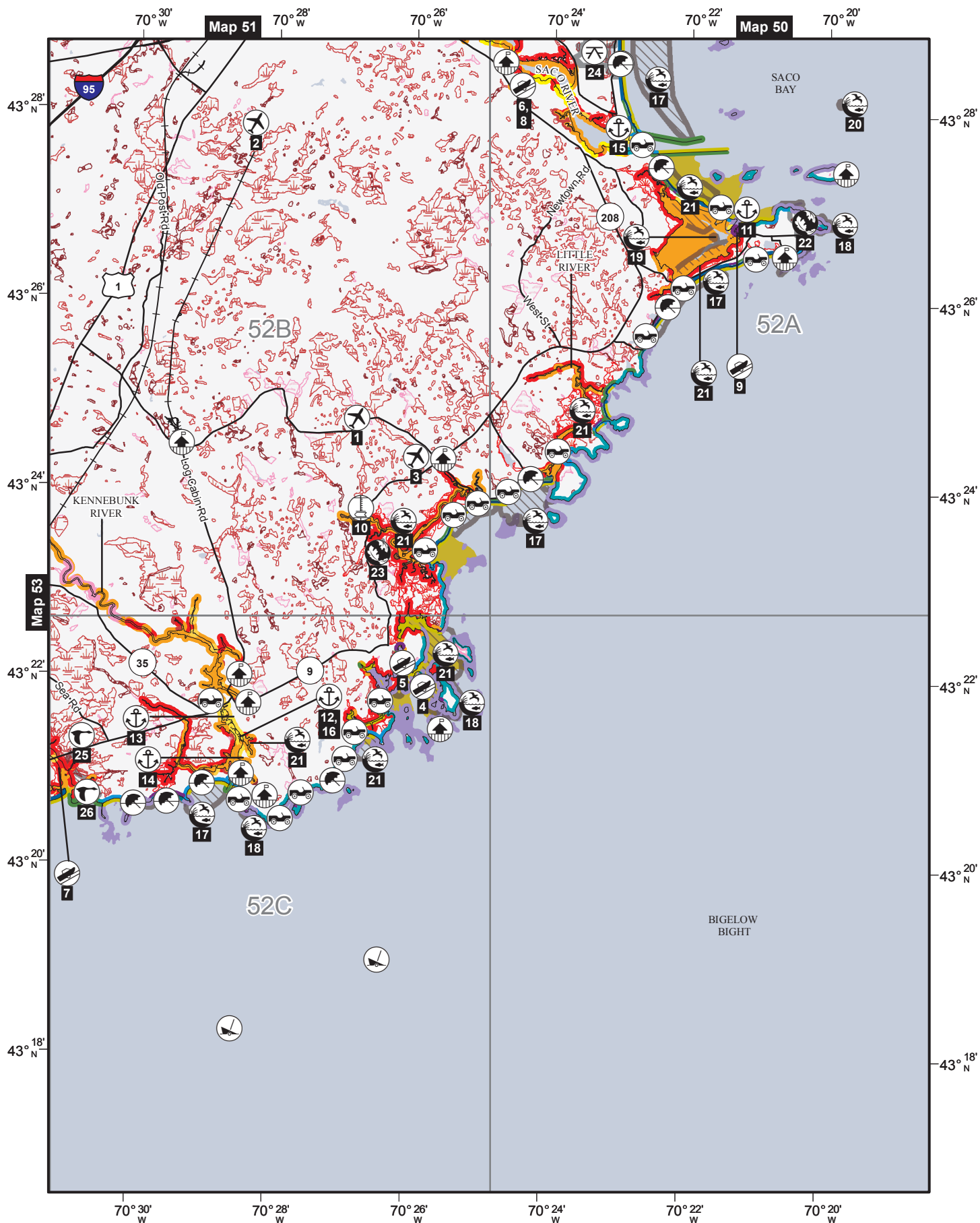
ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10B	Freshwater Marshes	2,061.01	1.28	3%
10C	Swamps	8,036.47	4.99	14%
10D	Scrub and Shrub Wetlands	180.18	0.11	< 1%
9A	Sheltered Tidal Flats	6,885.72	4.28	12%
9B	Vegetated Low Banks	41,296.24	25.66	69%
8B	Sheltered, Solid Man-Made Structures	760.01	0.47	1%
8C	Sheltered Riprap	195.09	0.12	< 1%
4	Coarse Grained Sand Beaches	78.68	0.05	< 1%
Total ESI Shoreline:		59,493.40	36.97	
Total Shoreline:		44,391.03	27.58	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 52

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 52
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)				
Map ID	Type	Name	Contact	Phone
1	AIRPORT	BACK ACRES AIRPORT	ALBERT L. GOODRICH	207-967-4378
2	AIRPORT	BIDDEFORD MUNICIPAL AIRPORT	TOM BRYAND	207-283-0181
3	AIRPORT	GOOSEFAIR AIRPORT	DAVID L BURNHAM	207-967-2868
4	BOAT RAMP	CAPE PORPOISE PIER WALK-IN LAUNCH AREA	KENNEBUNKPORT	
5	BOAT RAMP	CAUSEWAY LAUNCHING AREA	KENNEBUNKPORT	
6	BOAT RAMP	MEETINGHOUSE EDDY STATE BOAT LAUNCH FACILITY	BIDDEFORD	
7	BOAT RAMP	MOUSAM RIVER / RT 9 BOAT LAUNCH	KENNEBUNK	
8	BOAT RAMP	SACO RIVER BOAT RAMP 1	DOC	
9	BOAT RAMP	VINES LANDING BOAT LAUNCH FACILITY	BIDDEFORD	
10	LOCK AND DAM	BATSON RIVER DAM	TOWN OF KENNEBUNKPORT	
11	MARINA	BIDDEFORD POOL YACHT CLUB		207-282-0485
12	MARINA	CHICKS MARINA		207-967-2782
13	MARINA	KENNEBUNKPORT MARINA		207-967-3411
14	MARINA	NONANTUM HOTEL AND MARINA		207-967-4050
15	MARINA	NORWOODS MARINA		207-282-7411
16	MARINA	YACHTSMAN LODGE AND MARINA		207-967-2511

DISPLAYED ON MAP (POLYGONS)				
Map ID	Type	Name	Contact	Phone
17	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
18	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
19	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
20	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
21	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
22	NATURE CONSERVANCY	EAST POINT SANCTUARY	THE NATURE CONSERVANCY	207-729-5181
23	NATURE CONSERVANCY	RACHEL CARSON NWR - GOOSE ROCKS	THE NATURE CONSERVANCY	207-729-5181
24	PARK	FERRY BEACH STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-283-0067
25	WILDLIFE REFUGE	BANGS ISLAND LEDGE	U.S. FISH AND WILDLIFE SERVICE	
26	WILDLIFE REFUGE	CARLTON POND WILDLIFE MANAGEMENT AREA	U.S. FISH AND WILDLIFE SERVICE	

JURISDICTIONS

COUNTY:	YORK	FEMA:	REGION I
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	EPA:	REGION 1
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	1,108.14	1.73
10B	Freshwater Marshes	631.50	0.99
10C	Swamps	4,685.23	7.32
10D	Scrub and Shrub Wetlands	827.09	1.29
9A	Sheltered Tidal Flats	667.64	1.04
7	Exposed Tidal Flats	709.09	1.11
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	888.40	1.39

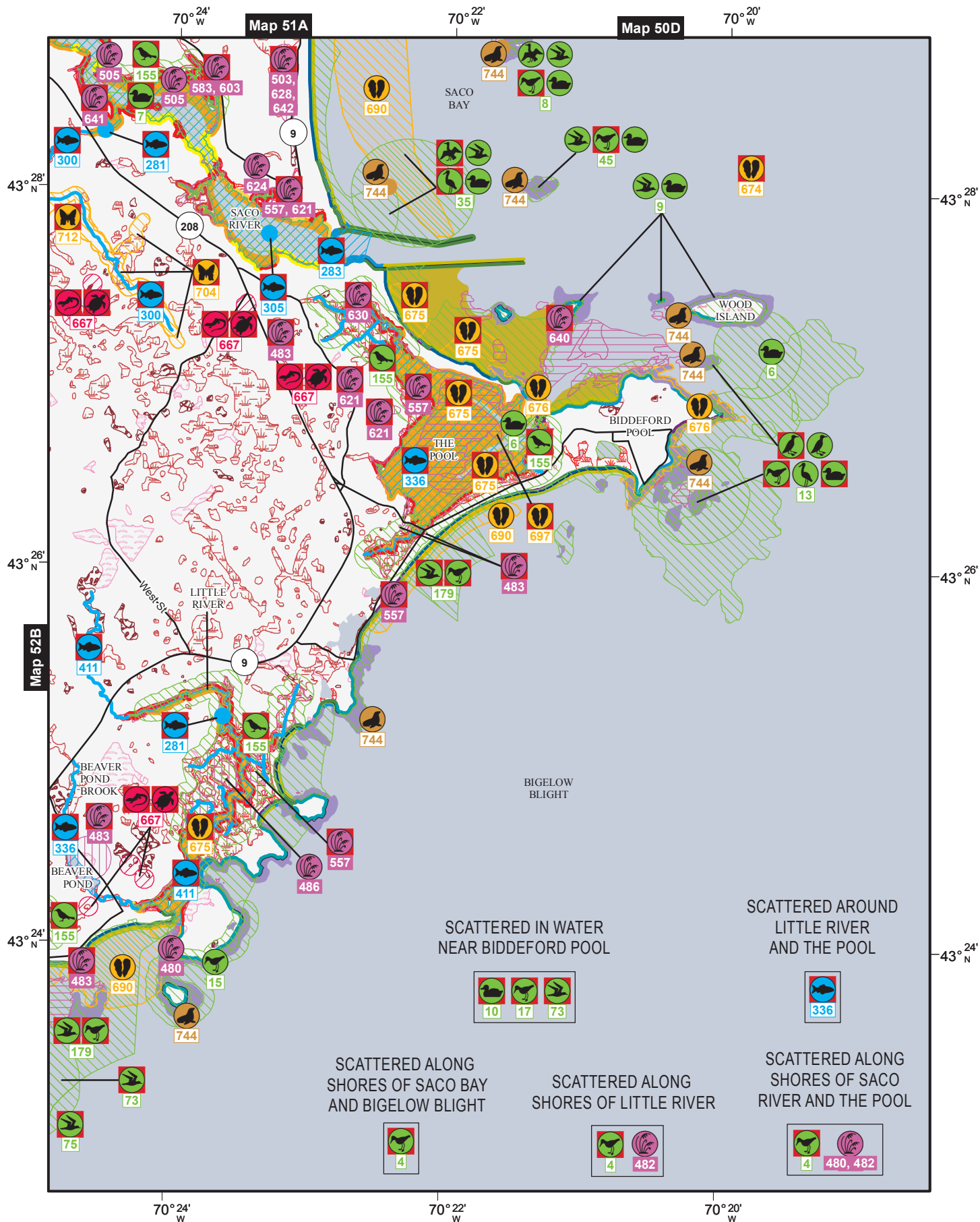
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	79,300.45	49.28	24%
10B	Freshwater Marshes	4,312.68	2.68	1%
10C	Swamps	2,969.12	1.84	1%
10D	Scrub and Shrub Wetlands	98.01	0.06	< 1%
9A	Sheltered Tidal Flats	82,074.96	51.00	25%
9B	Vegetated Low Banks	27,243.39	16.93	8%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	714.93	0.44	< 1%
8A	Sheltered, Impermeable, Rocky Shores	2,109.18	1.31	1%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	714.93	0.44	< 1%
8A	Sheltered, Impermeable, Rocky Shores	2,109.18	1.31	1%
8B	Sheltered, Solid Man-Made Structures	3,787.72	2.35	1%
8C	Sheltered Riprap	3,942.33	2.45	1%
7	Exposed Tidal Flats	26,271.34	16.32	8%
6A	Gravel Beaches	122.67	0.08	< 1%
6B	Riprap	10,543.76	6.55	3%
5	Mixed Sand and Gravel Beaches	25,814.30	16.04	8%
4	Coarse Grained Sand Beaches	7,595.38	4.72	2%
3A	Fine to Medium Grained Sand Beaches	11,852.39	7.36	4%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	39,599.51	24.61	12%
1A	Exposed, Rocky Shores	687.73	0.43	< 1%
1B	Exposed, Solid Man-Made Structures	4,970.51	3.09	1%
Total ESI Shoreline:		334,010.36	207.54	
Total Shoreline:		177,476.79	110.28	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



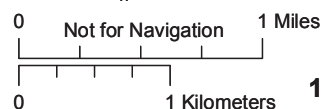


Map 52A

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 52A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area		High												
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
4	Shorebird	American golden-plover	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area		Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area		Foraging													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area		Foraging													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/- T	Foraging													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
6	Shorebird	Sanderling	Concentration Area		Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area		Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area		Foraging													-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area		Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-/C	Foraging													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	American black duck	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting		-													-	-	-	-
	Waterfowl	Bufflehead	Rafting		-													-	-	-	-
	Waterfowl	Canada goose	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Common eider	Rafting		-													May-Aug	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
7	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-													-	-	-	-
	Waterfowl	Common merganser	Rafting			-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting			-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-													-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-
8	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting			-													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting			-													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-													-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-													-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting			-													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting			-													May-Aug	May-Jun	Jul-Sep	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
9	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting															-	-	-	-
10	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-														-	-	-	-
	Acid	Black guillemot	Roosting															May-Aug	-	-	-
13	Gull/Tern	G. black-backed gull	Roosting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting															-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-														-	-	-	-
15	Wading	BC night-heron	Roosting	E/-														May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting															May-Aug	-	-	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence															-	Apr-May	Oct	-
17	Shorebird	American golden-plover	Concentration Area															-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area															-	-	-	-
	Shorebird	BB sandpiper	Concentration Area															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area															-	Apr-May	Sep-Oct	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence															-	Apr-May	Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C														May-Aug	May-Jun	Jul-Sep	-
35	Diving	Common Loon	Rafting	-T														-	-	-	-
	Diving	D. crested cormorant	Rafting															Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting															May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting															-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-														May-Sep	-	-	-
	Waterfowl	American black duck	Rafting															Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting															-	-	-	-
	Waterfowl	Bufflehead	Rafting															-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-												May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence			-												-	Dec-Jan	-	-
	Waterfowl	Scoters	Rafting			-												-	-	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
45	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-
	Shorebird	American golden-plover	Roosting			-												-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-		-												May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting			-												-	-	-	-
	Shorebird	BB sandpiper	Roosting			-												-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting			-												-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-												-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-												-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-												-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-												-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting			-												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-		-												-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Roosting			-												-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting			-												-	Jun	-	-
	Shorebird	Stilt sandpiper	Roosting			-												-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting			-												-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-		-												-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting	-/C		-												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting			-												May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
73	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	-												May-Aug	May	Aug	-
75	Gull/Tern	Roseate tern	Nesting	E/E	E	-												May-Aug	May	Aug	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-												May-Oct	May-Jun	Jul-Oct	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging												May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging												Apr-Sep	Apr	Sep	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
281	Diadromous	American eel	Harvest Area	-/C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	Alewife	Migration	-/C		-													-	-	Apr-Dec	Apr-Jul
283	Diadromous	American eel	Migration	-/C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	Jan-May	Jan-May
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
300	Marine Benthic	Atlantic tomcod	Migration			-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	Jan-May	Jan-May
305	Diadromous	American eel	Migration	-/C		-													-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													-	-	Jan-Dec	Jan-Dec
411	Diadromous	American eel	Migration	-/C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-													-	-	-	-
503	Wetland	Forested wetland	High Ecological Value			-													-	-	-	-
505	Wetland	Brackish marsh	High Ecological Value			-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
583	Plant	Eastern grasswort	Vulnerable Occurrence	C/-		-													-	-	-	-
603	Plant	Seaside brookweed	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-		-													-	-	-	-
621	Plant	Beach plum	Vulnerable Occurrence	E/-		-													-	-	-	-
624	Upland	Coastal dune grassland	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
630	Plant	Dwarf saltwort	Vulnerable Occurrence	C/-		-													-	-	-	-

HABITATS & RARE PLANTS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Mapping Qualifier	Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D									
640	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-
	Plant	C. sweetpepperbush	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-
	Plant	Eastern grasswort	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-
641	Plant	Horned pondweed	Vulnerable Occurrence	C/E	-													-	-	-	-	-	-	-	-	-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-
	Plant	Weish mudwort	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-
642	Plant	Sassafras	Vulnerable Occurrence	C/-	-													-	-	-	-	-	-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Mapping Qualifier	Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D									
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low													Apr-May	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare													Apr-May	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low													-	-	-	-	Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
668	Amphibian	Spotted salamander	Concentration Area	-	Common													Mar-May	-	-	-	Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area	-	Common													Mar-Apr	-	-	-	Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
669	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E	Very Low													May-Jul	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low													May-Jul	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
670	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low													May-Jul	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov





INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Mapping Qualifier	Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D									
674	Bivalve	Sea scallop	Harvest Area	-/C	-													-	-	-	-	Jul-Oct	-	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C	-													-	-	-	-	May-Oct	May-Oct	May-Nov	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-	-													-	-	-	-	May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area	-	-													-	-	-	-	Jun-Aug	-	-	Jan-Dec	Jan-Dec
697	Bivalve	Eastern oyster	Harvest Area	-/C	-													-	-	-	-	Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
704	Insect	Arrowhead spiketail	Vulnerable Occurrence	C/-	-													-	-	-	-	May-Jul	-	-	Feb-Dec	Feb-Dec
712	Insect	Zebra clubtail	Vulnerable Occurrence	C/-	-													-	-	-	-	May-Jul	-	-	Jan-Dec	Jan-Dec



MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	S	F	Mapping Qualifier	Mating	Calving	Pupping	Molt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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744	Pinniped	Harbor seal	Haul Out	-	-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Atlantic puffin	General Distribution	T/-	-													-	-	-	-
	Razorbill	General Distribution	T/-	-													-	-	-	-
	Common Loon	General Distribution	-/T	-													-	-	-	-
	Great cormorant	General Distribution	T/-	-													-	-	-	-
	Arctic tern	General Distribution	T/C	-													May-Oct	-	-	-
	Common tern	General Distribution	C/T	-													May-Aug	-	-	-
	Roseate tern	General Distribution	E/E	E													-	-	-	-
	Leach's storm-petrel	General Distribution	C/-	-													-	-	-	-
	Red-necked phalarope	General Distribution	C/-	-													-	Jun	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic sturgeon	General Distribution	-/T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Shortnose sturgeon	General Distribution	E/E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Concentration Area		High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area		Low													-	-	-	Jan-Dec	Jan-Dec


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH S F T	Concentration	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Green sea turtle	General Distribution	-/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	Rare													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D					
	Horseshoe crab	General Distribution	-/C	Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Northern shrimp	General Distribution	-/C	Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS






Subelement	Species	Mapping Qualifier	ME/NH S F E	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Fin whale	General Distribution	E/-	Low													-	-	-	-
	Humpback whale	General Distribution	E/-	Low													-	-	-	-
	N.A. right whale	General Distribution	E/-	Low													-	-	-	-
	Sei whale	General Distribution	E/-	Low													-	-	-	-
	Sperm whale	General Distribution	E/-	Rare													-	-	-	-

TERRESTRIAL MAMMALS




Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence													
			S	F	Concentration		J F M A M J J A S O N D											
	New England cottontail	General Distribution			Potential													

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-
														-	-	-	-





FISH

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	Atlantic cod													-	-	-	Mar-Oct	Mar-Oct
	Atlantic Wolffish													-	-	-	Mar-Oct	Mar-Oct
														-	-	-	Mar-Oct	Mar-Oct




FISH (continued)

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec
	Skates													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog																Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Echinoderm	Green urchin													Mar-Jun	Mar-Jun	Jan-Dec	Jan-Dec
 Lobster	American lobster													Jun-Oct		Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
 Pinniped	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
 Whale	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	459.13	0.72
10B	Freshwater Marshes	135.96	0.21
10C	Swamps	650.09	1.02
10D	Scrub and Shrub Wetlands	120.69	0.19
9A	Sheltered Tidal Flats	462.11	0.72
7	Exposed Tidal Flats	291.50	0.46
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	376.52	0.59

ESI SHORELINE HABITAT TYPES

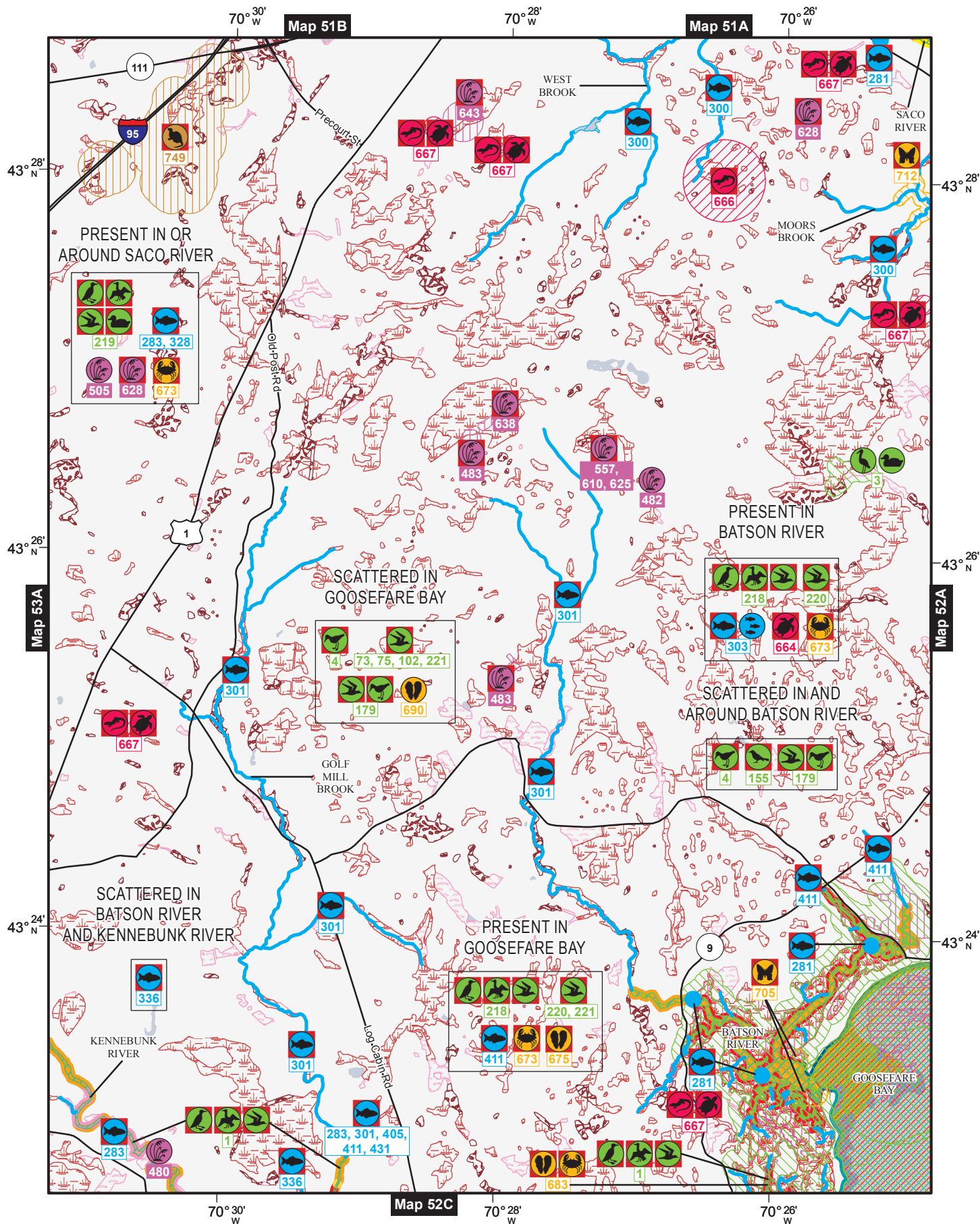
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	29,431.74	18.29	21%
10C	Swamps	1,877.09	1.17	1%
10D	Scrub and Shrub Wetlands	34.98	0.02	< 1%
9A	Sheltered Tidal Flats	36,035.75	22.39	26%
9B	Vegetated Low Banks	7,334.47	4.56	5%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	714.93	0.44	1%
8A	Sheltered, Impermeable, Rocky Shores	1,927.99	1.20	1%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	714.93	0.44	1%
8A	Sheltered, Impermeable, Rocky Shores	1,927.99	1.20	1%
8B	Sheltered, Solid Man-Made Structures	294.47	0.18	< 1%
8C	Sheltered Riprap	1,201.65	0.75	1%
7	Exposed Tidal Flats	11,741.08	7.30	8%
6B	Riprap	7,346.17	4.56	5%
5	Mixed Sand and Gravel Beaches	11,102.68	6.90	8%
4	Coarse Grained Sand Beaches	2,670.19	1.66	2%
3A	Fine to Medium Grained Sand Beaches	9,434.94	5.86	7%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	14,982.29	9.31	11%
1A	Exposed, Rocky Shores	597.18	0.37	< 1%
1B	Exposed, Solid Man-Made Structures	1,450.21	0.90	1%

Total ESI Shoreline: 138,177.81 Total ESI Shoreline: 85.86
 Total Shoreline: 70,326.47 Total Shoreline: 43.70

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov

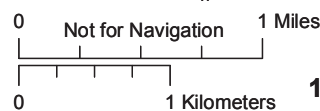




Map 52B
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 52B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
SAV	Eelgrass	High Ecological Value		0% To 10% Cover													-	-	-	-
SAV	Eelgrass	High Ecological Value		10% To 40% Cover													-	-	-	-
SAV	Eelgrass	High Ecological Value		40% To 70% Cover													-	-	-	-

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
1	Acid	Razorbill	General Distribution	T/-	-													-	-	-	-
	Diving	Common Loon	General Distribution	-T	-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-	-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C	-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T	-													May-Aug	-	-	-
3	Wading	Roseate tern	General Distribution	E/E	-													-	-	-	-
	Wading	Wading birds	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-
4	Waterfowl	Waterfowl	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Shorebird	American golden-plover	Concentration Area	C/-	Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area		Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area		Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area		Foraging													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area		Foraging													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	Foraging													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area		Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area		Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area		Foraging													-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area		Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
73	Shorebird	Willet	Concentration Area	-C		Foraging													May-Aug	May-Jun	Jul-Sep	-
	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	-													May-Aug	May	Aug	-
75	Gull/Tern	Roseate tern	Nesting	E/E	E	-													May-Aug	May	Aug	-
102	Gull/Tern	Common tern	Roosting	C/T		-													May-Aug	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Oct	May-Jun	Jul-Oct	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging													May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging													Apr-Sep	Apr	Sep	-
218	Alcid	Razorbill	General Distribution	T/-		-													-	-	-	-
	Diving	Common Loon	General Distribution	-T		-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-		-													-	-	-	-
219	Gull/Tern	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
	Alcid	Razorbill	General Distribution	T/-		-													-	-	-	-
	Diving	Common Loon	General Distribution	-T		-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-		-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T		-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E	E	-													-	-	-	-
	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-
Waterfowl	Black Scoter	Rafting			-													-	-	-	-	
Waterfowl	Bufflehead	Rafting			-													-	-	-	-	
Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-	
Waterfowl	Common goldeneye	Rafting			-													-	-	-	-	
Waterfowl	Common merganser	Rafting			-													-	-	-	-	
Waterfowl	Harlequin duck	Rafting			-													-	-	-	-	
Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-	
Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-	-
Waterfowl	Red-breasted merganser	Rafting			-													-	-	-	-	-
Waterfowl	Ruddy duck	Rafting			-													-	Dec-Jan	-	-	-
Waterfowl	Scaup	Rafting			-													-	Dec-Jan	-	-	-
Waterfowl	Surf scoter	Rafting			-													-	-	-	-	-
Waterfowl	White-winged scoter	Rafting			-													-	-	-	-	-
220	Gull/Tern	Common tern	General Distribution	C/T		-												May-Aug	-	-	-	-
221	Gull/Tern	Roseate tern	General Distribution	E/E	E	-												-	-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N						D
281	Diadromous	American eel	Harvest Area	-C		-													-	-	-	Mar-Oct	Mar-Oct
283	Diadromous	Alewife	Migration	-C		-													-	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-T	T	-													-	-	-	Jan-Dec	Jan-Dec
Diadromous	Blueback herring	Migration	-C		-													-	-	-	Jan-Dec	Jan-Dec	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D																		
300	Diadromous	Brook trout (sea run)	Migration	C/-																									-		-	Jan-May	Jan-May		
	Diadromous	Sea lamprey	Migration	-/C																								-		-	Apr-Dec	Apr-Jul			
	Diadromous	Shorthose sturgeon	Migration	E/E	E																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Striped bass	Migration																									-		-	Jan-Dec	Jan-Dec			
	Freshwater	Rainbow smelt	Migration	-/C																								-		-	Jan-Dec	Oct-Apr			
	Marine Benthic	Atlantic tomcod	Migration																									-	Dec-Feb		-	Jan-Dec	Jan-Dec		
	Diadromous	Brook trout (sea run)	Migration	C/-																								-		-	Jan-May	Jan-May			
301	Diadromous	American eel	Migration	-/C																								-		-	Mar-Oct	Mar-Oct			
303	Diadromous	Atlantic sturgeon	General Distribution	-/T	T																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Shorthose sturgeon	General Distribution	E/E	E																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Striped bass	Concentration Area																									-		-	Jan-Dec	Jan-Dec			
	Estuarine Nursery	Black Seabass	Concentration Area																									-		-	Jan-Dec	Jan-Dec			
328	Freshwater	Rainbow smelt	Migration	-/C																								-		-	Jan-Dec	Oct-Apr			
336	Diadromous	Atlantic sturgeon	Migration	-/T	T																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Shorthose sturgeon	Migration	E/E	E																							-		-	Jan-Dec	Jan-Dec			
405	Diadromous	Striped bass	Migration																									-		-	Jan-Dec	Jan-Dec			
	Marine Benthic	Atlantic tomcod	Migration																								-	Dec-Feb		-	Jan-Dec	Jan-Dec			
411	Diadromous	Alewife	Migration	-/C																								-		-	Apr-Jul	Apr-Jul			
	Diadromous	American shad	Migration	-/C																								-		-	May-Jul	May-Jul			
	Diadromous	Atlantic sturgeon	Migration	-/T	T																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Blueback herring	Migration	-/C																								-		-	Jan-Dec	Jan-Dec			
	Diadromous	Shorthose sturgeon	Migration	E/E	E																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Striped bass	Migration																									-		-	Jan-Dec	Jan-Dec			
	Marine Benthic	Atlantic tomcod	Migration																								-	Dec-Feb		-	Jan-Dec	Jan-Dec			
431	Diadromous	Alewife	Migration	-/C																								-		-	Apr-Jul	Apr-Jul			
	Diadromous	American eel	Migration	-/C																								-		-	Mar-Oct	Mar-Oct			
	Diadromous	American shad	Migration	-/C																								-		-	May-Jul	May-Jul			
	Diadromous	Atlantic sturgeon	Migration	-/T	T																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Blueback herring	Migration	-/C																								-		-	Jan-Dec	Jan-Dec			
	Diadromous	Shorthose sturgeon	Migration	E/E	E																							-		-	Jan-Dec	Jan-Dec			
	Diadromous	Striped bass	Migration																									-		-	Jan-Dec	Jan-Dec			
Marine Benthic	Atlantic tomcod	Migration																								-	Dec-Feb		-	Jan-Dec	Jan-Dec				

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence															
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
505	Wetland	Brackish marsh	High Ecological Value			-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
610	Wetland	Red goosefoot	Vulnerable Occurrence	E/E		-													-	-	-	-
625	Plant	Striped prince's pine	Vulnerable Occurrence	E/-		-													-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
638	Plant	Button sedge	Vulnerable Occurrence	C/-		-													-	-	-	-
643	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
	Wetland	Forested wetland	High Ecological Value			-													-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
664	Turtle	Green sea turtle	General Distribution	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
	Turtle	K. ridley sea turtle	General Distribution	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T		-													-	-	-	Jan-Dec	Jan-Dec
	Snake	Northern black racer	Vulnerable Occurrence	C/-		-													-	-	-	Jan-Dec	Jan-Dec
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
673	Crab	Horseshoe crab	General Distribution	-/C		Low												May-Jul	May-Jul	-	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec	
683	Bivalve	Softshell clam	Harvest Area	-/C		-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec	
	Crab	Horseshoe crab	General Distribution	-/C		Low												May-Jul	May-Jul	-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-												Jun-Aug	-	-	-	Jan-Dec	Jan-Dec
705	Insect	Saltmarsh tiger beetle	Vulnerable Occurrence	C/-		-												May-Jul	-	-	-	Jan-Dec	Jan-Dec
712	Insect	Zebra clubtail	Vulnerable Occurrence	C/-		-												May-Jul	-	-	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	Concentration	Monthly Presence
749	Small Mammal	New England cottontail	S F E/E	Vulnerable Occurrence	Low	J F M A M J J A S O N D
						- - - - - - - - - -

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

TERRESTRIAL MAMMALS

Subelement	Species	ME/NH	Mapping Qualifier	Concentration	Monthly Presence
Small Mammal	New England cottontail	S F E/E	General Distribution	Potential	J F M A M J J A S O N D
					- - - - - - - - - -

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence	Nest	Mig.(S)	Mig.(F)	Molt
Alcid	Black guillemot	J F M A M J J A S O N D	May-Aug	-	-	-
	Dovekie					
	Thick-billed murre					
Diving	D. crested cormorant	J F M A M J J A S O N D	Jun-Sep	-	-	-
	Horned grebe					
	Red-necked grebe					
	Red-throated loon					
Gull/Tern	G. black-backed gull	J F M A M J J A S O N D		-	-	-
	Herring gull					
	Ring-billed gull					
Pelagic	Northern gannet	J F M A M J J A S O N D		-	-	-

FISH

Subelement	Species	Monthly Presence	Spawn	Eggs	Larvae	Juveniles	Adults
Estuarine Nursery	Atlantic herring	J F M A M J J A S O N D	-	-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder					Jan-Dec	
Marine Benthic	American plaice	J F M A M J J A S O N D	-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance	J F M A M J J A S O N D	-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod	J F M A M J J A S O N D	Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish	J F M A M J J A S O N D	Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner	J F M A M J J A S O N D	Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock	J F M A M J J A S O N D	-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin	J F M A M J J A S O N D	Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin	J F M A M J J A S O N D	-	-	-	Jul-Oct	Jul-Oct
	Ocean pout	J F M A M J J A S O N D	-	-	-	Mar-Oct	Mar-Oct
	Pollock	J F M A M J J A S O N D	-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake	J F M A M J J A S O N D	-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel	J F M A M J J A S O N D	Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin	J F M A M J J A S O N D	-	-	-	Sep-May	Sep-May

FISH (continued)

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
Marine Pelagic	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	-	-	May-Nov	May-Nov
	Yellowtail flounder													-	-	-	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
Crab	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
Echinoderm	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
Lobster	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Pinniped	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	350.03	0.55
10B	Freshwater Marshes	394.50	0.62
10C	Swamps	3,156.92	4.93
10D	Scrub and Shrub Wetlands	615.70	0.96
9A	Sheltered Tidal Flats	84.57	0.13
7	Exposed Tidal Flats	103.09	0.16
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	49.80	0.08

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	20,034.12	12.45	32%
10B	Freshwater Marshes	2,831.95	1.76	5%
9A	Sheltered Tidal Flats	22,420.86	13.93	36%
9B	Vegetated Low Banks	6,987.70	4.34	11%
8A	Sheltered, Impermeable, Rocky Shores	181.19	0.11	< 1%
8B	Sheltered, Solid Man-Made Structures	31.33	0.02	< 1%
8C	Sheltered Riprap	31.78	0.02	< 1%
7	Exposed Tidal Flats	3,095.25	1.92	5%
6A	Gravel Beaches	122.67	0.08	< 1%
6B	Riprap	1,317.51	0.82	2%
5	Mixed Sand and Gravel Beaches	848.14	0.53	1%
4	Coarse Grained Sand Beaches	712.52	0.44	1%
3A	Fine to Medium Grained Sand Beaches	1,909.90	1.19	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,054.55	0.66	2%
1B	Exposed, Solid Man-Made Structures	122.67	0.08	< 1%

Total ESI Shoreline:
Total Shoreline:

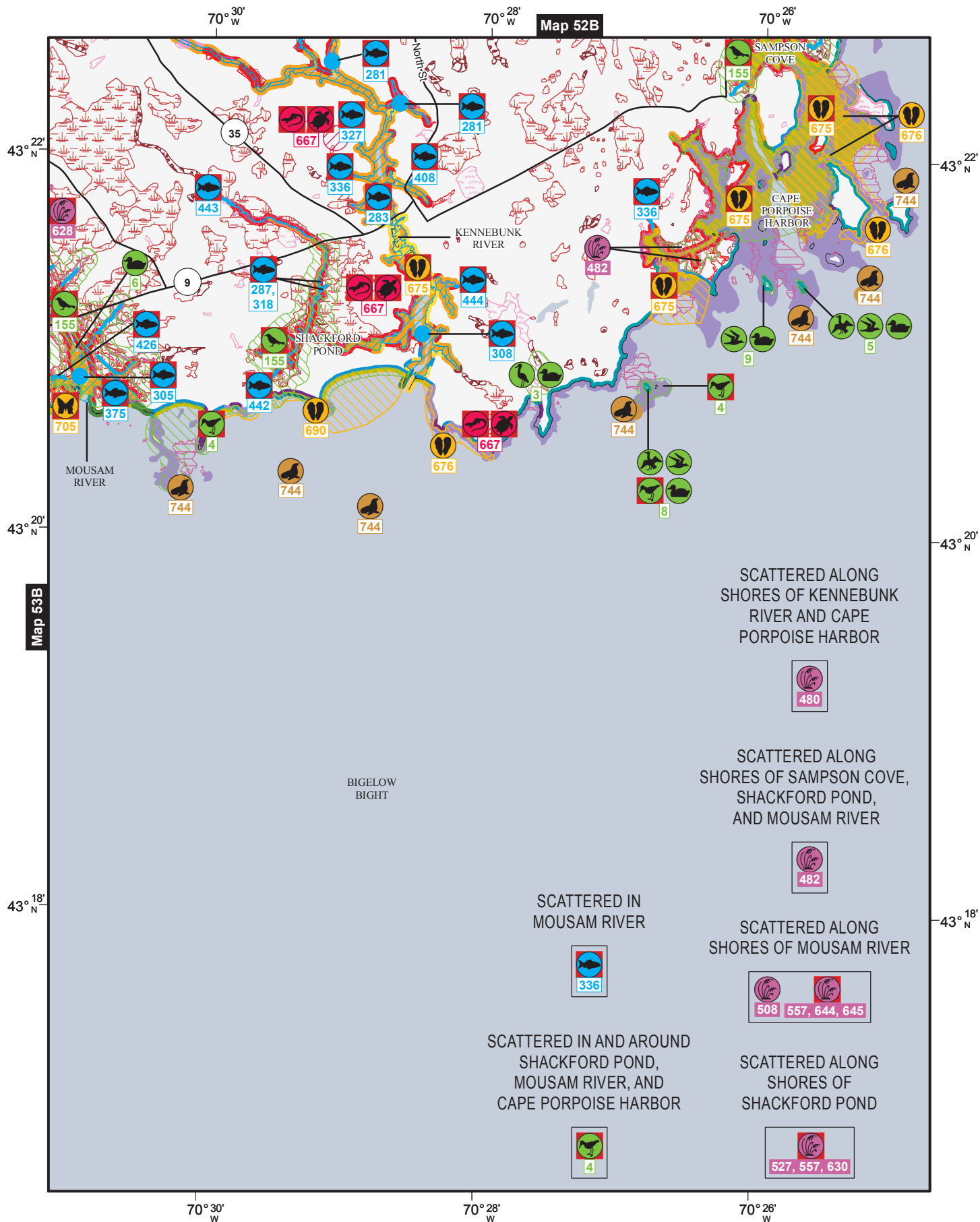
61,702.12
33,308.71

Total ESI Shoreline: 38.34
Total Shoreline: 20.70

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



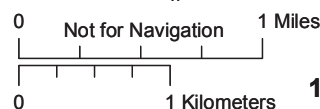


Map 52C

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 52C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/- T	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
	Shorebird	Willet	Concentration Area	-C	Foraging												
	Diving	D. crested cormorant	Roosting		-												
	Gull/Tern	G. black-backed gull	Roosting		-												
	Gull/Tern	Herring gull	Roosting		-												
	Waterfowl	Common eider	Roosting		-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt	
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
6	Waterfowl	American black duck	Rafting			-													Apr-Aug	-	-	-	
	Waterfowl	Black Scoter	Rafting			-													-	-	-	-	
	Waterfowl	Bufflehead	Rafting			-													-	-	-	-	
	Waterfowl	Canada goose	Rafting			-													Apr-Aug	-	-	-	
	Waterfowl	Common eider	Rafting			-													May-Aug	-	-	-	
	Waterfowl	Goldeneye	Rafting			-													-	-	-	-	
8	Waterfowl	Long-tailed duck	Rafting			-													-	May	Sep	-	-
	Waterfowl	Mallard	Rafting			-													Apr-Aug	-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-													-	-	-	-	-
	Diving	D. crested cormorant	Roosting			-													Jun-Sep	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-	-
	Shorebird	American golden-plover	Roosting			-													-	Aug	Oct	-	-
	Shorebird	American oystercatcher	Roosting	C/-		-													May-Jun	May	Sep	-	-
	Shorebird	Baird's sandpiper	Roosting			-													-	-	-	-	-
	Shorebird	BB sandpiper	Roosting			-													-	Aug	Oct	-	-
	Shorebird	Black-bellied plover	Roosting			-													-	May	Jul-Oct	-	-
	Shorebird	Dunlin	Roosting			-													-	May	Aug-Oct	-	-
	Shorebird	Greater yellowlegs	Roosting			-													-	May	Jul-Oct	-	-
	9	Shorebird	Hudsonian godwit	Roosting			-													-	-	Jul-Oct	-
Shorebird		Least sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-	-
Shorebird		Lesser yellowlegs	Roosting	C/-		-													-	May-Jun	Jul-Oct	-	-
Shorebird		Pectoral sandpiper	Roosting			-													-	Apr-May	Sep-Oct	-	-
Shorebird		Red Knot	Roosting	C/-	T	-													-	May	Aug-Oct	-	-
Shorebird		Ruddy turnstone	Roosting			-													-	May-Jun	Jul-Oct	-	-
Shorebird		Sanderling	Roosting			-													-	Apr-May	-	-	-
Shorebird		Semipalmated plover	Roosting			-													-	May-Jun	Jul-Oct	-	-
Shorebird		Semipalmated sandpiper	Roosting	C/-		-													-	May-Jun	Jul-Oct	-	-
Shorebird		Short-billed dowitcher	Roosting			-													-	May-Jun	Jul-Oct	-	-
Shorebird		Solitary sandpiper	Roosting			-													-	Jun	-	-	-
Shorebird		Stilt sandpiper	Roosting			-													-	Jul	Sep	-	-
Shorebird		Western sandpiper	Roosting			-													-	Jul	Oct	-	-
Shorebird		Whimbrel	Roosting	C/-		-													-	-	Jul-Oct	-	-
9		Shorebird	White-rumped sandpiper	Roosting			-													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C		-													May-Aug	May-Jun	Jul-Sep	-	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-	-	-	-
	Gull/Tern	Herring gull	Roosting			-													-	-	-	-	-
	Waterfowl	Common eider	Roosting			-													May-Aug	-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Jun	Jul-Oct	Jul-Oct	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
				S	F																														
281	Diadromous	American eel	Harvest Area	-/C																												Mar-Oct	Mar-Oct		
283	Diadromous	Alewife	Migration	-/C																												Apr-Jul	Apr-Jul		
	Diadromous	American eel	Migration	-/C																												Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C																												May-Feb	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E																											Jan-Dec	May-Mar		
	Diadromous	Atlantic sturgeon	Migration	-/T	T																											Jan-Dec	Jan-Dec		
	Diadromous	Blueback herring	Migration	-/C																												Jan-Dec	Jan-Dec		
	Diadromous	Brook trout (sea run)	Migration	C/-																												Jan-May	Jan-May		
	Diadromous	Sea lamprey	Migration	-/C																												Apr-Dec	Apr-Jul		
	Diadromous	Shorthose sturgeon	Migration	E/E	E																											Jan-Dec	Jan-Dec		
	Diadromous	Striped bass	Migration																													Jan-Dec	Jan-Dec		
	Freshwater	Rainbow smelt	Migration	-/C																												Oct-Apr	Oct-Apr		
287	Marine Benthic	Atlantic tomcod	Migration	-/C																												Jan-Dec	Jan-Dec		
	Diadromous	Alewife	Migration	-/C																												Apr-Jul	Apr-Jul		
305	Diadromous	American eel	Migration	-/C																												Mar-Oct	Mar-Oct		
	Freshwater	Rainbow smelt	Migration	-/C																												Jan-Dec	Oct-Apr		
308	Diadromous	Alewife	Migration	-/C																												Apr-Jul	Apr-Jul		
	Diadromous	American eel	Migration	-/C																												Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C																												May-Jul	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E																											Jan-Dec	May-Mar		
318	Freshwater	Rainbow smelt	Migration	-/C																												Jan-Dec	Oct-Apr		
	Diadromous	Atlantic sturgeon	Migration	-/C	E																											Jan-Dec	Jan-Dec		
	Diadromous	Sea lamprey	Migration	-/C																												May-Jul	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E																											Jan-Dec	May-Mar		
327	Diadromous	American shad	Migration	-/C																												Apr-Jul	Apr-Jul		
	Diadromous	Blueback herring	Migration	-/C																												May-Jul	May-Jul		
	Diadromous	Atlantic sturgeon	Migration	-/T	T																											Jan-Dec	Jan-Dec		
336	Diadromous	Shorthose sturgeon	Migration	E/E	E																											Jan-Dec	Jan-Dec		
	Diadromous	Striped bass	Migration																													Jan-Dec	Jan-Dec		
	Marine Benthic	Atlantic tomcod	Migration																													Dec-Feb	Jan-Dec		
375	Diadromous	Alewife	Migration	-/C																												Apr-Jul	Apr-Jul		
	Diadromous	American eel	Migration	-/C																												Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C																												May-Jul	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E																											Jan-Dec	May-Mar		
	Diadromous	Atlantic sturgeon	Migration	-/T	T																											Jan-Dec	Jan-Dec		
	Diadromous	Blueback herring	Migration	-/C																												Jan-Dec	Jan-Dec		
	Diadromous	Sea lamprey	Migration	-/C																												Apr-Jul	Apr-Jul		
	Diadromous	Shorthose sturgeon	Migration	E/E	E																											Jan-Dec	Jan-Dec		
	Diadromous	Striped bass	Migration																													Jan-Dec	Jan-Dec		
	Freshwater	Rainbow smelt	Migration	-/C																												Oct-Apr	Oct-Apr		
	Marine Benthic	Atlantic tomcod	Migration	-/C																												Jan-Dec	Jan-Dec		
408	Diadromous	American shad	Migration	-/C																												May-Jul	May-Jul		
	Diadromous	Atlantic sturgeon	Migration	-/T	T																											Jan-Dec	Jan-Dec		
	Diadromous	Blueback herring	Migration	-/C																												Jan-Dec	Jan-Dec		
	Diadromous	Shorthose sturgeon	Migration	E/E	E																											Jan-Dec	Jan-Dec		

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
426	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
442	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
443	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
444	Diadromous	American shad	Migration	-/C	E	-												-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
444	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
508	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
527	Plant	Pursh seepweed	Vulnerable Occurrence	T/-		-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
630	Plant	Dwarf saltwort	Vulnerable Occurrence	C/-		-													-	-	-	-
644	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Slender blue iris	Vulnerable Occurrence	T/-		-													-	-	-	-

HABITATS & RARE PLANTS (continued)

Map ID	Subelement	Species	ME/NH		Mapping Qualifier	Concentration	Monthly Presence											
			S	F			J	F	M	A	M	J	J	A	S	O	N	D
645	Plant	Sm. false foxglove	C/-	-	Vulnerable Occurrence	-										-	-	-
	Plant	Slender blue iris	T/-	-	Vulnerable Occurrence	-										-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
			Mapping Qualifier	S F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low												Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area		Common												Mar-May	Apr-Jun	-	May-Sep	Jan-Jun
	Amphibian	Wood Frog	Concentration Area		Common												Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E	Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

[illegible]

MARINE MAMMALS



[illegible]

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

[illegible]


FISH

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Diadromous	Atlantic sturgeon	-/T	T	Rare												-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	E/E	E	Rare												-	-	Jan-Dec	Jan-Dec
		Striped bass	Concentration Area			High												-	-	Jan-Dec
	Estuarine Nursery	Black Seabass			Low												-	-	Jan-Dec	Jan-Dec


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Turtle	Green sea turtle	-/-	T	Rare													-	-	Jun-Nov	Jun-Nov
		K. ridley sea turtle	E/-	E	Rare													-	-	Jun-Nov	Jun-Nov
		Leatherback sea turtle	E/-	E	Low													-	-	Jun-Nov	Jun-Nov
		Loggerhead sea turtle	E/-	T	Low													-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
	Crab	Horseshoe crab	-/C	C	Low												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Shrimp	Northern shrimp	-/C	C	Low												-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS






Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Mating	Calving	Pupping	Molt
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Whale	Fin whale	E/-	E	Low												-	-	-	-
		Humpback whale	E/-	E	Low												-	-	-	-
		N.A. right whale	E/-	E	Low												-	-	-	-
		Sei whale	E/-	E	Low												-	-	-	-
		Sperm whale	E/-	E	Rare												-	-	-	-

TERRESTRIAL MAMMALS

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
BIRDS

Monthly Presence


Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-

FISH



Monthly Presence

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct




FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Ocean pout													-	-	Mar-Oct	Mar-Oct
	Pollock													Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	Mar-Oct	Mar-Oct
	Red hake													Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	Mar-Oct	Mar-Oct
	Skates													-	-	Jan-Dec	Jan-Dec
	Skates													-	-	Mar-Oct	Mar-Oct
	White hake													-	-	Mar-Oct	Mar-Oct
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Butterfish													-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Northern quahog													-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
	Beaver												
	Muskrat												
Northern river otter													

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	299.06	0.47
10B	Freshwater Marshes	101.07	0.16
10C	Swamps	878.29	1.37
10D	Scrub and Shrub Wetlands	90.78	0.14
9A	Sheltered Tidal Flats	120.98	0.19
7	Exposed Tidal Flats	314.49	0.49
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	462.12	0.72

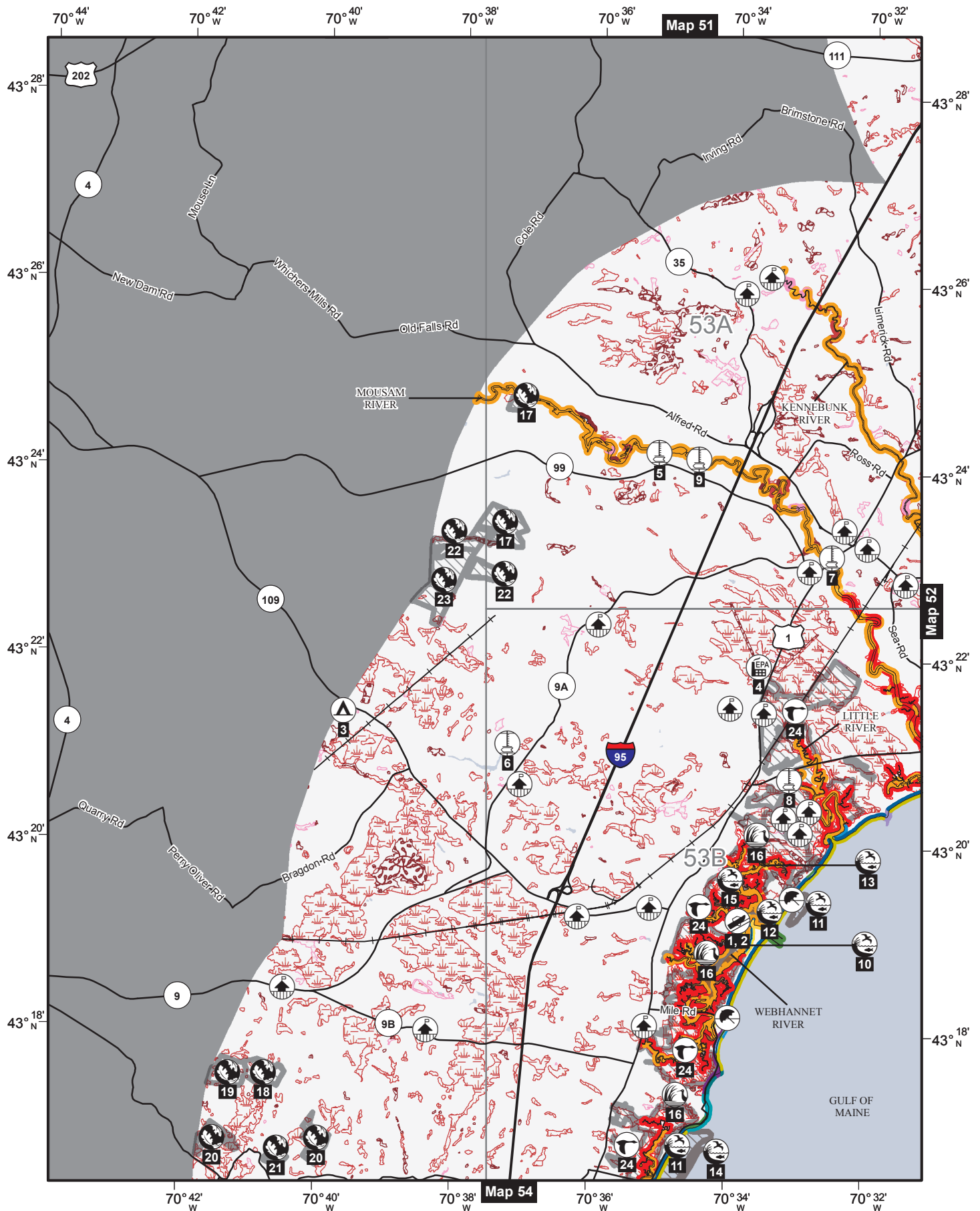
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	29,847.47	18.55	22%
10B	Freshwater Marshes	1,480.73	0.92	1%
10C	Swamps	1,092.03	0.68	1%
10D	Scrub and Shrub Wetlands	63.03	0.04	< 1%
9A	Sheltered Tidal Flats	23,629.77	14.68	18%
9B	Vegetated Low Banks	12,919.40	8.03	10%
8B	Sheltered, Solid Man-Made Structures	3,461.92	2.15	3%
8C	Sheltered Riprap	2,708.90	1.68	2%
7	Exposed Tidal Flats	11,436.51	7.11	9%
6B	Riprap	1,880.08	1.17	1%
5	Mixed Sand and Gravel Beaches	13,863.47	8.61	10%
4	Coarse Grained Sand Beaches	4,212.68	2.62	3%
3A	Fine to Medium Grained Sand Beaches	509.04	0.32	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	23,562.67	14.64	18%
1A	Exposed, Rocky Shores	90.55	0.06	< 1%
1B	Exposed, Solid Man-Made Structures	3,397.63	2.11	3%
Total ESI Shoreline:		134,155.88	83.36	
Total Shoreline:		73,854.15	45.89	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 53
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 53
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)				
Map ID	Type	Name	Contact	Phone
1	BOAT RAMP	WEBHANNET RIVER BOAT RAMP	WELLS	
2	BOAT RAMP	WELLS TOWN LANDING	WELLS	
3	CAMPGROUND	SANFORD HEALTH CAMP		
4	EPA FACILITY	KENNEBUNK, KENNEBUNKPORT & WELLS WATER DISTRICT		207-985-2362
5	LOCK AND DAM	DANE PERKINS DAM		
6	LOCK AND DAM	HOBBS POND DAM	DONALD JAMES	
7	LOCK AND DAM	KESSLER DAM		
8	LOCK AND DAM	SKINNERS MILL DAM		
9	LOCK AND DAM	TWINE MILL DAM		

DISPLAYED ON MAP (POLYGONS)				
Map ID	Type	Name	Contact	Phone
10	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
11	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
12	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
13	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
14	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
15	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
16	NATIONAL ESTUARINE RESEARCH RESERVE	NATURAL ESTUARINE RESEARCH RESERVE		
17	NATURE CONSERVANCY	KENNEBUNK PLAINS PRESERVE	THE NATURE CONSERVANCY	207-729-5181
18	NATURE CONSERVANCY	MT AGAMENTICUS - TATNIC HILLS PRESERVE	THE NATURE CONSERVANCY	207-729-5181
19	NATURE CONSERVANCY	MT AGAMENTICUS PRESERVE	THE NATURE CONSERVANCY	207-729-5181
20	NATURE CONSERVANCY	MT AGAMENTICUS-GWRLT	THE NATURE CONSERVANCY	207-729-5181
21	NATURE CONSERVANCY	MT. AGAMENTICUS WMA	THE NATURE CONSERVANCY	207-729-5181
22	NATURE CONSERVANCY	WELLS BARRENS	THE NATURE CONSERVANCY	207-729-5181
23	NATURE CONSERVANCY	WELLS BARRENS PRESERVE	THE NATURE CONSERVANCY	207-729-5181
24	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 1	U.S. FISH & WILDLIFE SERVICE	

ALSO PRESENT IN MAPPED AREA (POLYGONS)			
Type	Name	Contact	Phone
STATE PROTECTED AREA	KENNEBUNK PLAINS WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-657-2345
STATE PROTECTED AREA	MOUNT AGAMENTICUS WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-657-2345

JURISDICTIONS			
COUNTY:	YORK	FEMA:	REGION I
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	EPA:	REGION 1
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	1,423.29	2.22
10B	Freshwater Marshes	354.82	0.55
10C	Swamps	6,452.45	10.08
10D	Scrub and Shrub Wetlands	888.14	1.39
9A	Sheltered Tidal Flats	410.07	0.64
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	5.16	0.01

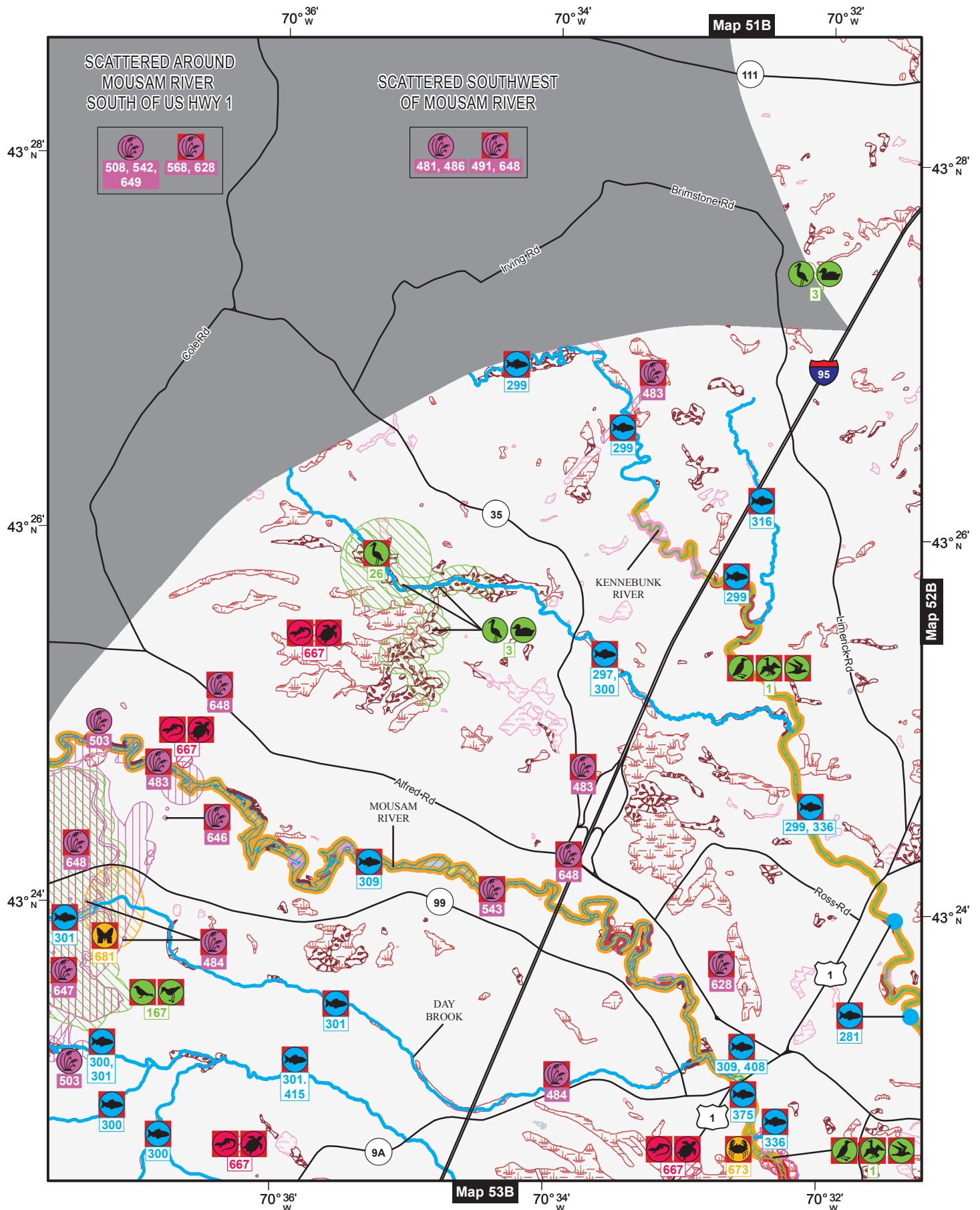
ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	95,377.46	59.26	33%
10B	Freshwater Marshes	3,586.50	2.23	1%
10C	Swamps	7,447.44	4.63	3%
10D	Scrub and Shrub Wetlands	5,309.25	3.30	2%
9A	Sheltered Tidal Flats	96,343.01	59.86	33%
9B	Vegetated Low Banks	55,493.91	34.48	19%
8B	Sheltered, Solid Man-Made Structures	1,826.07	1.13	1%
8C	Sheltered Riprap	1,290.25	0.80	< 1%
7	Exposed Tidal Flats	7,914.11	4.92	3%
6B	Riprap	3,357.63	2.09	1%
5	Mixed Sand and Gravel Beaches	1,050.08	0.65	< 1%
4	Coarse Grained Sand Beaches	2,200.68	1.37	1%
3A	Fine to Medium Grained Sand Beaches	7,694.82	4.78	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	214.21	0.13	< 1%
1B	Exposed, Solid Man-Made Structures	1,665.12	1.03	1%
Total ESI Shoreline:		290,770.52	180.68	
Total Shoreline:		170,376.41	105.87	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 53A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
1	Acid	Razorbill	General Distribution	T/-		-												-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-												-	-	-	-
	Diving	Great cormorant	General Distribution	T/-		-												-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-												May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T		-												May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E	E	-												-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence			-												Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence			-												Apr-Nov	Apr-Jun	Jul-Nov	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-		-												May-Sep	-	-	-
167	Passerine	Grasshopper sparrow	Vulnerable Occurrence	E/C		-												May-Oct	-	-	-
	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E		-												Apr-Oct	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-											-		-	Mar-Oct	Mar-Oct		
	Diadromous	Alewife	Migration	-/C		-											-		-	Apr-Jul	Apr-Jul		
297	Diadromous	American eel	Migration	-/C		-											-		-	Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C		-											-		-	May-Jul	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-		-	Jan-Dec	May-Mar		
	Diadromous	Blueback herring	Migration	-/C		-											-		-	Jan-Dec	Jan-Dec		
	Diadromous	Sea lamprey	Migration	-/C		-											-		-	Apr-Jul	Apr-Jul		
	Freshwater	Rainbow smelt	Migration	-/C		-											-		-	Jan-Dec	Oct-Apr		
299	Diadromous	Alewife	Migration	-/C		-											-		-	Apr-Jul	Apr-Jul		
	Diadromous	American eel	Migration	-/C		-											-		-	Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C		-											-		-	May-Jul	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-		-	Jan-Dec	May-Mar		
	Diadromous	Blueback herring	Migration	-/C		-											-		-	Jan-Dec	Jan-Dec		
	Diadromous	Brook trout (sea run)	Migration	C/-		-											-		-	Jan-May	Jan-May		
	Diadromous	Sea lamprey	Migration	-/C		-											-		-	Apr-Jul	Apr-Jul		
	Freshwater	Rainbow smelt	Migration	-/C		-											-		-	Jan-Dec	Oct-Apr		
300	Diadromous	Brook trout (sea run)	Migration	C/-		-											-		-	Jan-May	Jan-May		
301	Diadromous	American eel	Migration	-/C		-											-		-	Mar-Oct	Mar-Oct		
	Diadromous	Alewife	Migration	-/C		-											-		-	Apr-Jul	Apr-Jul		
309	Diadromous	American eel	Migration	-/C		-											-		-	Mar-Oct	Mar-Oct		
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-		-	Jan-Dec	May-Mar		
	Diadromous	Sea lamprey	Migration	-/C		-											-		-	Apr-Jul	Apr-Jul		

Southern Maine and New Hampshire: Map 53A

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
316	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
	Diadromous	American eel	Migration	-/C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	Jan-May	Jan-May
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
375	Diadromous	Alewife	Migration	-/C		-													-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
408	Diadromous	American shad	Migration	-/C		-													-	-	May-Jul	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	Apr-Jul	Apr-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-		-													-	-	Jan-May	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
				S	F		J	F	M	A	M	J	J	A	S	O	N	D
481	Wetland	Rare ecol. community	High Ecological Value			-												
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-												
484	Plant	Endangered plant	Vulnerable Occurrence	E/E		-												
486	Upland	Rare upland community	High Ecological Value			-												
491	Plant	Threatened plant	Vulnerable Occurrence	T/T		-												
503	Wetland	Forested wetland	High Ecological Value			-												
508	Wetland	Salt marsh	High Ecological Value			-												
542	Wetland	Freshwater tidal marsh	High Ecological Value			-												
543	Plant	Meadow garlic	Vulnerable Occurrence	C/-		-												

HABITATS & RARE PLANTS (continued)

[illegible]

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	ME/NH		Mapping Qualifier	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
667	Amphibian	B. spotted salamander	C/C		Vulnerable Occurrence	Very Low										Apr-May	May-Jun	-	Jan-Dec	Apr-Jun		
	Amphibian	Jefferson salamander	C/C		Vulnerable Occurrence	Rare										Apr-May	May-Jun	-	Jan-Dec	Apr-Jun		
	Amphibian	Northern leopard frog	C/C		Vulnerable Occurrence	Low										Apr-Jun	May-Jul	-	May-Sep	Jan-Dec		
	Amphibian	Spotted salamander			Concentration Area	Common										Mar-May	Apr-Jun	-	May-Sep	Mar-Dec		
	Amphibian	Wood Frog			Concentration Area	Common										Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep		
	Turtle	Blanding's turtle	E/E		Vulnerable Occurrence	Very Low										May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec		
	Turtle	Spotted turtle	T/T		Vulnerable Occurrence	Very Low									May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec			
	Turtle	Wood turtle	C/C		Vulnerable Occurrence	Very Low									May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov			

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
673	Crab	Horseshoe crab	General Distribution	-/C													May-Jul	-	Jan-Dec	Jan-Dec	
681	Insect	Rare insect	Vulnerable Occurrence	C/-													May-Jul	-	Jan-Dec	Jan-Dec	

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

TERRESTRIAL MAMMALS

[illegible]

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Alcid	Black guillemot													May-Aug	-	-	-
	Dovekie														-	-	-
Diving	Thick-billed murre														-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe														-	-	-
	Red-necked grebe														-	-	-
Gull/Tern	Red-throated loon														-	-	-
	G. black-backed gull														-	-	-
	Herring gull														-	-	-
Pelagic	Ring-billed gull														-	-	-
	Northern gannet														-	-	-

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
Bivalve	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
Crab	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
Echinoderm	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Pinniped	Harbor seal													-	-	-	-

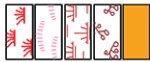
TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	12.24	0.02
10B	Freshwater Marshes	184.01	0.29
10C	Swamps	835.55	1.31
10D	Scrub and Shrub Wetlands	433.12	0.68
9A	Sheltered Tidal Flats	2.48	0.00



ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	513.41	0.32	1%
10B	Freshwater Marshes	3,586.50	2.23	6%
10C	Swamps	6,866.27	4.27	11%
10D	Scrub and Shrub Wetlands	3,273.53	2.03	5%
9A	Sheltered Tidal Flats	1,108.14	0.69	2%
9B	Vegetated Low Banks	47,137.46	29.29	75%
8B	Sheltered, Solid Man-Made Structures	547.54	0.34	1%
8C	Sheltered Riprap	126.38	0.08	< 1%

Total ESI Shoreline:
Total Shoreline:

63,159.24
51,899.93

Total ESI Shoreline:
Total Shoreline:

39.25
32.25

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 53B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
4	Shorebird	American golden-plover	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area		Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area		Foraging													-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area		Foraging													-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area		Foraging													-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area		Foraging													-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	Foraging													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area		Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area		Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area		Foraging													-	Jul	Sep	-
7	Shorebird	Western sandpiper	Concentration Area		Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C	Foraging													May-Aug	May-Jun	Jul-Sep	-
	Waterfowl	American black duck	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting		-													-	-	-	-
	Waterfowl	Bufflehead	Rafting		-													-	-	-	-
	Waterfowl	Common eider	Rafting		-													May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting		-													-	-	-	-
	Waterfowl	Common merganser	Rafting		-													-	-	-	-
	Waterfowl	Harlequin duck	Rafting		-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting	T/-	-													-	-	-	-
	Waterfowl	Mallard	Rafting		-													-	May	Sep	-
	Waterfowl	Red-breasted merganser	Rafting		-													Apr-Aug	-	-	-
	Waterfowl	Ruddy duck	Rafting		-													-	-	-	-
	Waterfowl	Scaup	Rafting		-													-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting		-													-	Dec-Jan	-	-
	Waterfowl	White-winged scoter	Rafting		-													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		-												-	-	-	-
11	Alcid	Atlantic puffin	General Distribution	T/-		-												-	-	-	-
	Pelagic	Leach's storm-petrel	General Distribution	C/-		-												-	-	-	-
	Shorebird	Red-necked phalarope	General Distribution	C/-		-												-	-	-	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging												May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging												Apr-Sep	Apr	Sep	-
197	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	-												May-Aug	May	Aug	-
	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	-												Apr-Sep	Apr	Sep	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
300	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May	
301	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
305	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
315	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shorthnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
328	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
354	Diadromous	Shorthnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
366	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
375	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	-	Jan-May	Jan-May	
	Diadromous	Shorthnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
375	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Oct-Apr	Oct-Apr	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
375	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Jul	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
375	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shorthnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
390	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
404	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
410	Diadromous	Brook trout (sea run)	Migration	C/-		-												-	-	Jan-May	Jan-May	
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
411	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct	
426	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
445	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
446	Marine Benthic	Atlantic tomcod	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	American shad	Migration	-/C		-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
447	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
448	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
448	Marine Benthic	Atlantic tomcod	Migration			-												-	-	Oct-Apr	Oct-Apr	
	Diadromous	American shad	Migration	-/C		-											Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	May-Feb	May-Jul	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C		-												-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
481	Wetland	Rare ecol. community	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-													-	-	-	-
505	Wetland	Brackish marsh	High Ecological Value			-													-	-	-	-
507	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
508	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
542	Wetland	Freshwater tidal marsh	High Ecological Value			-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
622	Plant	Dwarf saltwort	Vulnerable Occurrence	C/-		-													-	-	-	-
623	Upland	Coastal dune grassland	High Ecological Value			-													-	-	-	-
624	Upland	Coastal dune grassland	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
625	Plant	Striped prince's pine	Vulnerable Occurrence	E/-		-													-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
630	Plant	Dwarf saltwort	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
642	Plant	Sassafras	Vulnerable Occurrence	C/-		-													-	-	-	-
643	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-
	Wetland	Forested wetland	High Ecological Value			-													-	-	-	-
645	Plant	Slender blue iris	Vulnerable Occurrence	T/-		-													-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T		-													-	-	-	Jan-Dec	Jan-Dec
	Snake	Northern black racer	Vulnerable Occurrence	C/-		-													-	-	-	Jan-Dec	Jan-Dec
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C		Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C		Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C		Low													Mar-May	May-Jun	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area			Common													Mar-Apr	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area			Common													May-Jul	Aug-Oct	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
675	Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-/C		-													May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common													May-Jul	-	Jan-Dec	Jan-Dec
678	Shrimp	Northern shrimp	General Distribution	-/C		Low													Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr
679	Bivalve	Atl. jackknife clam	Harvest Area			-													-	-	Jan-Dec	Jan-Dec
681	Insect	Rare insect	Vulnerable Occurrence	C/-		-													-	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area			-													May-Jul	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-													Jun-Aug	-	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area			-													Jun-Aug	-	Jan-Dec	Jan-Dec
705	Insect	Saltmarsh tiger beetle	Vulnerable Occurrence	C/-		-													Aug-Sep	-	Jan-Dec	Jan-Dec
713	Insect	Pale swallowtail	Vulnerable Occurrence	C/-		-													May-Jul	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
744	Pinniped	Harbor seal	Haul Out			-													-	-	-	-
745	Whale	Fin whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	Humpback whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	N.A. right whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	Sei whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	Sperm whale	General Distribution	E/-	E	Rare													-	-	-	-

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low													-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Acid	Razorbill	General Distribution	T/-		-													-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-													-	-	-	-
		Great cormorant	General Distribution	T/-		-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
		Common tern	General Distribution	C/T		-													May-Aug	-	-	-
		Roseate tern	General Distribution	E/E	E	-													-	-	-	-
	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-													May-Oct	May-Jun	Jul-Oct	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Diadromous	Atlantic sturgeon	-/T	T	Rare												-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	E/E	E	Rare												-	-	Jan-Dec	Jan-Dec
		Striped bass			High												-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass			Low												-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Hatch	Internest	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Turtle	Green sea turtle	-/-	T	Rare												-	-	Jun-Nov	Jun-Nov
		K. ridley sea turtle	E/-	E	Rare												-	-	Jun-Nov	Jun-Nov
		Leatherback sea turtle	E/-	E	Low												-	-	Jun-Nov	Jun-Nov
		Loggerhead sea turtle	E/-	T	Low												-	-	Jun-Nov	Jun-Nov

INVERTEBRATES





Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Crab	Horseshoe crab	-/C		Low												May-Jul	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS


Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Small Mammal	New England cottontail	E/E		Potential												-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)




BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Black guillemot												May-Aug	-	-	-
		Common murre												-	-	-	-
		Dovekie												-	-	-	-
	Diving	Thick-billed murre												-	-	-	-
		D. crested cormorant												Jun-Sep	-	-	-
		Horned grebe												-	-	-	-
		Red-necked grebe												-	-	-	-
	Gull/Tern	Red-throated loon												-	-	-	-
		G. black-backed gull												-	-	-	-
		Herring gull												-	-	-	-
	Pelagic	Ring-billed gull												-	-	-	-
		Cory's shearwater												-	-	-	-
		Great shearwater												-	-	-	-
		Manx shearwater												-	-	-	-
		Northern fulmar												-	-	-	-
		Northern gannet												-	-	-	-





BIRDS (continued)

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Eggs	Larvae	Juveniles	Adults
			S	F	J	F	M	A	M	J	J	A	S	O	N	D					
	Sooty shearwater																-	-	-	Jan-Dec	Jan-Dec
	Wilson's storm-petrel																-	-	-	Jan-Dec	Apr-Dec
	Red phalarope																-	-	-	Jan-Dec	Mar-Oct




FISH

	Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
		Black Seabass													-	-	-	Jan-Dec	Jan-Dec
		Winter flounder													-	-	-	Mar-Oct	Mar-Oct
		Winter flounder													-	-	-	Jan-Dec	-
	Marine Benthic	American plaice													-	-	-	Mar-Oct	Mar-Oct
		American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
		American sand lance													-	-	-	Mar-Oct	Mar-Oct
		American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
		Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
		Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
		Cunner													-	-	-	Mar-Oct	Mar-Oct
		Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
		Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
		Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
		Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
		Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
		Northern searobin													-	-	-	Mar-Oct	Mar-Oct
		Northern searobin													-	-	-	Jul-Oct	Jul-Oct
		Ocean pout													-	-	-	Mar-Oct	Mar-Oct
		Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
		Red hake													-	-	-	Mar-Oct	Mar-Oct
		Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
		Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
		Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
		Shorthorn sculpin													-	-	-	Sep-May	Sep-May
		Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
		Silver hake													-	-	-	Apr-Nov	Apr-Nov
		Silver hake													-	-	-	Mar-Oct	Mar-Oct
		Skates													-	-	-	Jan-Dec	Jan-Dec
		Skates													-	-	-	Mar-Oct	Mar-Oct
		White hake													-	-	-	Mar-Oct	Mar-Oct
		White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
		Yellowtail flounder													-	-	-	Mar-Oct	Mar-Oct
		Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Marine Pelagic	Atlantic mackerel													-	Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
		Atlantic mackerel													-	-	-	May-Nov	May-Nov
		Butterfish													-	-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog																Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
 Echinoderm	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
 Lobster	Green urchin													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
 Pinniped	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
 Whale	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	1,411.08	2.20
10B	Freshwater Marshes	87.46	0.14
10C	Swamps	2,991.09	4.67
10D	Scrub and Shrub Wetlands	182.86	0.29
9A	Sheltered Tidal Flats	407.59	0.64
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	5.16	0.01

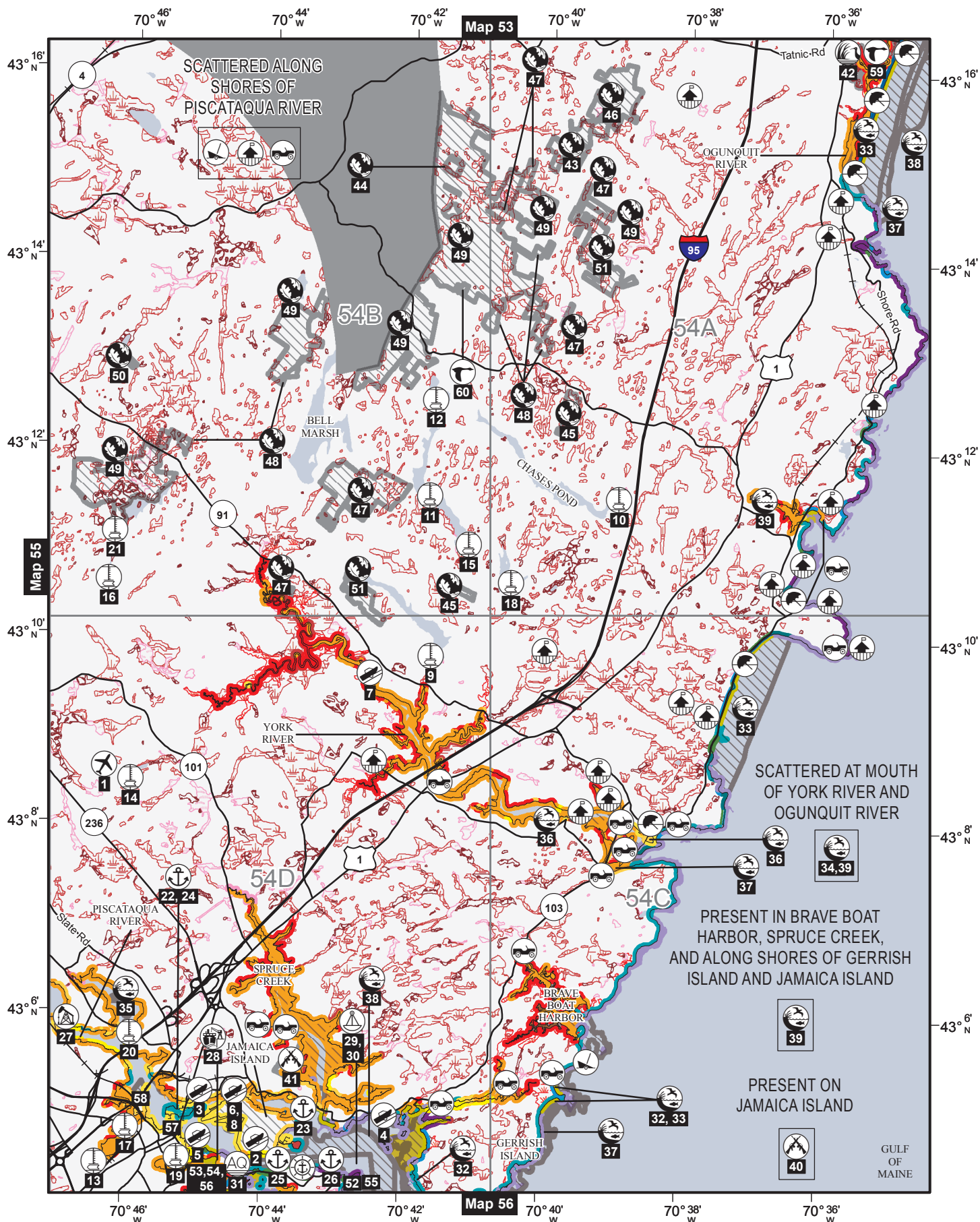
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	94,866.18	58.95	42%
10C	Swamps	581.17	0.36	< 1%
10D	Scrub and Shrub Wetlands	2,035.71	1.26	1%
9A	Sheltered Tidal Flats	95,234.42	59.18	42%
9B	Vegetated Low Banks	7,831.58	4.87	3%
8B	Sheltered, Solid Man-Made Structures	1,278.53	0.79	1%
8C	Sheltered Riprap	1,163.33	0.72	1%
7	Exposed Tidal Flats	7,914.13	4.92	3%
6B	Riprap	3,357.63	2.09	1%
5	Mixed Sand and Gravel Beaches	1,050.08	0.65	< 1%
4	Coarse Grained Sand Beaches	2,200.68	1.37	1%
3A	Fine to Medium Grained Sand Beaches	7,694.84	4.78	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	214.21	0.13	< 1%
1B	Exposed, Solid Man-Made Structures	1,665.12	1.03	1%
Total ESI Shoreline:		227,087.61	141.11	
Total Shoreline:		117,953.76	73.29	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 54
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)					Phone
Map ID	Type	Name	Contact		
1	AIRPORT	LITTLEBROOK AIR PARK	MIKE KAICHEN		
2	BOAT RAMP	BACK BAY BOAT RAMP	STATE - NHFG		
3	BOAT RAMP	GOVT. ST DOCK / KITTERY TOWN LANDING	KITTERY		
4	BOAT RAMP	KITTERY POINT TOWN PIER / LANDING	KITTERY		
5	BOAT RAMP	PISCATAQUA RIVER BOAT RAMP 1	CITY - PORTSMOUTH		
6	BOAT RAMP	PISCATAQUA RIVER BOAT RAMP 3	KITTERY		
7	BOAT RAMP	SCOTTLAND BRIDGE	YORK		
8	BOAT RAMP	TRAIP ACADEMY RAMP	KITTERY		
9	LOCK AND DAM	BOULTER DAM	KITTERY WATER DISTRICT		
10	LOCK AND DAM	CHASES POND DAM	YORK WATER DISTRICT		
11	LOCK AND DAM	FOLLY POND DAM	KITTERY WATER DISTRICT		
12	LOCK AND DAM	FOLLY POND DAM NORTH			
13	LOCK AND DAM	HODGSON BROOK DAM 1	BADGER RAND COMPANY INC		
14	LOCK AND DAM	LITTLE BROOK DAM	GEORGE SARGENT		
15	LOCK AND DAM	MIDDLE POND DAM	KITTERY WATER DISTRICT		
16	LOCK AND DAM	MILL DAM 2	EDWARD + ARTHUR BARTLETT		
17	LOCK AND DAM	NORTH MILL POND DAM	CITY OF PORTSMOUTH		
18	LOCK AND DAM	SCITUATE POND DAM	EST OF ROGER YOUNG		
19	LOCK AND DAM	SOUTH MILL POND DAM	CITY OF PORTSMOUTH PWD		
20	LOCK AND DAM	SPINNEY CREEK CAUSEWAY	STATE OF ME DOT		
21	LOCK AND DAM	UPPER BARTLETT DAM			
22	MARINA	BADGERS ISLAND MARINA			207-439-3810
23	MARINA	DIONS YACHT YARD			207-439-9582
24	MARINA	KITTERY LANDING MARINA			207-439-1661
25	MARINA	KITTERY POINT YACHT CLUB			603-436-9303
26	MARINA	PORTSMOUTH YACHT CLUB			603-436-9877
27	OIL FACILITY	NEWINGTON	PUBLIC SERVICE CO OF NH		
28	PORT	PORTSMOUTH, NH - C0135			
29	REPEATED MEASUREMENT SITE	CML UNH COASTAL MARINE LAB FIELD STATION			
30	REPEATED MEASUREMENT SITE	UNH COASTAL MARINE LAB FIELD STATION			

DISPLAYED ON MAP (POLYGONS)

Map ID	Type	Name	Contact	Phone
31	AQUACULTURE	PORTSMOUTH SCUBA	JAY GINGRICH	603-436-4887
32	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
33	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
34	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
35	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
36	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
37	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
38	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
39	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
40	MILITARY	PORTSMOUTH NAVAL SHIPYARD		
41	MILITARY	PORTSMOUTH NAVAL SHIPYARD (NAVY HOUSING)		
42	NATIONAL ESTUARINE RESEARCH RESERVE	NATURAL ESTUARINE RESEARCH RESERVE		
43	NATURE CONSERVANCY	MOUNT AGAMENTICUS	THE NATURE CONSERVANCY	207-729-5181
44	NATURE CONSERVANCY	MOUNT AGAMENTICUS - GWRLT	THE NATURE CONSERVANCY	207-729-5181
45	NATURE CONSERVANCY	MOUNT AGAMENTICUS MACROSITE	THE NATURE CONSERVANCY	207-729-5181
46	NATURE CONSERVANCY	MT AGAMENTICUS - HILTON EASEMENT	THE NATURE CONSERVANCY	207-729-5181
47	NATURE CONSERVANCY	MT AGAMENTICUS - YORK LAND TRUST	THE NATURE CONSERVANCY	207-729-5181
48	NATURE CONSERVANCY	MT AGAMENTICUS PRESERVE	THE NATURE CONSERVANCY	207-729-5181
49	NATURE CONSERVANCY	MT AGAMENTICUS WMA	THE NATURE CONSERVANCY	207-729-5181
50	NATURE CONSERVANCY	MT AGAMENTICUS-GWRLT	THE NATURE CONSERVANCY	207-729-5181
51	NATURE CONSERVANCY	MT. AGAMENTICUS - YORK LAND TRUST	THE NATURE CONSERVANCY	207-729-5181
52	PIPELINE	CABLE 4		
53	PIPELINE	CABLE 5		
54	PIPELINE	CABLE 6		
55	PIPELINE	CABLE 7		
56	PIPELINE	CABLE 8		
57	PIPELINE	CABLE 9		
58	PIPELINE	CABLE 10		
59	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 1	U.S. FISH & WILDLIFE SERVICE	
60	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 2	PRIVATE LAND OWNER	
ALSO PRESENT IN MAPPED AREA (POLYGONS)				
Type	Name		Contact	Phone
STATE PROTECTED AREA	MOUNT AGAMENTICUS WMA		MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-657-2345

JURISDICTIONS

COUNTY: ROCKINGHAM, YORK
COAST GUARD: DISTRICT 1, SECTOR NORTHERN NEW ENGLAND
USACE: NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT

FEMA: REGION I
EPA: REGION 1

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	977.43	1.53
10B	Freshwater Marshes	1,057.38	1.65
10C	Swamps	8,248.33	12.89
10D	Scrub and Shrub Wetlands	1,671.48	2.61
9A	Sheltered Tidal Flats	1,271.26	1.99
7	Exposed Tidal Flats	225.30	0.35
5	Mixed Sand and Gravel Beaches	52.23	0.08
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	493.20	0.77

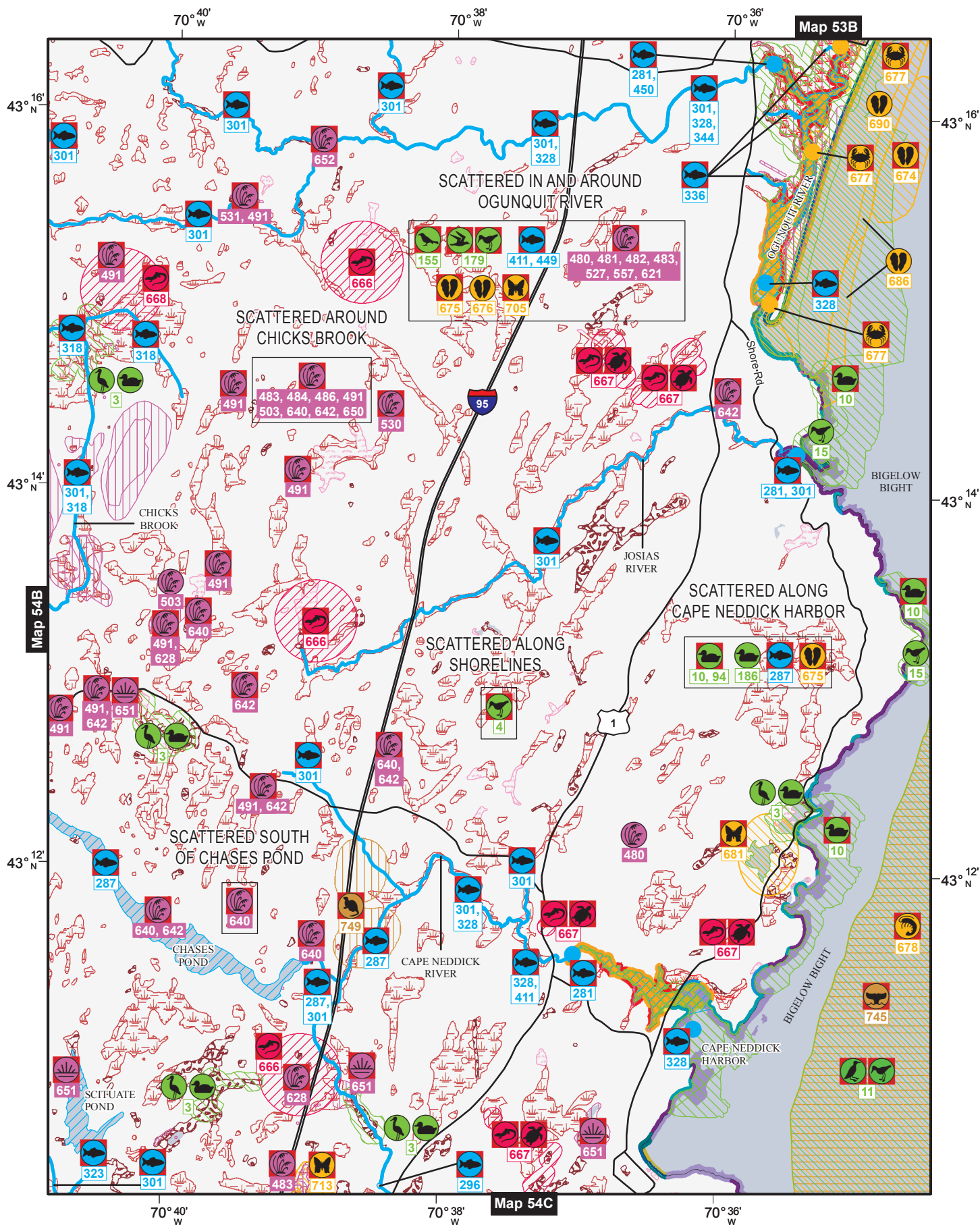
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	80,718.52	50.16	19%
10B	Freshwater Marshes	2,452.61	1.52	1%
10C	Swamps	6,695.97	4.16	2%
10D	Scrub and Shrub Wetlands	480.75	0.30	< 1%
9A	Sheltered Tidal Flats	124,105.38	77.12	29%
9B	Vegetated Low Banks	69,953.09	43.47	16%
8A	Sheltered, Impermeable, Rocky Shores	5,788.03	3.60	1%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	141.01	0.09	< 1%
8A	Sheltered, Impermeable, Rocky Shores	5,788.03	3.60	1%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	141.01	0.09	< 1%
8B	Sheltered, Solid Man-Made Structures	12,395.45	7.70	3%
8C	Sheltered Riprap	13,910.94	8.64	3%
7	Exposed Tidal Flats	15,912.51	9.89	4%
6A	Gravel Beaches	2,566.54	1.59	1%
6B	Riprap	6,497.69	4.04	2%
5	Mixed Sand and Gravel Beaches	25,483.46	15.83	6%
4	Coarse Grained Sand Beaches	6,591.58	4.10	2%
3A	Fine to Medium Grained Sand Beaches	3,609.36	2.24	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	38,734.93	24.07	9%
1A	Exposed, Rocky Shores	10,270.50	6.38	2%
1B	Exposed, Solid Man-Made Structures	3,050.63	1.90	1%
Total ESI Shoreline:		429,358.96	266.79	
Total Shoreline:		242,191.16	150.49	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 54A
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Map 54A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence											
							J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value				0% To 10% Cover												
SAV	Eelgrass	High Ecological Value				10% To 40% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
3	Wading	Waterfowl	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
4	Shorebird	American golden-plover	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Shorebird	Shorebird	Concentration Area				Foraging													-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area			C/-	Foraging													May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area				Foraging													-	-	-	-
	Shorebird	BB sandpiper	Concentration Area				Foraging													-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area				Foraging													-	Aug	Oct	-
	Shorebird	Dunlin	Concentration Area				Foraging													-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area				Foraging													-	May	Aug-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area				Foraging													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area				Foraging													-	-	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area			C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Red Knot	Concentration Area			C/-	Foraging													-	Apr-May	Sep-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			T	Foraging													-	May	Aug-Oct	-
	Shorebird	Sanderling	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area				Foraging													-	Apr-May	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area			C/-	Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area				Foraging													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area				Foraging													-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area				Foraging													-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area				Foraging													-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area			C/-	Foraging													-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			-/C	Foraging													-	May-Jun	Jul-Oct	-
10	Waterfowl	Willlet	Concentration Area				Foraging													-	May-Aug	Jul-Sep	-
11	Waterfowl	Harlequin duck	Vulnerable Occurrence			T/-	-													-	-	-	-
	Acid	Atlantic puffin	General Distribution			T/-	-													-	-	-	-
	Pelagic	Leach's storm-petrel	General Distribution			C/-	-													-	-	-	-
	Shorebird	Red-necked phalarope	General Distribution			C/-	-													-	Jun	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence				-													-	Apr-May	Oct	-
94	Waterfowl	Harlequin duck	Rafting			T/-	-													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C		-												May-Oct	May-Jun	Jul-Oct	-
179	Gull/Tern	Least tern	Vulnerable Occurrence	E/E	E	Foraging												May-Aug	May	Aug	-
186	Shorebird	Piping plover	Vulnerable Occurrence	E/E	E	Foraging												Apr-Sep	Apr	Sep	-
	Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-												-	-	-	-
	Waterfowl	Bufflehead	Rafting			-												-	-	-	-
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Common goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Common merganser	Rafting			-												-	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Rafting			-												-	-	-	-
	Waterfowl	Ruddy duck	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting			-												-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
	Waterfowl	White-winged scoter	Rafting			-												-	-	-	-
	Waterfowl		Rafting			-												-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
287	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
296	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
301	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
318	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
323	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
328	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
344	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
411	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
449	Diadromous	Sea lamprey	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	Jan-Dec	Oct-Apr
	Diadromous	American eel	Migration	-/C	-													-	-	Mar-Oct	Mar-Oct
450	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Migration	E/E	E													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-	-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration	-	-													Dec-Feb	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value		-													-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value		-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value		-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-													-	-	-	-
484	Plant	Endangered plant	Vulnerable Occurrence	E/E	-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value		-													-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T	-													-	-	-	-
503	Wetland	Forested wetland	High Ecological Value		-													-	-	-	-
527	Plant	Pursh seepweed	Vulnerable Occurrence	T/-	-													-	-	-	-
530	Plant	Mountain laurel	Vulnerable Occurrence	C/-	-													-	-	-	-
531	Plant	Atlantic white cedar	Vulnerable Occurrence	C/-	-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-	-													-	-	-	-
621	Plant	Beach plum	Vulnerable Occurrence	E/-	-													-	-	-	-
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-	-													-	-	-	-
640	Plant	C. sweetpepperbush	Vulnerable Occurrence	C/-	-													-	-	-	-
642	Plant	Sassafras	Vulnerable Occurrence	C/-	-													-	-	-	-
650	Plant	Threatened plant	Vulnerable Occurrence	T/T	-													-	-	-	-
	Upland	Rare upland community	High Ecological Value		-													-	-	-	-
651	FAV	Featherfoil	Vulnerable Occurrence	T/E	-													-	-	-	-
652	Plant	O.fruit horse-gentian	Vulnerable Occurrence	E/-	-													-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T	-													-	-	-	Jan-Dec	Jan-Dec
667	Snake	Northern black racer	Vulnerable Occurrence	C/-	-													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Spotted salamander	Concentration Area		Common													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Amphibian	Wood Frog	Concentration Area		Common																	

REPTILES & AMPHIBIANS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
668	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T		-													-	-	-	Jan-Dec	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
674	Bivalve	Sea scallop	Harvest Area	-/C		-													Jul-Oct	-	-	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C		-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area			-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C		Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
678	Shrimp	Northern shrimp	General Distribution	-/C		Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr
681	Insect	Rare insect	Vulnerable Occurrence	C/-		-													May-Jul	-	-	Jan-Dec	Jan-Dec
686	Bivalve	Northern quahog	Harvest Area			-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area			-													Jun-Aug	-	-	Jan-Dec	Jan-Dec
705	Insect	Saltmarsh tiger beetle	Vulnerable Occurrence	C/-		-													May-Jul	-	-	Jan-Dec	Jan-Dec
713	Insect	Pale swallowtail	Vulnerable Occurrence	C/-		-													May-Jul	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
745	Whale	Fin whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	Humpback whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	N.A. right whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	Sei whale	General Distribution	E/-	E	Low													-	-	-	-
	Whale	Sperm whale	General Distribution	E/-	E	Rare													-	-	-	-

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low													-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Razorbill	General Distribution	T/-		-													-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-													-	-	-	-
		Great cormorant	General Distribution	T/-		-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-													May-Oct	-	-	-
		Common tern	General Distribution	C/T		-													May-Aug	-	-	-
		Roseate tern	General Distribution	E/E	E	-													-	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH S F -J T E/E E	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D				
	Diadromous	Atlantic sturgeon	-J T	Rare													-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	E/E E	Rare													-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Striped bass		High													-	-	Jan-Dec	Jan-Dec
		Black Seabass		Low													-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH S F -J T E/E E	Concentration	Monthly Presence												Hatch	Internest	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D				
	Turtle	Green sea turtle	-J T	Rare													-	-	Jun-Nov	Jun-Nov
		K. ridley sea turtle	E/- E	Rare													-	-	Jun-Nov	Jun-Nov
		Leatherback sea turtle	E/- E	Low													-	-	Jun-Nov	Jun-Nov
		Loggerhead sea turtle	E/- T	Low													-	-	Jun-Nov	Jun-Nov

INVERTEBRATES





Subelement	Species	Mapping Qualifier	ME/NH S F -J C	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
	Crab	Horseshoe crab		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH S F E/E	Concentration	Monthly Presence															
	Small Mammal	New England cottontail		Potential													-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F E/E	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Black guillemot															May-Aug	-	-	-
		Common murre															-	-	-	-
		Dovekie															-	-	-	-
	Diving	Thick-billed murre															-	-	-	-
		D. crested cormorant															Jun-Sep	-	-	-
		Horned grebe															-	-	-	-
		Red-necked grebe															-	-	-	-
		Red-throated loon															-	-	-	-
	Gull/Tern	G. black-backed gull															-	-	-	-
		Herring gull															-	-	-	-
		Ring-billed gull															-	-	-	-
	Pelagic	Cory's shearwater															-	-	-	-
		Great shearwater															-	-	-	-
		Manx shearwater															-	-	-	-
		Northern fulmar															-	-	-	-
		Northern gannet															-	-	-	-





BIRDS (continued)

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Juveniles	Adults
	Sooty shearwater													-	-	-	Jan-Dec	Jan-Dec
	Wilson's storm-petrel													-	-	-	Jan-Dec	Jan-Dec
	Red phalarope													-	-	-	Jan-Dec	Jan-Dec



FISH

Monthly Presence




Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Winter flounder													-	-	-	Jan-Dec	-
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	-	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Dec-Jun	Jan-Dec	Oct-Jul
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec
	Skates													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	Mar-Oct	Mar-Oct
	White hake													-	-	-	May-Nov	May-Nov
	Yellowtail flounder													-	Jul-Oct	Jul-Oct	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	-	-	Apr-Sep	Apr-Sep
	Atlantic mackerel													-	Apr-Sep	Apr-Sep	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	Jun-Jul	Jun-Jul	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

Southern Maine and New Hampshire: Map 54A


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	152.57	0.24
10B	Freshwater Marshes	156.19	0.24
10C	Swamps	2,637.75	4.12
10D	Scrub and Shrub Wetlands	345.91	0.54
9A	Sheltered Tidal Flats	125.21	0.20
7	Exposed Tidal Flats	10.21	0.02
5	Mixed Sand and Gravel Beaches	7.20	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	173.73	0.27

ESI SHORELINE HABITAT TYPES

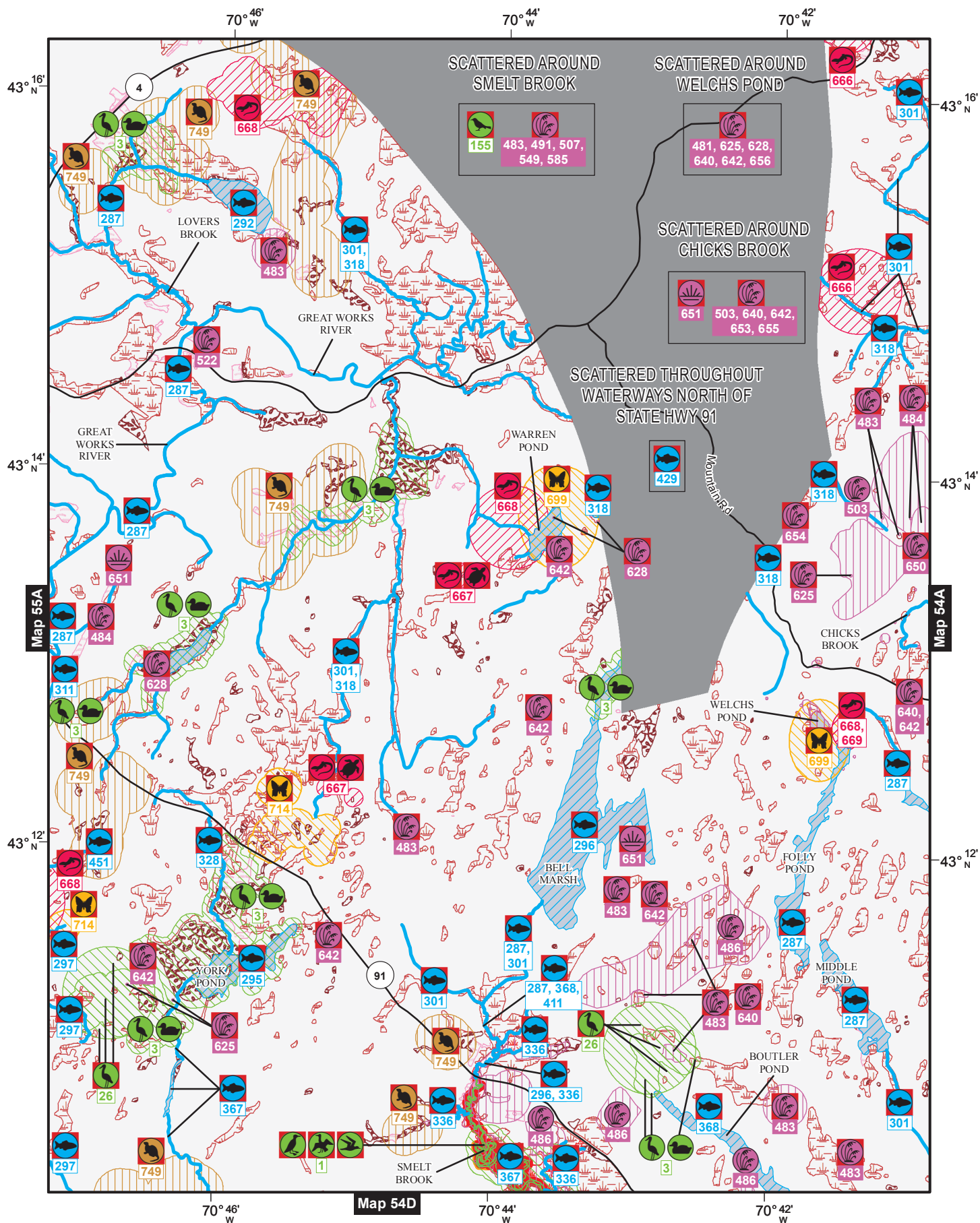
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	8,728.18	5.42	14%
10C	Swamps	200.71	0.12	< 1%
9A	Sheltered Tidal Flats	13,437.87	8.35	21%
9B	Vegetated Low Banks	3,688.40	2.29	6%
8B	Sheltered, Solid Man-Made Structures	195.45	0.12	< 1%
8C	Sheltered Riprap	431.13	0.27	1%
7	Exposed Tidal Flats	3,831.62	2.38	6%
6A	Gravel Beaches	786.95	0.49	1%
6B	Riprap	1,261.86	0.78	2%
5	Mixed Sand and Gravel Beaches	5,149.96	3.20	8%
4	Coarse Grained Sand Beaches	1,557.98	0.97	2%
3A	Fine to Medium Grained Sand Beaches	3,609.73	2.24	6%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	13,714.50	8.52	21%
1A	Exposed, Rocky Shores	7,246.96	4.50	11%
1B	Exposed, Solid Man-Made Structures	742.32	0.46	1%

Total ESI Shoreline: 64,583.63
Total Shoreline: 33,364.93
Total ESI Shoreline: 40.13
Total Shoreline: 20.73

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 54B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
1	Acid	Razorbill	General Distribution		T/-		-													-	-	-	-
	Diving	Common Loon	General Distribution		-/T		-													-	-	-	-
	Diving	Great cormorant	General Distribution		T/-		-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution		T/C		-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution		C/T		-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution		E/E	E	-													-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Waterfowl	Waterfowl	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
26	Wading	Great blue heron	Vulnerable Occurrence		C/-		-													May-Sep	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence		C/C		-													May-Oct	May-Jun	Jul-Oct	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
								J	F	M	A	M	J	J	A	S	O	N	D					
287	Diadromous	Alewife	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
292	Diadromous	Alewife	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration		-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration		-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
295	Diadromous	Alewife	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration		-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration		-/C		-													-	-	-	Jan-Dec	Oct-Apr
296	Diadromous	Alewife	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration		-/C		-													-	-	-	Mar-Oct	Mar-Oct
297	Diadromous	Alewife	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration		-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration		-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration		-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration		-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration		-/C		-													-	-	-	Jan-Dec	Oct-Apr
301	Diadromous	American eel	Migration		-/C		-													-	-	-	Mar-Oct	Mar-Oct
311	Diadromous	American eel	Migration		-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration		-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration		-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration		-/C		-													-	-	-	Jan-Dec	Oct-Apr
318	Diadromous	Atlantic salmon	Migration		-/C	E	-													-	-	-	Jan-Dec	May-Mar

Southern Maine and New Hampshire: Map 54B

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults										
				S	F		J	F	M	A	M	J	J	A	S	O	N	D															
328	Diadromous	Sea lamprey	Migration	-/C		-											-											-			-	Apr-Jul	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-											-											-			-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-											-											-			-	Jan-Dec	Jan-Dec
367	Diadromous	Striped bass	Migration			-											-											-			-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb											-			-	Jan-Dec	Jan-Dec
368	Diadromous	Alewife	Migration	-/C		-											-											-			-	Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-/C	T	-											-											-			-	Mar-Oct	Mar-Oct
411	Diadromous	Atlantic sturgeon	Migration	-/T	T	-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-											-											-			-	Jan-Dec	Jan-Dec
429	Diadromous	Striped bass	Migration			-											-											-			-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-											Dec-Feb											-			-	Jan-Dec	Jan-Dec
451	Diadromous	American eel	Migration	-/C		-											-											-			-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-											-											-			-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-											-			-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-											-											-			-	Apr-Dec	Apr-Jul
	Diadromous	Alewife	Migration	-/C		-											-											-			-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-											-											-			-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-											-											-			-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-											-											-			-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-											-											-			-	Apr-Dec	Apr-Jul
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-											-											-			-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-/C		-											-											-			-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-											-											-			-	Jan-Dec	Oct-Apr

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
481	Wetland	Rare ecol. community	High Ecological Value		-												
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-												
484	Plant	Endangered plant	Vulnerable Occurrence	E/E	-												
486	Upland	Rare upland community	High Ecological Value		-												
491	Plant	Threatened plant	Vulnerable Occurrence	T/T	-												
503	Wetland	Forested wetland	High Ecological Value		-												
507	Wetland	Salt marsh	High Ecological Value		-												
	Wetland	SM cordgrass/wiregrass	High Ecological Value		-												
522	Plant	Twining screwstem	Vulnerable Occurrence	T/-	-												
549	Plant	Eaton's beggarticks	Vulnerable Occurrence	C/-	-												
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-												
585	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-												
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-												
625	Plant	Striped prince's pine	Vulnerable Occurrence	E/-	-												
628	Plant	Smooth winterberry	Vulnerable Occurrence	C/-	-												
640	Plant	C. sweetpepperbush	Vulnerable Occurrence	C/-	-												
642	Plant	Sassafras	Vulnerable Occurrence	C/-	-												
650	Plant	Threatened plant	Vulnerable Occurrence	T/T	-												
	Upland	Rare upland community	High Ecological Value		-												
651	FAV	Featherfoil	Vulnerable Occurrence	T/E	-												
653	Plant	Rare plant	Vulnerable Occurrence	C/C	-												
	Wetland	Forested wetland	High Ecological Value		-												
654	Plant	Atlantic white cedar	Vulnerable Occurrence	C/-	-												
	Plant	Threatened plant	Vulnerable Occurrence	T/T	-												
	Wetland	Forested wetland	High Ecological Value		-												
655	Plant	C. sweetpepperbush	Vulnerable Occurrence	C/-	-												
	Plant	Sassafras	Vulnerable Occurrence	C/-	-												
	Plant	Smooth winterberry	Vulnerable Occurrence	C/-	-												
656	Plant	Tail horned beaksedge	Vulnerable Occurrence	E/-	-												

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T	-												
	Snake	Northern black racer	Vulnerable Occurrence	C/-	-												
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low												
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare												
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low												
	Amphibian	Spotted salamander	Concentration Area		Common												
	Amphibian	Wood Frog	Concentration Area		Common												
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E	Very Low												
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low												
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low												
668	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T	-												
669	Amphibian	Rare salamander	Vulnerable Occurrence	C/-	-												

INVERTEBRATES

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence	Spawn	Eggs	Larvae	Juveniles	Adults
								J F M A M J J A S O N D					
699	Insect	Scarlet bluet		Vulnerable Occurrence	C/-		-		May-Jul	-	-	Jan-Dec	Jan-Dec
714	Insect	Ringed boghaunter		Vulnerable Occurrence	T/-		-		May-Jul	-	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence
								J F M A M J J A S O N D
749	Small Mammal	New England cottontail		Vulnerable Occurrence	E/E		Low	





WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

TERRESTRIAL MAMMALS

Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence
							J F M A M J J A S O N D
	Small Mammal	New England cottontail		General Distribution	E/E	Potential	

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)


BIRDS

Subelement	Species	Monthly Presence	Nest	Mig.(S)	Mig.(F)	Molt
		J F M A M J J A S O N D				
	Alcid		May-Aug	-	-	-
	Black guillemot					
	Dovekie					
	Thick-billed murre					
	D. crested cormorant		Jun-Sep	-	-	-
	Diving					
	Horned grebe					
	Red-necked grebe					
	Red-throated loon					
	G. black-backed gull					
	Gull/Tern					
	Herring gull					
	Ring-billed gull					
	Pelagic					
	Northern gannet					

MARINE MAMMALS

Subelement	Species	Monthly Presence	Mating	Calving	Pupping	Molt
		J F M A M J J A S O N D				
	Pinniped					
	Harbor seal					

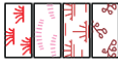
TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence
		J F M A M J J A S O N D
	Small Mammal	
	Beaver	
	Muskrat	
	Northern river otter	

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	94.02	0.15
10B	Freshwater Marshes	272.79	0.43
10C	Swamps	2,351.85	3.67
10D	Scrub and Shrub Wetlands	526.52	0.82



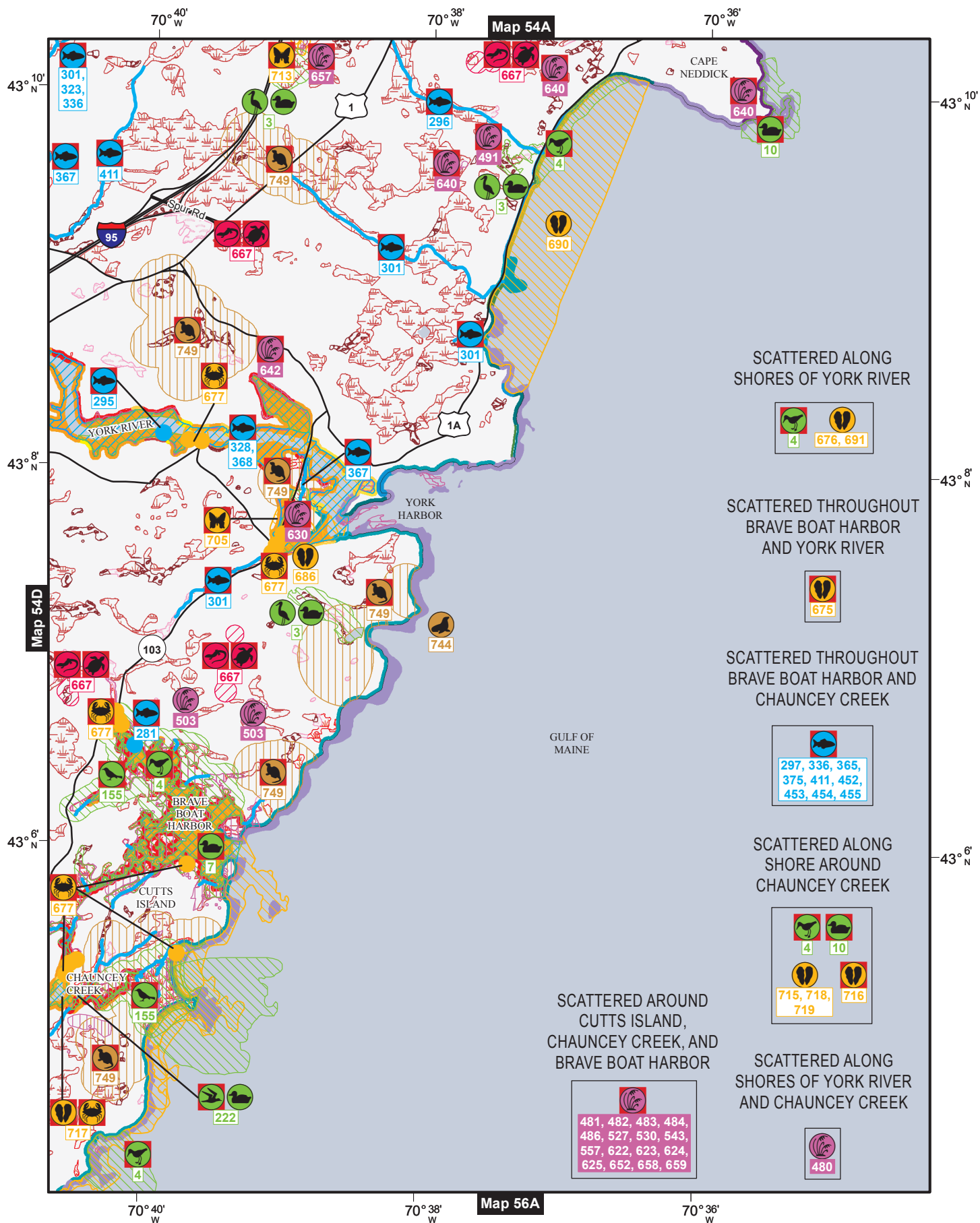
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	6,273.25	3.90	72%
10B	Freshwater Marshes	10.30	0.01	< 1%
10C	Swamps	768.73	0.48	9%
9B	Vegetated Low Banks	1,663.30	1.03	19%
Total ESI Shoreline:		8,715.58	5.42	
Total Shoreline:		7,946.86	4.94	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



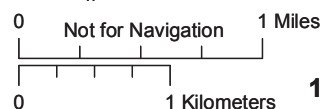


Map 54C

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 54C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/- T	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
	Shorebird	Willet	Concentration Area	-C	Foraging												
7	Waterfowl	American black duck	Rafting		-												
	Waterfowl	Black Scoter	Rafting		-												
	Waterfowl	Bufflehead	Rafting		-												
	Waterfowl	Common eider	Rafting		-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	Common goldeneye	Rafting															-	-	-	-
	Waterfowl	Common merganser	Rafting															-	-	-	-
	Waterfowl	Harlequin duck	Rafting		T/-													-	-	-	-
	Waterfowl	Long-tailed duck	Rafting															-	May	Sep	-
	Waterfowl	Mallard	Rafting															-	Apr-Aug	-	-
	Waterfowl	Red-breasted merganser	Rafting															-	-	-	-
	Waterfowl	Ruddy duck	Rafting															-	Dec-Jan	-	-
	Waterfowl	Scaup	Rafting															-	Dec-Jan	-	-
	Waterfowl	Surf scoter	Rafting															-	-	-	-
	Waterfowl	White-winged scoter	Rafting															-	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-														-	-	-	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C														May-Oct	May-Jun	Jul-Oct	-
222	Gull/Tern	Bonaparte's gull	Concentration Area															-	-	-	-
	Gull/Tern	Common tern	Concentration Area	C/T														May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area															May-Aug	-	-	-
	Gull/Tern	Herring gull	Concentration Area															-	-	-	-
	Gull/Tern	Ring-billed gull	Concentration Area															-	-	-	-
	Waterfowl	American black duck	Concentration Area															-	-	-	-
	Waterfowl	Bufflehead	Concentration Area															-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area															-	-	-	-
	Waterfowl	Mallard	Concentration Area															Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area															-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C														-	-	-	Mar-Oct	Mar-Oct
295	Diadromous	Alewife	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
296	Diadromous	Alewife	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
297	Diadromous	Alewife	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American eel	Migration	-/C														-	-	-	May-Feb	May-Jul
	Diadromous	American shad	Migration	-/C														-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic salmon	Migration	-/C														-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C														-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Sea lamprey	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
301	Diadromous	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
323	Diadromous	American eel	Migration	-/C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Alewife	Migration	-/C														-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
328	Freshwater	Rainbow smelt	Migration	-/C														-	-	-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
365	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
367	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
368	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
375	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
411	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
452	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
452	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	General Distribution	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	General Distribution	-/C		-													-	-	-	Apr-Jul	Apr-Jul
	Diadromous	American shad	General Distribution	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	General Distribution	-/C	E	-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	T	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	General Distribution	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	General Distribution	-/C		-													-	-	-	Jan-Dec	Jan-Dec
						-													-	-	-	Apr-Dec	Apr-Jul
						-													-	-	-	Apr-Dec	Apr-Jul

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
453	Diadromous	Shorthead sturgeon	Concentration Area	E/E	E	Rare												-	-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	General Distribution	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	American sand lance	Concentration Area			Common												-	-	Dec-Jun	Jan-Dec	Mar-Nov	
	Marine Benthic	Cunner	Concentration Area			Common												Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	Migration	-/C		-												-	-	-	Mar-Oct	Mar-Oct	
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
454	Diadromous	Striped bass	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shorthead sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
455	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	Atlantic tomcod	Migration	-/C		-												Dec-Feb	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Diadromous	American shad	Migration	-/C		-												-	-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	-	Jan-Dec	May-Mar	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	-	Apr-Dec	Apr-Jul	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	-	Jan-Dec	Oct-Apr	
																		-	-	-	Jan-Dec	Oct-Apr	

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence															
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value			-													-	-	-	-
482	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
484	Plant	Endangered plant	Vulnerable Occurrence	E/E		-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-													-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T		-													-	-	-	-
503	Wetland	Forested wetland	High Ecological Value			-													-	-	-	-
527	Plant	Pursh seepweed	Vulnerable Occurrence	T/-		-													-	-	-	-
530	Plant	Mountain laurel	Vulnerable Occurrence	C/-		-													-	-	-	-
543	Plant	Meadow garlic	Vulnerable Occurrence	C/-		-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-

HABITATS & RARE PLANTS (continued)

[illegible]

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec	
	Amphibian	Spotted salamander	Concentration Area														Mar-May	Apr-Jun	-	May-Sep	Mar-Jun	
	Amphibian	Wood Frog	Concentration Area														Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep	
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	
	Turtle	Wood turtle	Vulnerable Occurrence	C/C													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
675	Bivalve	Softshell clam	Harvest Area	-/C	-												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec	
676	Bivalve	Blue mussel	Harvest Area		-												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec	
677	Crab	Horseshoe crab	Spawning Area	-/C	Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec	
686	Bivalve	Northern quahog	Harvest Area		-												Jun-Aug	-	-	Jan-Dec	Jan-Dec	
690	Bivalve	Atlantic surfclam	Harvest Area		-												Jun-Aug	-	-	Jan-Dec	Jan-Dec	
691	Bivalve	European flat oyster	Harvest Area		-												Aug-Sep	-	-	Jan-Dec	Jan-Dec	
705	Insect	Saltmarsh tiger beetle	Vulnerable Occurrence	C/-	-												May-Jul	-	-	Jan-Dec	Jan-Dec	
713	Insect	Pale swallowtail	Vulnerable Occurrence	C/-	-												May-Jul	-	-	Jan-Dec	Jan-Dec	
715	Bivalve	Northern quahog	Harvest Area		Common												Jun-Aug	-	-	Jan-Dec	Jan-Dec	
716	Bivalve	Softshell clam	Harvest Area	-/C	Common												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec	
717	Bivalve	Softshell clam	Harvest Area	-/C	Common												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec	
	Crab	Horseshoe crab	General Distribution	-/C	Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec	
718	Bivalve	Atl. jackknife clam	Harvest Area		Common												-	-	-	Jan-Dec	Jan-Dec	
719	Bivalve	Atlantic surfclam	Harvest Area		Common												Jun-Aug	-	-	Jan-Dec	Jan-Dec	

Southern Maine and New Hampshire: Map 54C

MARINE MAMMALS






Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
744	Pinniped	Harbor seal	Haul Out	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
Monthly Presence																							

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J	F	M	A	M											
749	Small Mammal	New England cottontail	Vulnerable Occurrence	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
Monthly Presence																							

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J	F	M	A	M												
	Acid	Atlantic puffin	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Diving	Razorbill	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Common Loon	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Gull/Tern	Great cormorant	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Arctic tern	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Common tern	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Roseate tern	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Pelagic	Leach's storm-petrel	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Shorebird	Red-necked phalarope	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-



FISH

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J	F	M	A	M												
	Diadromous	Atlantic sturgeon	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Shortnose sturgeon	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Striped bass	Concentration Area	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Estuarine Nursery	Black Seabass	Concentration Area	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J	F	M	A	M												
	Turtle	Green sea turtle	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		K. ridley sea turtle	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Leatherback sea turtle	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
		Loggerhead sea turtle	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J	F	M	A	M												
	Crab	Horseshoe crab	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Shrimp	Northern shrimp	General Distribution	ME/NH				J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-

MARINE MAMMALS






Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Fin whale	General Distribution	E/-	E													-	-	-	-
	Humpback whale	General Distribution	E/-	E													-	-	-	-
	N.A. right whale	General Distribution	E/-	E													-	-	-	-
	Sei whale	General Distribution	E/-	E													-	-	-	-
	Sperm whale	General Distribution	E/-	E													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	New England cottontail	General Distribution	E/E	Potential													-	-	-	-





ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
	Black guillemot																May-Aug	-	-	-
	Common murre																-	-	-	-
	Dovekie																-	-	-	-
	Thick-billed murre																-	-	-	-
	D. crested cormorant																Jun-Sep	-	-	-
	Horned grebe																-	-	-	-
	Red-necked grebe																-	-	-	-
	Red-throated loon																-	-	-	-
	G. black-backed gull																-	-	-	-
	Herring gull																-	-	-	-
	Ring-billed gull																-	-	-	-
	Cory's shearwater																-	-	-	-
	Great shearwater																-	-	-	-
	Manx shearwater																-	-	-	-
	Northern fulmar																-	-	-	-
	Northern gannet																-	-	-	-
	Sooty shearwater																-	-	-	-
	Wilson's storm-petrel																-	-	-	-
	Red phalarope																-	-	-	-

FISH

Monthly Presence

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic tomcod													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Mar-Oct	Mar-Oct

FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Skates													-	-	Jan-Dec	Jan-Dec
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	White hake													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Butterfish													-	-	May-Oct	May-Oct

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Blue mussel													May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Northern quahog													Jun-Aug	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
	Db grass shrimp													-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	329.58	0.51
10B	Freshwater Marshes	101.71	0.16
10C	Swamps	1,114.28	1.74
10D	Scrub and Shrub Wetlands	210.73	0.33
9A	Sheltered Tidal Flats	296.03	0.46
5	Mixed Sand and Gravel Beaches	12.72	0.02
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	255.67	0.40

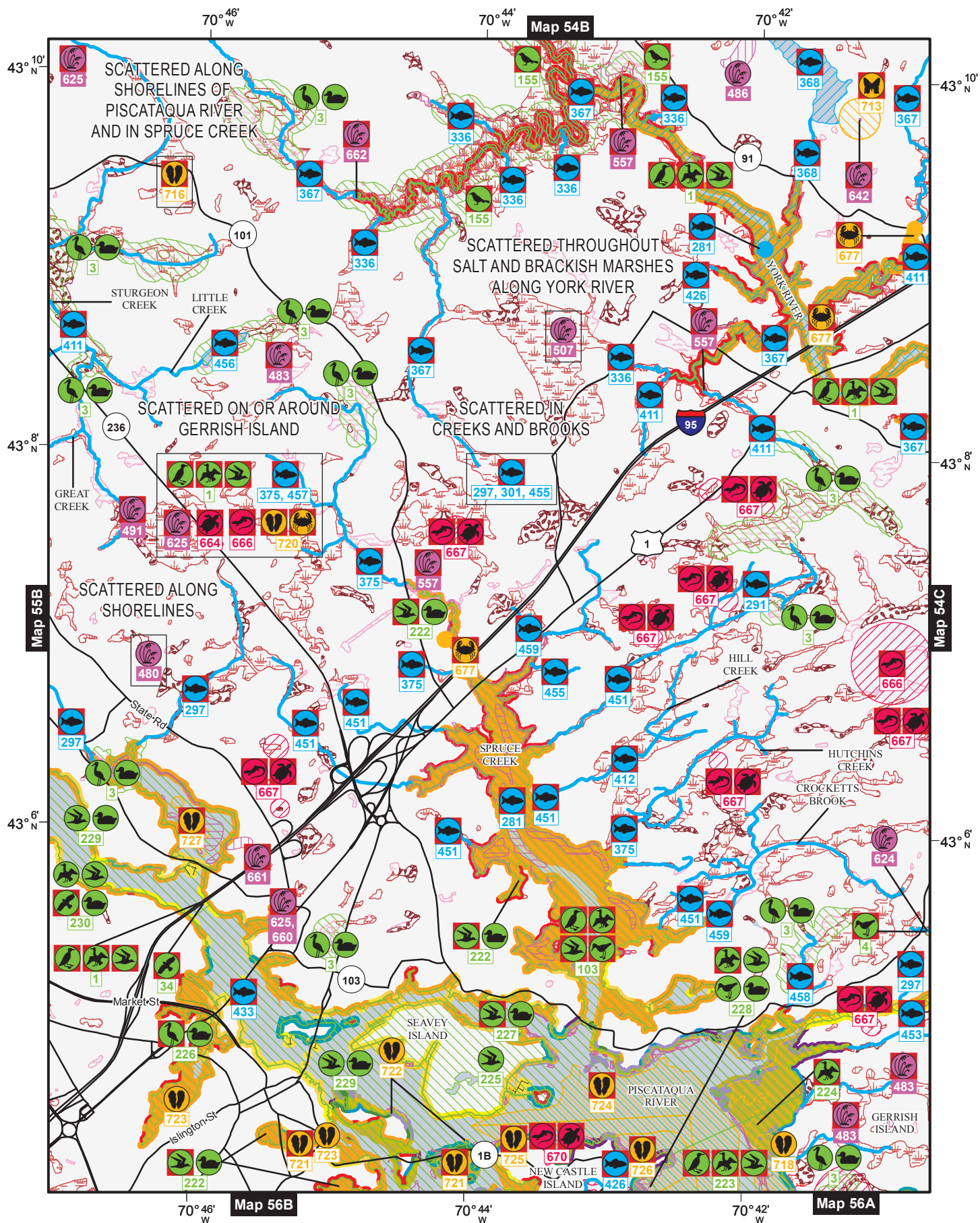
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	24,951.23	15.50	22%
10C	Swamps	493.88	0.31	< 1%
10D	Scrub and Shrub Wetlands	195.23	0.12	< 1%
9A	Sheltered Tidal Flats	33,843.22	21.03	30%
9B	Vegetated Low Banks	9,997.60	6.21	9%
8A	Sheltered, Impermeable, Rocky Shores	461.11	0.29	< 1%
8B	Sheltered, Solid Man-Made Structures	1,502.45	0.93	1%
8C	Sheltered Riprap	3,522.50	2.19	3%
7	Exposed Tidal Flats	3,220.59	2.00	3%
6A	Gravel Beaches	1,779.59	1.11	2%
6B	Riprap	1,254.09	0.78	1%
5	Mixed Sand and Gravel Beaches	12,625.38	7.85	11%
4	Coarse Grained Sand Beaches	3,036.27	1.89	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	16,288.38	10.12	14%
1A	Exposed, Rocky Shores	1,322.97	0.82	1%
Total ESI Shoreline:		114,494.51	Total ESI Shoreline: 71.14	
		61,312.86	Total Shoreline: 38.10	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



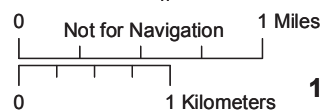


Map 54D

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 54D
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed	Harvest Area		High												
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												
SAV	Eelgrass	High Ecological Value		Some-Bottom (60-90%)												
SAV	Eelgrass	High Ecological Value		Half (30-60%)												
SAV	Eelgrass	High Ecological Value		Scarce (10-30%)												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
1	Alcid	Razorbill	General Distribution	T/-	-												
	Diving	Common Loon	General Distribution	-/T	-												
	Diving	Great cormorant	General Distribution	T/-	-												
	Gull/Tern	Arctic tern	General Distribution	T/C	-												
	Gull/Tern	Common tern	General Distribution	C/T	-												
	Gull/Tern	Roseate tern	General Distribution	E/E	E												
3	Wading	Wading birds	Vulnerable Occurrence		-												
	Waterfowl	Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area	C/-	Foraging												
	Shorebird	American oystercatcher	Concentration Area		Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												

Southern Maine and New Hampshire: Map 54D

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C														May-Aug	May-Jun	Jul-Sep	-
34	Raptor	Peregrine falcon	Vulnerable Occurrence	E/T														-	-	-	-
103	Acid	Razorbill	General Distribution	T/-														-	-	-	-
	Diving	Common Loon	General Distribution	-T														-	-	-	-
	Diving	Great cormorant	General Distribution	T/-														-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C														May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T														May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E	E													-	-	-	-
	Shorebird	American golden-plover	Concentration Area															-	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-														May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area															-	-	-	-
	Shorebird	BB sandpiper	Concentration Area															-	Aug	Oct	-
	Shorebird	Black-bellied plover	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area															-	May	Aug-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area															-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area															-	-	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Concentration Area															-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Concentration Area	C/-	T													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area															-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area															-	Jun	-	-
	Shorebird	Stilt sandpiper	Concentration Area															-	Jul	Sep	-
	Shorebird	Western sandpiper	Concentration Area															-	Jul	Oct	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Concentration Area	-C														May-Aug	May-Jun	Jul-Sep	-
155	Passerine	Saltmarsh sharp-tailed sparrow	Vulnerable Occurrence	C/C														May-Oct	May-Jun	Jul-Oct	-
222	Gull/Tern	Bonaparte's gull	Concentration Area															-	-	-	-
	Gull/Tern	Common tern	Concentration Area	C/T														May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area															May-Aug	-	-	-
	Gull/Tern	Herring gull	Concentration Area															-	-	-	-
	Gull/Tern	Ring-billed gull	Concentration Area															-	-	-	-
	Waterfowl	American black duck	Concentration Area															-	-	-	-
	Waterfowl	Bufflehead	Concentration Area															-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.		Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N		(S)	(F)	
	Waterfowl	Common goldeneye	Concentration Area			Med												-	-	-	-
	Waterfowl	Mallard	Concentration Area			High												Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			Low												-	-	-	-
223	Alcid	Razorbill	General Distribution	T/-		-												-	-	-	-
	Diving	Common Loon	General Distribution	-/T		-												-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-												May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T		-												May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E	E	-												-	-	-	-
224	Diving	Great cormorant	General Distribution	T/-		-												-	-	-	-
225	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
226	Wading	American bittern	Concentration Area			Low												May-Aug	Apr	Oct	-
	Wading	BC night-heron	Concentration Area	E/-		Low												-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Low												-	-	-	-
	Wading	Great egret	Concentration Area			Low												-	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Low												-	Apr	Oct	-
227	Waterfowl	American black duck	Concentration Area			Low												-	Apr	Oct	-
	Gull/Tern	Bonaparte's gull	Concentration Area			Med												Apr-Aug	-	-	-
	Gull/Tern	Common tern	Concentration Area	C/T		Low												-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												May-Aug	-	-	-
	Gull/Tern	Ring-billed gull	Concentration Area			Med												May-Aug	-	-	-
228	Waterfowl	Red-breasted merganser	Concentration Area			Low												-	-	-	-
	Diving	D. crested cormorant	Concentration Area			Med-High												Jun-Sep	-	-	-
	Diving	Great cormorant	Concentration Area	T/-		Low												-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												-	-	-	-
	Gull/Tern	Herring gull	Concentration Area			High												-	-	-	-
229	Shorebird	Purple sandpiper	Concentration Area			Med												-	-	-	-
	Waterfowl	American black duck	Concentration Area			Low												-	-	-	-
	Waterfowl	Common eider	Nesting			Med												May-Aug	-	-	-
	Gull/Tern	Herring gull	Concentration Area			High												-	-	-	-
	Waterfowl	American black duck	Concentration Area			High												-	-	-	-
230	Waterfowl	Bufflehead	Concentration Area			Med												-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area			Med												-	-	-	-
	Waterfowl	Mallard	Concentration Area			High												Apr-Aug	-	-	-
	Diving	D. crested cormorant	Concentration Area			Low												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												-	-	-	-
	Raptor	Bald eagle	Concentration Area	C/T		15-25												Mar-May	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med												Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			High												-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D																		
281	Diadromous	American eel	Harvest Area	-/C														-																Mar-Oct	Mar-Oct
291	Diadromous	Alewife	Migration	-/C														-																Apr-Jul	Apr-Jul
	Diadromous	American shad	Migration	-/C														-																May-Jul	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E													-																Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-/C														-																Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C														-																Apr-Jul	Apr-Jul
297	Diadromous	Alewife	Migration	-/C														-																Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-/C														-																Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C														-																May-Jul	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E													-																Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-/C														-																Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C														-																Apr-Jul	Apr-Jul
301	Freshwater	Rainbow smelt	Migration	-/C														-																Jan-Dec	Oct-Apr
	Diadromous	American eel	Migration	-/C														-																Mar-Oct	Mar-Oct
336	Diadromous	Atlantic sturgeon	Migration	-/T	T													-																Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-																Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-																Jan-Dec	Jan-Dec
Marine Benthic	Atlantic tomcod	Migration																-																Jan-Dec	Jan-Dec
367	Diadromous	Alewife	Migration	-/C														-																Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-/C														-																Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-																Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-																Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration															-																Jan-Dec	Jan-Dec
Freshwater	Rainbow smelt	Migration		-/C														-																Jan-Dec	Oct-Apr
Marine Benthic	Atlantic tomcod	Migration																-																Jan-Dec	Jan-Dec
368	Diadromous	Alewife	Migration	-/C														-																Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-/C														-																Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-																Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-																Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	E/E	E													-																Jan-Dec	Jan-Dec
Marine Benthic	Atlantic tomcod	Migration																-																Jan-Dec	Jan-Dec
375	Diadromous	Alewife	Migration	-/C														-																Apr-Jul	Apr-Jul
	Diadromous	American eel	Migration	-/C														-																Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C														-																May-Jul	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E													-																Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-																Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C														-																Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C														-																Apr-Jul	Apr-Jul
	Diadromous	Shorthose sturgeon	Migration	E/E	E													-																Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-/C														-																Jan-Dec	Jan-Dec
Freshwater	Rainbow smelt	Migration		-/C														-																Jan-Dec	Oct-Apr
Marine Benthic	Atlantic tomcod	Migration																-																Jan-Dec	Jan-Dec
411	Diadromous	American eel	Migration	-/C														-																Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-																Jan-Dec	Jan-Dec

FISH (continued)

[illegible]

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
458	Diadromous	Shorthead sturgeon	General Distribution	E/E	E	Rare													-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	Apr-Jul	Apr-Jul
	Diadromous	American shad	Migration	-/C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	Apr-Dec	Apr-Jul
Diadromous	Shorthead sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec	
Freshwater	Rainbow smelt	Migration	-/C		-													-	-	Jan-Dec	Oct-Apr	
459	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar	
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shorthead sturgeon	Migration	E/E	E	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration			-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Oct-Apr	

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence															
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-													-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T		-													-	-	-	-
507	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
557	Plant	Sm. false foxglove	Vulnerable Occurrence	C/-		-													-	-	-	-
624	Upland	Coastal dune grassland	High Ecological Value			-													-	-	-	-
	Wetland	SM cordgrass/wiregrass	High Ecological Value			-													-	-	-	-
625	Plant	Striped prince's pine	Vulnerable Occurrence	E/-		-													-	-	-	-
642	Plant	Sassafras	Vulnerable Occurrence	C/-		-													-	-	-	-
660	Plant	Allegheny vine	Vulnerable Occurrence	E/E		-													-	-	-	-
661	Plant	Bitternut hickory	Vulnerable Occurrence	E/-		-													-	-	-	-
662	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-		-													-	-	-	-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-		-													-	-	-	-





REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Hatch	Interstest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
664	Turtle	Green sea turtle	General Distribution	-/-	T													-	-	-	Jun-Nov	Jun-Nov
	Turtle	K. ridley sea turtle	General Distribution	E/-	E													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	E													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T													-	-	-	Jun-Nov	Jun-Nov
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T														-	-	-	Jan-Dec	Jan-Dec
	Snake	Northern black racer	Vulnerable Occurrence	C/-														-	-	-	Jan-Dec	Jan-Dec
667	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area		Common													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
670	Amphibian	Wood Frog	Concentration Area		Common													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
670	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	General Distribution	C/C	Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	General Distribution	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	General Distribution	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	General Distribution	C/C	Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
677	Crab	Horseshoe crab	Spawning Area	-/C	Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
713	Insect	Pale swallowtail	Vulnerable Occurrence	C/-	-													May-Jul	-	-	Jan-Dec	Jan-Dec
716	Bivalve	Softshell clam	Harvest Area	-/C	Common													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
718	Bivalve	Atl. jackknife clam	Harvest Area	-/C	Common													-	-	-	Jan-Dec	Jan-Dec
720	Bivalve	Softshell clam	Harvest Area	-/C	Common													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Crab	Horseshoe crab	General Distribution	-/C	Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
721	Bivalve	Softshell clam	Concentration Area	-/C	Historic													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
722	Bivalve	Blue mussel	Concentration Area	-/C	High													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
723	Bivalve	European flat oyster	Concentration Area	-/C	Present													Aug-Sep	-	-	Jan-Dec	Jan-Dec
724	Bivalve	Sea scallop	Harvest Area	-/C	Common													Jul-Oct	-	-	Jan-Dec	Jan-Dec
725	Bivalve	Sea scallop	Concentration Area	-/C	Common													Jul-Oct	-	-	Jan-Dec	Jan-Dec
726	Bivalve	Sea scallop	Concentration Area	-/C	High													Jul-Oct	-	-	Jan-Dec	Jan-Dec
727	Bivalve	Eastern oyster	Harvest Area	-/C	Common													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec


FISH

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D	Spawn			
	Diadromous	Alewife	-/C	-													-	-	Apr-Dec	Apr-Jul
		American eel	-/C	-													-	-	Mar-Oct	Mar-Oct
		American shad	-/C	-													-	-	May-Feb	May-Jul
		Atlantic salmon	-/C	Historic													-	-	Jan-Dec	May-Mar
		Atlantic sturgeon	-/T	Rare													-	-	Jan-Dec	Jan-Dec
		Blueback herring	-/C	-													-	-	Jan-Dec	Jan-Dec
		Sea lamprey	-/C	-													-	-	Apr-Dec	Apr-Jul
		Shortnose sturgeon	E/E	Rare													-	-	Jan-Dec	Jan-Dec
		Striped bass		High													-	-	Jan-Dec	Jan-Dec
		Black Seabass		Low													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	-/C	-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	American sand lance		Common													-	Dec-Jun	Jan-Dec	Mar-Nov
		Cunner		Common													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec

INVERTEBRATES





Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D	Spawn			
	Crab	Horseshoe crab	-/C	Common													May-Jul	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
					J	F	M	A	M	J	J	A	S	O	N	D	Spawn			
	Small Mammal	New England cottontail	E/E	Potential													-	-	-	-
		New England cottontail	E/E	Low													-	-	-	-





ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D	May-Aug			
	Alcid	Black guillemot															-	-	-	-
		Dovekie															-	-	-	-
	Diving	Thick-billed murre															-	-	-	-
		D. crested cormorant															Jun-Sep	-	-	-
		Horned grebe															-	-	-	-
		Red-necked grebe															-	-	-	-
		Red-throated loon															-	-	-	-
	Gull/Tern	G. black-backed gull															-	-	-	-
		Herring gull															-	-	-	-
		Ring-billed gull															-	-	-	-
	Pelagic	Northern gannet															-	-	-	-

FISH

Monthly Presence





Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Diadromous													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Estuarine Nursery													-	-	Oct-May	Jan-Dec	Apr-Dec
														-	-	-	Apr-Nov	Apr-Nov
														-	-	-	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
														Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
	Estuarine Resident													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
														Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
														Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
														Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
														Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
														Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
														May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
														-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	Marine Benthic													-	-	Dec-Jun	Jan-Dec	Mar-Nov
														Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
														Dec-Feb	-	-	Jan-Dec	Jan-Dec
														Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
														Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
														-	Mar-Jun	Mar-Jun	Mar-Jun	-
														Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
														-	-	-	Jul-Oct	Jul-Oct
														-	-	-	Mar-Oct	Mar-Oct
														-	Nov-Feb	Nov-Mar	Jan-Dec	-
														-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
														Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
														-	-	-	Sep-May	Sep-May
														-	-	-	Apr-Nov	Apr-Nov
														-	-	-	Jan-Dec	Jan-Dec
														-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Marine Pelagic													-	Apr-Sep	Apr-Sep	Apr-Sep	-
														-	-	-	May-Nov	May-Nov
														-	-	-	May-Oct	May-Oct
														-	-	-	May-Oct	May-Oct

REPTILES & AMPHIBIANS



Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Interest	Juveniles	Adults
	Amphibian													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
														Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Blue mussel													May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Northern quahog													-	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
 Echinoderm	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	American lobster													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec
 Shrimp	American lobster													Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
	Db grass shrimp													-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
 Pinniped	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Small Mammal	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	401.29	0.63
10B	Freshwater Marshes	526.55	0.82
10C	Swamps	2,144.49	3.35
10D	Scrub and Shrub Wetlands	587.92	0.92
9A	Sheltered Tidal Flats	849.49	1.33
7	Exposed Tidal Flats	215.09	0.34
5	Mixed Sand and Gravel Beaches	32.32	0.05
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	63.59	0.10

ESI SHORELINE HABITAT TYPES

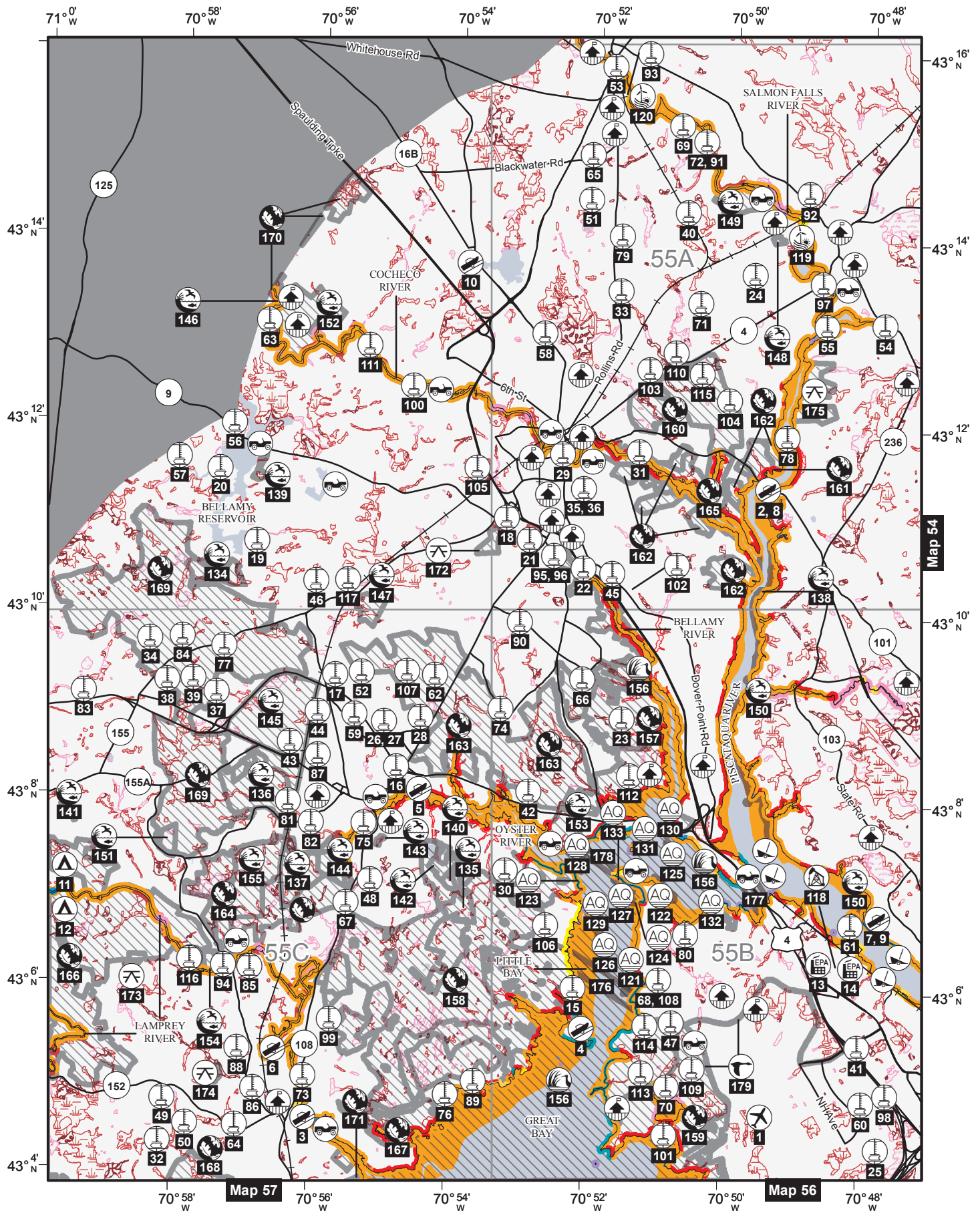
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	40,764.88	25.33	17%
10B	Freshwater Marshes	2,442.31	1.52	1%
10C	Swamps	5,232.65	3.25	2%
10D	Scrub and Shrub Wetlands	285.52	0.18	< 1%
9A	Sheltered Tidal Flats	76,815.03	47.73	32%
9B	Vegetated Low Banks	54,595.50	33.92	23%
8A	Sheltered, Impermeable, Rocky Shores	5,326.91	3.31	2%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	141.01	0.09	< 1%
8A	Sheltered, Impermeable, Rocky Shores	5,326.91	3.31	2%
8A	Sheltered Scarps (Bedrock/Mud/Clay)	141.01	0.09	< 1%
8B	Sheltered, Solid Man-Made Structures	10,697.55	6.65	4%
8C	Sheltered Riprap	9,957.85	6.19	4%
7	Exposed Tidal Flats	8,860.67	5.51	4%
6B	Riprap	3,981.74	2.47	2%
5	Mixed Sand and Gravel Beaches	7,677.69	4.77	3%
4	Coarse Grained Sand Beaches	1,997.33	1.24	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	8,692.26	5.40	4%
1A	Exposed, Rocky Shores	1,700.57	1.06	1%
1B	Exposed, Solid Man-Made Structures	2,308.31	1.43	1%

Total ESI Shoreline: 241,477.79 Total ESI Shoreline: 150.05
 Total Shoreline: 139,506.08 Total Shoreline: 86.69

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 55

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 55
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			
Map ID	Type	Name	Contact
1	AIRPORT	PORTSMOUTH INTERNATIONAL AT PEASE AIRPORT	603-433-6536
2	BOAT RAMP	BILL BRAY PARK TOWN LANDING	SOUTH BERWICK
3	BOAT RAMP	LAMPREY RIVER BOAT RAMP	TOWN - NEWMARKET
4	BOAT RAMP	LITTLE BAY BOAT RAMP	STATE - NHFG
5	BOAT RAMP	OYSTER RIVER BOAT RAMP	TOWN - DURHAM
6	BOAT RAMP	PISCASSIC RIVER BOAT RAMP	TOWN - NEWMARKET
7	BOAT RAMP	PISCATAQUA RIVER BOAT RAMP 2	DOC
8	BOAT RAMP	PISCATAQUA RIVER BOAT RAMP 4	SOUTH BERWICK
9	BOAT RAMP	PUBLIC LANDING 1	ELIOT
10	BOAT RAMP	WILLAND POND BOAT RAMP	STATE - NHFG
11	CAMPGROUND	FERNDALE ACRES CAMPGROUND	
12	CAMPGROUND	WELLINGTON CAMPGROUND	
13	EPA FACILITY	ESSENTIAL POWER NEWINGTON, LLC	
14	EPA FACILITY	SEA-3, INC.	603-812-8436
15	LOCK AND DAM	ADAMS POINT WILDLIFE POND DAM	NH FISH AND GAME DEPARTMENT
16	LOCK AND DAM	BEARDS CREEK	NH DOT
17	LOCK AND DAM	BEARDS CREEK DAM	MR RONALD TUVESON
18	LOCK AND DAM	BELLAMY PARK DAM	CITY OF DOVER
19	LOCK AND DAM	BELLAMY RESERVOIR DAM	CITY OF PORTSMOUTH PWD
20	LOCK AND DAM	BELLAMY RIVER DAM	TOWN OF MADBURY
21	LOCK AND DAM	BELLAMY RIVER II DAM	CITY OF DOVER
22	LOCK AND DAM	BELLAMY RIVER V DAM	MR FRANK HOLMWOOD
23	LOCK AND DAM	BELLAMY RIVER WILDLIFE POND	NH FISH AND GAME DEPARTMENT
24	LOCK AND DAM	BOOTHBY DAM	OWNER UNKNOWN
25	LOCK AND DAM	BRANCH HODGSON BROOK	UNKNOWN
26	LOCK AND DAM	CANNEY FARM CO LOWER DAM	CANNEY FARM COMMUNITY ASSN
27	LOCK AND DAM	CANNEY FARM CO MIDDLE DAM	CANNEY FARM CO
28	LOCK AND DAM	CANNEY FARM CO UPPER DAM	CANNEY FARM COMMUNITY ASSN
29	LOCK AND DAM	CENTRAL AVE DAM COCHECO FALLS	CITY OF DOVER
30	LOCK AND DAM	CHASE FARM POND DAM	MR MALCOLM J CHASE
31	LOCK AND DAM	COCHECO COUNTRY CLUB DAM	COCHECO COUNTRY CLUB
32	LOCK AND DAM	CONSERVATION POND DAM 1	MS AMANDA DEBLAUW
33	LOCK AND DAM	CONSERVATION POND DAM 2	MS LOUIS BOUCHER
34	LOCK AND DAM	COX DAM	MR CHARLES COX
35	LOCK AND DAM	CRICKET BROOK DAM 1	MR ARTHUR G DAVIS
36	LOCK AND DAM	CRICKET BROOK DAM 2	MR ARHTUR G DAVIS
37	LOCK AND DAM	DATA GENERAL DAM	HARRIS GRAPHICS CORP
38	LOCK AND DAM	DEMERRITT HILL FARM IRR POND DAM	ROY & MEG WILSON
39	LOCK AND DAM	DEMERRITT HILL FARM POND DAM	ROY & MEG WILSON
40	LOCK AND DAM	DEVELCO FIRE POND DAM	STRATHAM GREEN OWNERS ASSOC

DISPLAYED ON MAP (POINTS) (continued)

Map ID	Type	Name	Contact	Phone
41	LOCK AND DAM	DEVELOPMENT EAST DAM	MR LAWRENCE CARLIN	
42	LOCK AND DAM	DUFOUR FIRE POND DAM	MR CHARLES DUFOUR	
43	LOCK AND DAM	DURHAM RESERVOIR DAM	UNIVERSITY OF NH	
44	LOCK AND DAM	EJARQUE POND DAM	MR PETER EJARQUE	
45	LOCK AND DAM	ELLIOTT ROSE POND DAM	ELLIOTT ROSE COMPANY	
46	LOCK AND DAM	ELLIOTS POND	UNIVERSITY OF NH	
47	LOCK AND DAM	FERLAND RECREATION POND	MS EVELYN FERLAND	
48	LOCK AND DAM	FERNANDEZ POND	MR OLIVER FERNANDEZ	
49	LOCK AND DAM	FISH HOLDING POND DAM 1	UNKNOWN	
50	LOCK AND DAM	FISH HOLDING POND DAM 2	UNKNOWN	
51	LOCK AND DAM	FISH POND DAM	PSNH	
52	LOCK AND DAM	GANGWER WILDLIFE POND DAM	MR JESSE GANGWER	
53	LOCK AND DAM	GREAT FALLS UPPER DAM	GENERAL ELECTRIC CO	
54	LOCK AND DAM	GREAT WORKS DAM 1	RALPH SWEET	
55	LOCK AND DAM	GREAT WORKS POND DAM	GREAT WORKS HYDRO CO	
56	LOCK AND DAM	HALE DAM	MS PATRICIA HALE	
57	LOCK AND DAM	HALE FARM POND DAM	MS RUTH MURRAY	
58	LOCK AND DAM	HANNAFORD BROTHERS DAM	HANNAFORD BROTHERS COMPANY	
59	LOCK AND DAM	HIRST DAM	MR DON HIRST	
60	LOCK AND DAM	HODGSON BROOK DAM 2	BADGER & RAND ICE COMPANY	
61	LOCK AND DAM	HOLDING POND	FUEL STORAGE CORP	
62	LOCK AND DAM	HOYT POND	NH FISH AND GAME DEPARTMENT	
63	LOCK AND DAM	HUSSEY MILL DAM	MR TIM PEARSON	
64	LOCK AND DAM	ICE POND DAM 1	MR H J SOPEL	
65	LOCK AND DAM	INDIGO HILL DAM	MR LESTER C ELDRIDGE JR	
66	LOCK AND DAM	JERALDS FARM POND DAM	MS THELMA JERALDS	
67	LOCK AND DAM	LONSINGER DAM	MR GARY LONSINGER	
68	LOCK AND DAM	LOWER DUNWOODY DAM	MR ROBERT HILL	
69	LOCK AND DAM	LOWER GREAT FALLS DAM	ENEL NORTH AMERICA INC	
70	LOCK AND DAM	LOWER PEVERLY BROOK DAM	DOI FWS GREAT BAY NWR	
71	LOCK AND DAM	LOWER TOOMEY CONTROL STRUCTURE	MR RICHARD SHAW	
72	LOCK AND DAM	LRSW LEACHATE SUMP POND DAM	LRSWC	
73	LOCK AND DAM	MACALLEN DAM	TOWN OF NEWMARKET	
74	LOCK AND DAM	MADBURY WELLS DAM	CITY OF PORTSMOUTH	
75	LOCK AND DAM	MILL POND DAM 1	TOWN OF DURHAM	
76	LOCK AND DAM	MILLER DAM	OWNER UNKNOWN	
77	LOCK AND DAM	MOORE WILDLIFE POND DAM	MS MARGARET MOORE	
78	LOCK AND DAM	MORRIS FARM POND DAM	MR ROBERT MORRIS	
79	LOCK AND DAM	MOSCATO RECREATION POND DAM	MR ROBERT MOSCATO	
80	LOCK AND DAM	MOTTS POND DAM	TOWN OF NEWINGTON	
81	LOCK AND DAM	OYSTER RESERVOIR DAM	UNIVERSITY OF NH	
82	LOCK AND DAM	OYSTER RIVER DOUBLE WALL DAM	MR FRED S DANIELS	
83	LOCK AND DAM	OYSTER RIVER I DAM	MR JOSEPH DE ANGELO	
84	LOCK AND DAM	OYSTER RIVER II DAM	MR DREW GOSS	
85	LOCK AND DAM	PACKER FALLS DAM	LAMPREY RIVER IMPROVEMENT CO	

DISPLAYED ON MAP (POINTS) (continued)

Map ID	Type	Name	Contact	Phone
86	LOCK AND DAM	PISCASSIC RIVER DAM	TOWN OF NEWMARKET	
87	LOCK AND DAM	RECREATION POND DAM 1	UNIVERSITY OF NH	
88	LOCK AND DAM	RECREATION POND DAM 2	JOHN AND JULIANNE FARRELL	
89	LOCK AND DAM	RECREATION POND DAM 3	MR NICLOS ZVK	
90	LOCK AND DAM	REDDEN POND DAM	CITY OF DOVER	
91	LOCK AND DAM	RETIRED LAGOON	CITY OF SOMERSWORTH	
92	LOCK AND DAM	ROLLINSFORD DAM	TOWN OF ROLLINSFORD	
93	LOCK AND DAM	SALMON FALLS RIVER DAM II	GENERAL ELECTRIC CO	
94	LOCK AND DAM	SAMUELS DAM	MR BRUCE SAMUELS mail ret	
95	LOCK AND DAM	SAWYERS MILL LOWER DAM	SAWYER MILLS ASSOCIATES	
96	LOCK AND DAM	SAWYERS MILL UPPER DAM	SAWYER MILLS ASSOCIATES	
97	LOCK AND DAM	SOUTH BERWICK DAM	ENEL NORTH AMERICA INC	
98	LOCK AND DAM	SPAULDING TNPK MIT POND DAM	NH DOT	
99	LOCK AND DAM	STAGECOACH FARM POND DAM	BANK OF NEW HAMPSHIRE	
100	LOCK AND DAM	STERLING DAM	NH DES WATER DIVISION	
101	LOCK AND DAM	STUBBS POND DAM	DOI FWS GREAT BAY NWR	
102	LOCK AND DAM	THORNWOOD COMMONS POND	VARNEY BROOK LANDS LLC	
103	LOCK AND DAM	UNNAMED DAM	UNKNOWN	
104	LOCK AND DAM	UNNAMED STREAM DAM 1	UNKNOWN	
105	LOCK AND DAM	UNNAMED STREAM DAM 2	DAM 067.41 DOES NOT EXIST	
106	LOCK AND DAM	UNNAMED STREAM DAM 3	UNKNOWN	
107	LOCK AND DAM	UNNAMED STREAM DAM 4	UNKNOWN	
108	LOCK AND DAM	UPPER DUNWOODY DAM	MR RICHARD FERLAND	
109	LOCK AND DAM	UPPER PEVERLY BROOK POND DAM	DOI FWS GREAT BAY NWR	
110	LOCK AND DAM	UPPER TOOMEY DAM	MR FRANK LABBE	
111	LOCK AND DAM	WATSON WALDRON DAM	NH DES WATER DIVISION	
112	LOCK AND DAM	WEBSTER BROOK DAM	ELIZABETH HUGGINS TRUST	
113	LOCK AND DAM	WETLANDS RESTORATION PD	GREAT BAY NATIONAL WILDLIFE REFUGE	
114	LOCK AND DAM	WILDLIFE DUG POND DAM	FRIEDMAN & BABCOCK	
115	LOCK AND DAM	WILDLIFE POND DAM 3	MR ARMAND LALIBERTE	
116	LOCK AND DAM	WISWALL DAM	TOWN OF DURHAM	
117	LOCK AND DAM	WOODMAN FARM POND	UNIVERSITY OF NH	
118	OIL FACILITY	NAEA NEWINGTON POWER	NAEA NEWINGTON ENERGY LLC	
119	RENEWABLE ENERGY	ROLLINSFORD	CONSOLIDATED HYDRO NH INC	
120	RENEWABLE ENERGY	SOMERSWORTH LOWER GREAT DAM	SOMERSWORTH HYDRO COMPANY, INC.	

DISPLAYED ON MAP (POLYGONS)

Map ID	Type	Name	Contact	Phone
121	AQUACULTURE	BAY POINT OYSTER COMPANY LLC	TIM HENRY	
122	AQUACULTURE	BAYSIDE OYSTER FARM LLC	JONATHAN BUNKER	413-834-3148
123	AQUACULTURE	CEDAR POINT SHELLFISH FARM	STEPHEN WEGLARZ	603-502-1914
124	AQUACULTURE	CHOICE OYSTERS LLC	KRYSTIN WARD	603-862-5128
125	AQUACULTURE	DOVER POINT OYSTER COMPANY	CHRISTOPHER PHILLIPS	603-785-4364
126	AQUACULTURE	FAT DOG SHELLFISH CO. LLC	JAY BAKER	978-500-2337
127	AQUACULTURE	GOAT ISLAND OYSTER, LLC	TODD DIGGINS	603-785-9355
128	AQUACULTURE	GRANITE STATE SHELLFISH LLC	RAYMOND GRIZZLE	603-862-5130
129	AQUACULTURE	JOE KING OYSTER COOPERATIVE	RALPH JIMENEZ	603-225-4042
130	AQUACULTURE	RISEING TIDE OYSTER CO. LLC	JOSHUA CARLONI	603-905-9297
131	AQUACULTURE	ROYALL'S COVE SHELLFISH CO	SHANE CONLIN	603-812-6311
132	AQUACULTURE	VIRGIN OYSTER & GOAT ISLAND OYSTER	BRIAN GENNACO	781-367-6294
133	AQUACULTURE	VIRGIN OYSTER COMPANY, LLC	BRIAN GENNACO	781-367-6294
134	MANAGEMENT AREA	BOLSTRIDGE (MADBURY) FOREST	TOWN OF MADBURY	
135	MANAGEMENT AREA	COLBY MARSH	TOWN OF DURHAM	
136	MANAGEMENT AREA	COLLEGE WOODS AND RESERVOIR	UNIVERSITY SYSTEM	
137	MANAGEMENT AREA	EAST FOSS FARM	UNIVERSITY OF NEW HAMPSHIRE	
138	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
139	MANAGEMENT AREA	FERNWAY PROPERTY	TOWN OF MADBURY	
140	MANAGEMENT AREA	HORSEHIDE CREEK	TOWN OF DURHAM	
141	MANAGEMENT AREA	JAMES FARM	TOWN OF LEE	
142	MANAGEMENT AREA	LANG MAID FARM	TOWN OF DURHAM	
143	MANAGEMENT AREA	LINN PONDS	TOWN OF DURHAM	
144	MANAGEMENT AREA	MCDONALD LOT	UNIVERSITY OF NEW HAMPSHIRE	
145	MANAGEMENT AREA	OLD RESERVOIR	UNIVERSITY OF NEW HAMPSHIRE	
146	MANAGEMENT AREA	PEDESTRIAN BRIDGE	CITY OF DOVER	
147	MANAGEMENT AREA	PUDGING HILL TOWN FOREST	TOWN OF MADBURY	
148	MANAGEMENT AREA	SANDY BANK PLAY FIELD	TOWN OF ROLLINSFORD	
149	MANAGEMENT AREA	SCOUT LAND	TOWN OF ROLLINSFORD	
150	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
151	MANAGEMENT AREA	SPRUCE HOLE	TOWN OF DURHAM	
152	MANAGEMENT AREA	STAFFORD COUNTY LAND	STAFFORD COUNTY	
153	MANAGEMENT AREA	WAGON HILL FARM	TOWN OF DURHAM	
154	MANAGEMENT AREA	WEEKS PROPERTY	TOWN OF DURHAM	
155	MANAGEMENT AREA	WEST FOSS FARM	UNIVERSITY OF NEW HAMPSHIRE	
156	NATIONAL ESTUARINE RESEARCH RESERVE	NATURAL ESTUARINE RESEARCH RESERVE		
157	NATURE CONSERVANCY	BELLAMY RIVER	THE NATURE CONSERVANCY	207-729-5181
158	NATURE CONSERVANCY	CROMMET AND LUBBERLAND CREEKS	THE NATURE CONSERVANCY	207-729-5181
159	NATURE CONSERVANCY	FABYAN POINT	THE NATURE CONSERVANCY	207-729-5181
160	NATURE CONSERVANCY	FRESH CREEK	THE NATURE CONSERVANCY	207-729-5181
161	NATURE CONSERVANCY	GARVIN BROOK	THE NATURE CONSERVANCY	207-729-5181
162	NATURE CONSERVANCY	GARVIN BROOK AND LOWER COCHECO RIVER	THE NATURE CONSERVANCY	207-729-5181
163	NATURE CONSERVANCY	JOHNSON AND BUNKER CREEKS	THE NATURE CONSERVANCY	207-729-5181
164	NATURE CONSERVANCY	LAROCHE AND WOODMAN BROOKS	THE NATURE CONSERVANCY	207-729-5181
165	NATURE CONSERVANCY	LOWER COCHECO RIVER	THE NATURE CONSERVANCY	207-729-5181

DISPLAYED ON MAP (POLYGONS) (continued)				
Map ID	Type	Name	Contact	Phone
166	NATURE CONSERVANCY	LOWER LAMPREY RIVER	THE NATURE CONSERVANCY	207-729-5181
167	NATURE CONSERVANCY	LOWER LUBBERLAND CREEK	THE NATURE CONSERVANCY	207-729-5181
168	NATURE CONSERVANCY	LOWER PISCASSIC RIVER	THE NATURE CONSERVANCY	207-729-5181
169	NATURE CONSERVANCY	OYSTER RIVER	THE NATURE CONSERVANCY	207-729-5181
170	NATURE CONSERVANCY	ROCHESTER NECK	THE NATURE CONSERVANCY	207-729-5181
171	NATURE CONSERVANCY	SQUAMSCOTT RIVER	THE NATURE CONSERVANCY	207-729-5181
172	PARK	BELLAMY PARK	CITY OF DOVER	
173	PARK	DAVIS PARK	UNIVERSITY OF NEW HAMPSHIRE	
174	PARK	TROTTER PARK	TOWN OF NEWMARKET	
175	PARK	VAUGHAN WOODS STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-490-4079
176	PIPELINE	CABLE 11		
177	PIPELINE	CABLE 12		
178	PIPELINE	PIPELINE 12		
179	WILDLIFE REFUGE	GREAT BAY NATIONAL WILDLIFE REFUGE	PARKER RIVER NWR	

ALSO PRESENT IN MAPPED AREA (POLYGONS)				
Type	Name	Contact	Phone	
STATE PROTECTED AREA	ADAMS POINT WILDLIFE MANAGEMENT AREA	NH DEPT OF FISH & GAME		
STATE PROTECTED AREA	BELLAMY RIVER WILDLIFE MANAGEMENT AREA	NH DEPT OF FISH & GAME		
STATE PROTECTED AREA	WILCOX POINT WILDLIFE MANAGEMENT AREA	NH DEPT OF FISH & GAME		

JURISDICTIONS				
COUNTY:	ROCKINGHAM, STRAFFORD, YORK	FEMA:	REGION I	
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	EPA:	REGION 1	
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT			

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	540.81	0.85
10B	Freshwater Marshes	1,861.59	2.91
10C	Swamps	4,687.57	7.32
10D	Scrub and Shrub Wetlands	1,123.12	1.75
9A	Sheltered Tidal Flats	3,037.95	4.75
5	Mixed Sand and Gravel Beaches	25.25	0.04
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	21.33	0.03

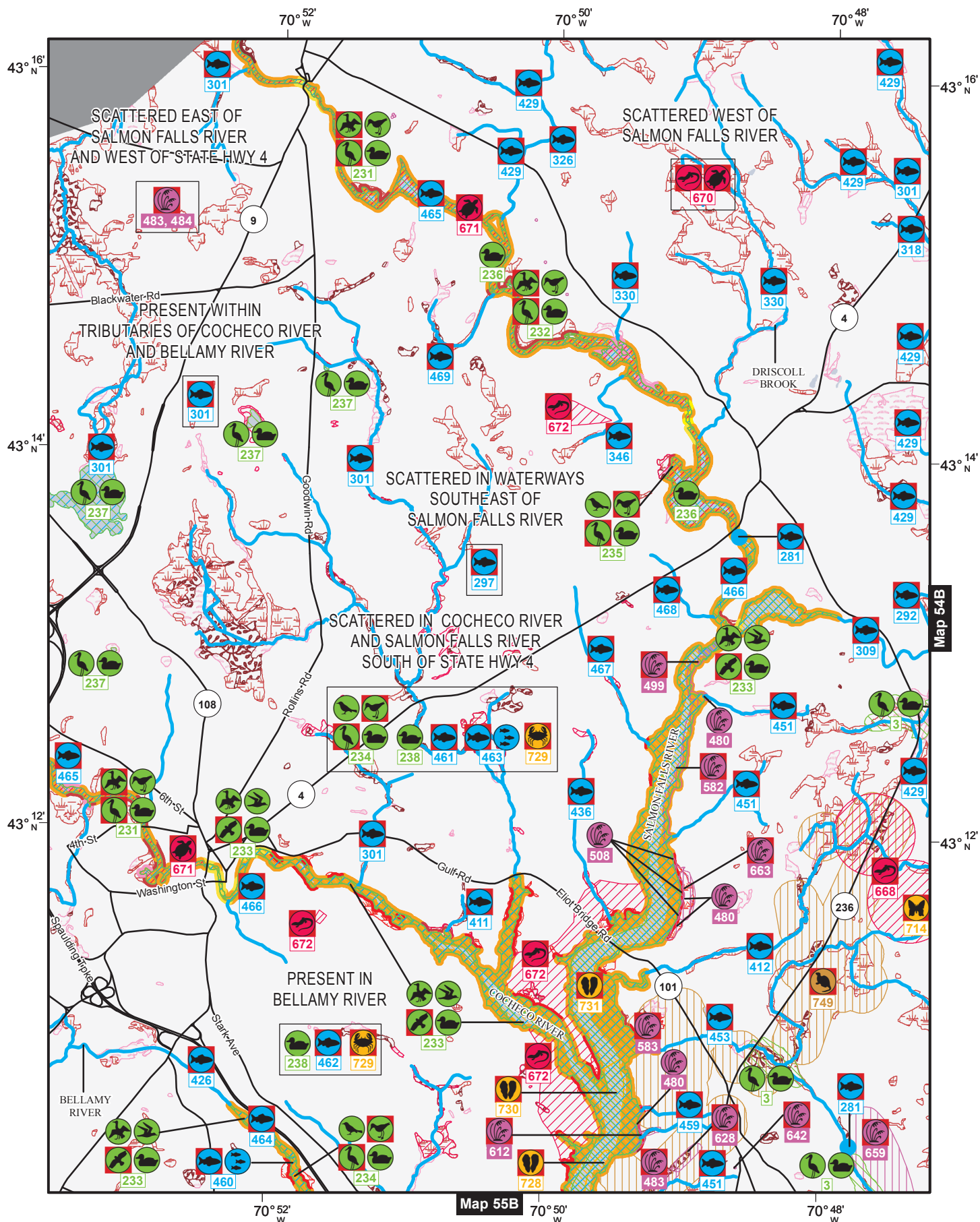
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	58,762.05	36.51	14%
10B	Freshwater Marshes	11,044.35	6.86	3%
10C	Swamps	15,167.10	9.42	3%
10D	Scrub and Shrub Wetlands	503.26	0.31	< 1%
9A	Sheltered Tidal Flats	146,481.35	91.02	34%
9B	Vegetated Low Banks	165,228.92	102.67	38%
8A	Sheltered, Impermeable, Rocky Shores	4,100.92	2.55	1%
8B	Sheltered, Solid Man-Made Structures	6,318.91	3.93	1%
8C	Sheltered Riprap	6,590.91	4.10	2%
5	Mixed Sand and Gravel Beaches	13,618.07	8.46	3%
4	Coarse Grained Sand Beaches	3,262.67	2.03	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	2,582.14	1.60	1%
Total ESI Shoreline:		433,660.65	269.46	
Total Shoreline:		255,651.23	158.85	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 55A
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000

Map 55A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
3	Wading	Wading birds	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
231	Waterfowl	Waterfowl	Vulnerable Occurrence				-													Apr-Nov	Apr-Jun	Jul-Nov	-
	Diving	Common Loon	Concentration Area			-JT	Low													-	-	-	-
	Shorebird	Spotted sandpiper	Concentration Area				Low													-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area			C/-	Low													-	-	-	-
	Wading	Green heron	Concentration Area				Low													-	Apr	Oct	-
	Waterfowl	Bufflehead	Concentration Area				<100													-	-	-	-
	Waterfowl	Canvasback	Concentration Area				Low													-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area				200-400													-	-	-	-
	Waterfowl	Common merganser	Concentration Area				200													-	-	-	-
	Waterfowl	Greater scaup	Concentration Area				400-800													-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area				200													-	-	-	-
	Waterfowl	Mallard	Concentration Area				Med													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area				200													-	-	-	-
232	Waterfowl	Sooters	Concentration Area				Med													-	-	-	-
	Diving	Common Loon	Concentration Area			-JT	Low													-	-	-	-
	Shorebird	Spotted sandpiper	Concentration Area				Low													-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area			C/-	Low													-	-	-	-
	Wading	Green heron	Concentration Area				Low													-	Apr	Oct	-
	Waterfowl	Bufflehead	Concentration Area				<100													-	-	-	-
	Waterfowl	Canvasback	Concentration Area				Low													-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area				200-400													-	-	-	-
	Waterfowl	Common merganser	Concentration Area				200													-	-	-	-
	Waterfowl	Greater scaup	Concentration Area				400-800													-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area				200													-	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area				200													-	-	-	-
	Waterfowl	Sooters	Concentration Area				Med													-	-	-	-
233	Diving	D. crested cormorant	Concentration Area				Low													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area				High													-	-	-	-
	Gull/Tern	Herring gull	Concentration Area				High													-	-	-	-
	Raptor	Bald eagle	Concentration Area			C/T	15-25													Mar-May	-	-	-
	Waterfowl	American black duck	Concentration Area				High													-	-	-	-
	Waterfowl	Bufflehead	Concentration Area				Med													-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area				Med													-	-	-	-
	Waterfowl	Mallard	Concentration Area				High													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area				High													-	-	-	-
	Passerine	Marsh wren	Concentration Area				Low													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Greater yellowlegs	Concentration Area			10-50													-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50													-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Med													-	-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-	-
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-	-
235	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-	-
	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-	-
	Passerine	Marsh wren	Concentration Area			Low													-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area			10-50													-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50													-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Med													-	-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-	-
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													Apr-Aug	-	-	-
236	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-	-
237	Wading	Virginia rail	Concentration Area			Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area			Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area			Med													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													Apr-Aug	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
292	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar		
297	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	American shad	Migration	-/C		-												-	-	May-Feb	May-Jul		
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar		
	Diadromous	Blueback herring	Migration	-/C		-												-	-	Jan-Dec	Jan-Dec		
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Oct-Apr		
301	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
309	Diadromous	Alewife	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
	Diadromous	American eel	Migration	-/C		-												-	-	Mar-Oct	Mar-Oct		
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar		
	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		
	Freshwater	Rainbow smelt	Migration	-/C		-												-	-	Jan-Dec	Oct-Apr		
	Diadromous	Atlantic salmon	Migration	-/C	E	-												-	-	Jan-Dec	May-Mar		
318	Diadromous	Sea lamprey	Migration	-/C		-												-	-	Apr-Dec	Apr-Jul		

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
326	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
330	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
346	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
411	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb			Jan-Dec	Jan-Dec
412	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
426	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													Dec-Feb			Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb			Jan-Dec	Jan-Dec
429	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
436	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
451	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/C	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	Shorthose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
453	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul

Southern Maine and New Hampshire: Map 55A

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D				
459	Diadromous	American eel	Migration	-/C	-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	American shad	Migration	-/C	-												-	-	May-Jul	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E												-	-	Jan-Dec	May-Mar	
	Diadromous	Blueback herring	Migration	-/C	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C	-												-	-	Apr-Jul	Jan-Dec	
	Diadromous	Striped bass	Migration	-	-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C	-												-	-	Jan-Dec	Oct-Apr	
	Diadromous	Alewife	Migration	-/C	-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	American shad	Migration	-/C	-												-	-	May-Feb	May-Jul	
	Diadromous	Atlantic salmon	Migration	-/C	E												-	-	Jan-Dec	May-Mar	
460	Diadromous	Atlantic sturgeon	Migration	-/T	T												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Blueback herring	Migration	-/C	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	Migration	-/C	-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shortnose sturgeon	Migration	E/E	E												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Migration	-	-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	Migration	-/C	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Atlantic sturgeon	Migration	-/C	-												-	-	Oct-Apr	Jan-Dec	
	Diadromous	Alewife	General Distribution	-/C	-												-	-	Apr-Jul	Oct-Apr	
	Diadromous	American eel	General Distribution	-/C	-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	T												-	-	Jan-Dec	Jan-Dec	
461	Diadromous	Blueback herring	General Distribution	-/C	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	General Distribution	-/C	-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	Shortnose sturgeon	Concentration Area	E/E	E												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Concentration Area	-	-												-	-	Jan-Dec	Jan-Dec	
	Estuarine Nursery	Black Seabass	Concentration Area	-	-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	General Distribution	-/C	-												-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	Cunner	Concentration Area	-	-												Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	General Distribution	-/C	-												-	-	Apr-Dec	Apr-Jul	
	Diadromous	American eel	General Distribution	-/C	-												-	-	Mar-Oct	Mar-Oct	
	Diadromous	American shad	General Distribution	-/C	-												-	-	May-Feb	May-Jul	
462	Diadromous	Atlantic salmon	General Distribution	-/C	E												-	-	Jan-Dec	May-Mar	
	Diadromous	Blueback herring	General Distribution	-/C	-												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Sea lamprey	General Distribution	-/C	-												-	-	Jan-Dec	Jan-Dec	
	Marine Benthic	American sand lance	Concentration Area	-	-												-	-	Dec-Jun	Mar-Nov	
	Diadromous	American shad	General Distribution	-/C	-												-	-	May-Jul	May-Jul	
	Diadromous	Atlantic salmon	General Distribution	-/C	E												-	-	Jan-Dec	May-Mar	
	Marine Benthic	American sand lance	Concentration Area	-	-												-	-	Dec-Jun	Mar-Nov	
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	T												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Shortnose sturgeon	Concentration Area	E/E	E												-	-	Jan-Dec	Jan-Dec	
	Diadromous	Striped bass	Concentration Area	-	-												-	-	Jan-Dec	Jan-Dec	
463	Estuarine Nursery	Black Seabass	Concentration Area	-	-												-	-	Jan-Dec	Jan-Dec	
	Freshwater	Rainbow smelt	General Distribution	-/C	-												-	-	Jan-Dec	Oct-Apr	
	Marine Benthic	Cunner	Concentration Area	-	-												Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec	
	Diadromous	Alewife	General Distribution	-/C	-												-	-	Apr-Jul	Apr-Jul	
	Diadromous	American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May	
	464	Diadromous	American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May
		Diadromous	American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May
		Diadromous	American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May
		Diadromous	American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May
		Diadromous	American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May
Diadromous		American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May	
Diadromous		American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May	
Diadromous		American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May	
Diadromous		American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May	
Diadromous		American eel	General Distribution	-/C	-												-	-	Apr-May	Apr-May	

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
465	Diadromous	Blueback herring	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jun	Apr-Jun
	Diadromous	Sea lamprey	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May
	Freshwater	Rainbow smelt	General Distribution	-/C		High													Mar-Apr	-	-	Mar-Apr	Mar-Apr
	Diadromous	Alewife	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May
	Diadromous	American shad	General Distribution	-/C		-													May-Jun	-	-	May-Jun	May-Jun
	Diadromous	Atlantic salmon	General Distribution	-/C	E	Historic													Sep-Nov	-	-	Jan-Dec	Sep-Mar
	Diadromous	Blueback herring	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jun	Apr-Jun
	Diadromous	Sea lamprey	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May
	Freshwater	Rainbow smelt	General Distribution	-/C		High													Mar-Apr	-	-	Mar-Apr	Mar-Apr
466	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
468	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
469	Diadromous	Striped bass	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
663	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
480	Wetland	Tidal Marsh	High Ecological Value			-													-	-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C		-													-	-	-	-	-
484	Plant	Endangered plant	Vulnerable Occurrence	E/E		-													-	-	-	-	-
499	Plant	Welsh mudwort	Vulnerable Occurrence	C/-		-													-	-	-	-	-
508	Wetland	Salt marsh	High Ecological Value			-													-	-	-	-	-
582	Plant	Eastern grasswort	Vulnerable Occurrence	C/-		-													-	-	-	-	-
583	Plant	Seaside brookweed	Vulnerable Occurrence	C/-		-													-	-	-	-	-
612	Plant	Eastern grasswort	Vulnerable Occurrence	C/-		-													-	-	-	-	-
628	Plant	E.A. saltmarsh aster	Vulnerable Occurrence	T/-		-													-	-	-	-	-
642	Plant	Smooth winterberry	Vulnerable Occurrence	C/-		-													-	-	-	-	-
642	Plant	Sassafras	Vulnerable Occurrence	C/-		-													-	-	-	-	-
659	Plant	Scarlet oak	Vulnerable Occurrence	E/-		-													-	-	-	-	-
663	Plant	E.A. saltmarsh aster	Vulnerable Occurrence	T/-		-													-	-	-	-	-
	Plant	Horned pondweed	Vulnerable Occurrence	C/E		-													-	-	-	-	-

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
668	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T	-													-	-	-	Jan-Dec	Jan-Dec
670	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
		Jefferson salamander	General Distribution	C/C	Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
		Northern leopard frog	General Distribution	C/C	Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
		Blanding's turtle	General Distribution	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	General Distribution	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
		Wood turtle	General Distribution	C/C	Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
		Blanding's turtle	Vulnerable Occurrence	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
		Spotted turtle	Vulnerable Occurrence	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
672	Turtle	Wood turtle	Concentration Area	C/C	Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
		B. spotted salamander	General Distribution	C/C	Very Low													-	-	-	-	Jan-Dec
		Jefferson salamander	General Distribution	C/C	Rare													-	-	-	-	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
714	Insect	Ringed boghaunter	Vulnerable Occurrence	T/-	-													May-Jul	-	-	Jan-Dec	Jan-Dec
728	Bivalve	Eastern oyster	Harvest Area	-/C	Common													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
		Softshell clam	Harvest Area	-/C	Common													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
729	Crab	Horseshoe crab	General Distribution	-/C	Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
730	Bivalve	Eastern oyster	Concentration Area	-/C	High													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
731	Bivalve	Eastern oyster	Concentration Area	-/C	Historic													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				S	F		J	F	M	A	M	J	J	A	S	O	N	D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</






WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

TERRESTRIAL MAMMALS


Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			S	F		J	F	M	A	M	J	J	A	S	O	N	D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
 Small Mammal	New England cottontail	General Distribution	E/E	Potential																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

FISH



Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Atlantic tomcod													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Atlantic mackerel													-	-	-	May-Nov	May-Nov


REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Blue mussel													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
	Db grass shrimp													-	-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Beaver													-	-	-	-	-
	Muskrat													-	-	-	-	-
	Northern river otter													-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	93.05	0.15
10B	Freshwater Marshes	510.87	0.80
10C	Swamps	1,270.51	1.99
10D	Scrub and Shrub Wetlands	381.10	0.60
9A	Sheltered Tidal Flats	370.72	0.58
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	4.69	0.01

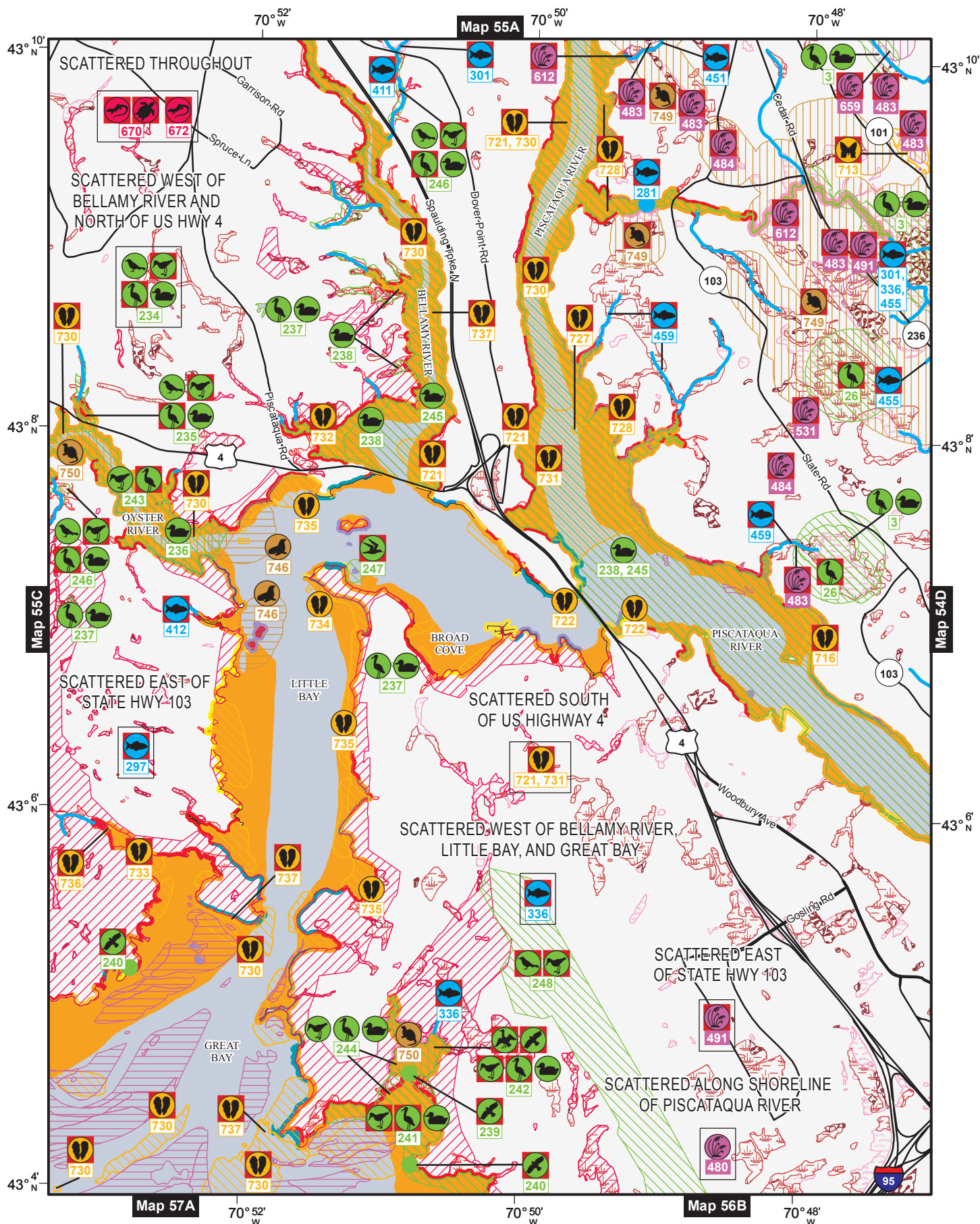
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	8,728.05	5.42	8%
10B	Freshwater Marshes	2,065.33	1.28	2%
10C	Swamps	6,479.84	4.03	6%
10D	Scrub and Shrub Wetlands	413.98	0.26	< 1%
9A	Sheltered Tidal Flats	30,854.58	19.17	29%
9B	Vegetated Low Banks	54,818.81	34.06	51%
8A	Sheltered, Impermeable, Rocky Shores	335.81	0.21	< 1%
8B	Sheltered, Solid Man-Made Structures	3,273.17	2.03	3%
8C	Sheltered Riprap	144.55	0.09	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	567.12	0.35	1%
Total ESI Shoreline:		107,681.23	66.91	
Total Shoreline:		69,472.42	43.17	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 55B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
					J	F	M	A	M	J	J	A	S	O	N	D				
SAV	Eelgrass	High Ecological Value		0% To 10% Cover													-	-	-	-
SAV	Eelgrass	High Ecological Value		10% To 40% Cover													-	-	-	-
SAV	Eelgrass	High Ecological Value		Some-Bottom (60-90%)													-	-	-	-
SAV	Eelgrass	High Ecological Value		Half (30-60%)													-	-	-	-
SAV	Eelgrass	High Ecological Value		Scarce (10-30%)													-	-	-	-
SAV	Eelgrass	High Ecological Value		Dense (90-100%)													-	-	-	-

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
3	Wading	Wading birds	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-
26	Wading	Waterfowl	Vulnerable Occurrence		-													Apr-Nov	Apr-Jun	Jul-Nov	-
234	Wading	Great blue heron	Vulnerable Occurrence	C/-	-													May-Sep	-	-	-
	Passerine	Marsh wren	Concentration Area		Low													-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area		10-50													-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	10-50													-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-	Med													-	-	-	-
	Wading	Virginia rail	Concentration Area		Low													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Med													Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area		Low													-	-	-	-
	Waterfowl	Mallard	Concentration Area		Med													Apr-Aug	-	-	-
235	Passerine	Marsh wren	Concentration Area		Low													-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area		10-50													-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	10-50													-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-	Med													-	-	-	-
	Wading	Virginia rail	Concentration Area		Low													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Med													Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area		Low													-	-	-	-
	Waterfowl	Canada goose	Concentration Area		Med													Apr-Aug	-	-	-
236	Waterfowl	Mallard	Concentration Area		Med													Apr-Aug	-	-	-
237	Wading	Virginia rail	Concentration Area		Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area		Med													-	-	-	-
238	Waterfowl	Canada goose	Concentration Area		Med													Apr-Aug	-	-	-
239	Raptor	Osprey	Nesting	-/C	1-Pair													Apr-Oct	Apr	Oct	-
240	Raptor	Bald eagle	Nesting	C/T	5-20													Mar-May	-	-	-
241	Shorebird	Black-bellied plover	Concentration Area		Low													-	May	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Shorebird	Greater yellowlegs	Concentration Area			Med													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Med													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Med													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area			Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Low													-	May-Jun	Jul-Oct	-
	Wading	American bittern	Concentration Area			Low												May-Aug	Apr	Oct	-	-
	Wading	BC night-heron	Concentration Area	E/-		Low												-	Apr	Oct	-	-
	Wading	Glossy ibis	Concentration Area			Low													-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Low													-	-	-	-
	Wading	Great egret	Concentration Area			Low													-	Apr	Oct	-
	Waterfowl	American black duck	Concentration Area			1000-2000												Apr-Aug	-	-	-	-
	Waterfowl	American wigeon	Concentration Area			50													-	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			<50													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			3000-6000												Apr-Aug	-	-	-	-
242	Waterfowl	Northern pintail	Concentration Area			<50													-	-	-	-
	Diving	Pied-billed grebe	Concentration Area	-I/T		Low												Apr-Oct	-	-	-	-
	Raptor	Bald eagle	Concentration Area	C/T		Low												Mar-May	-	-	-	-
	Raptor	Osprey	Concentration Area	-I/C		Low												Apr-Oct	Apr	Oct	-	-
	Raptor	Peregrine falcon	Concentration Area	E/T		Low													-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area			Low													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Low													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		50													-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Low												May-Sep	-	-	-	-
	Wading	Least bittern	Concentration Area	E/C		Low												May-Sep	-	-	-	-
	Wading	Sora	Concentration Area	-I/C		Low													-	-	-	-
	Wading	Virginia rail	Concentration Area			Low												May-Aug	-	-	-	-
	Waterfowl	American black duck	Concentration Area			Med												Apr-Aug	-	-	-	-
	Waterfowl	American wigeon	Concentration Area			>100													-	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-	-
	Waterfowl	Bufflehead	Concentration Area			Low													-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area			Low													-	-	-	-
	Waterfowl	Greater scaup	Concentration Area			Low													-	-	-	-
	Waterfowl	Green-winged teal	Concentration Area			150													-	-	-	-
	Waterfowl	Mallard	Concentration Area			Med												Apr-Aug	-	-	-	-
	Waterfowl	Northern pintail	Concentration Area			Low													-	-	-	-
	Waterfowl	Ring-necked duck	Concentration Area			Low													-	-	-	-
	Waterfowl	Wood duck	Concentration Area			200												Oct	-	-	-	-
243	Shorebird	Spotted sandpiper	Concentration Area			Low													-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area	C/-		Low													-	-	-	-
	Wading	Green heron	Concentration Area			Low													-	Apr	Oct	-
244	Shorebird	Solitary sandpiper	Concentration Area			Low													-	Jun	-	-
	Shorebird	Spotted sandpiper	Concentration Area			Low													-	Jun-Aug	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Wading	Green heron	Concentration Area			Low													Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Low													Apr	Oct	-
	Waterfowl	Gadwall	Concentration Area			Low													-	-	-
245	Waterfowl	American black duck	Concentration Area			High													-	-	-
	Waterfowl	Bufflehead	Concentration Area			Med													-	-	-
	Waterfowl	Common goldeneye	Concentration Area			Med													-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			High													-	-	-
246	Passerine	Marsh wren	Concentration Area			Low													-	-	-
	Shorebird	Greater yellowlegs	Concentration Area			10-50													May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50													May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Med													-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-
	Waterfowl	American black duck	Concentration Area			Med												Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-
	Waterfowl	Canada goose	Concentration Area			Med												Apr-Aug	-	-	-
	Waterfowl	Mallard	Concentration Area			Med												Apr-Aug	-	-	-
247	Gull/Tern	Common tern	Nesting	C/T		10-15 Pairs												May-Jul	-	-	-
248	Passerine	Grasshopper sparrow	Nesting	E/C		<5												May-Oct	-	-	-
	Passerine	Horned lark	Nesting	-/T		<5												May-Oct	-	-	-
	Passerine	Vesper sparrow	Nesting	-/C		Low												May-Oct	-	-	-
	Shorebird	Upland sandpiper	Nesting	T/E		10-15												Apr-Oct	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
281	Diadromous	American eel	Harvest Area	-/C		-													-	-	-	Mar-Oct	Mar-Oct
297	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-/C	E	-													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-/C		-													-	-	-	Apr-Jul	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-/C		-													-	-	-	Jan-Dec	Oct-Apr
301	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
411	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
412	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
451	Diadromous	Shorthead sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C		-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shorthead sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
455	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C		-													-	-	Jan-Dec	Oct-Apr
	Diadromous	Alewife	Migration	-C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-C		-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	Migration	-C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-C		-													-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-C		-													-	-	Jan-Dec	Oct-Apr
	Diadromous	Alewife	Migration	-C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American shad	Migration	-C		-													-	-	May-Feb	May-Jul
459	Diadromous	Atlantic salmon	Migration	-C	E	-													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-T	T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-C		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	Migration	-C		-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shorthead sturgeon	Migration	E/E	E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C		-													-	-	Jan-Dec	Oct-Apr

HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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480	Wetland	Tidal Marsh	High Ecological Value			-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
670	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	General Distribution	C/C	Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	General Distribution	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	General Distribution	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
672	Amphibian	B. spotted salamander	General Distribution	C/C	Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
	Amphibian	Jefferson salamander	General Distribution	C/C	Very Low													-	-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	-	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
713	Insect	Pale swallowtail	Vulnerable Occurrence	C/-	-													May-Jul	-	-	Jan-Dec	Jan-Dec
716	Bivalve	Softshell clam	Harvest Area	-C	Common													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
721	Bivalve	Softshell clam	Concentration Area	-C	Historic													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
722	Bivalve	Blue mussel	Concentration Area	-C	High													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
727	Bivalve	Eastern oyster	Harvest Area	-C	Common													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
728	Bivalve	Eastern oyster	Harvest Area	-C	Common													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Harvest Area	-C	Common													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
730	Bivalve	Eastern oyster	Concentration Area	-C	High													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
731	Bivalve	Eastern oyster	Concentration Area	-C	Historic													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
732	Bivalve	Softshell clam	Concentration Area	-C	High													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
733	Bivalve	Eastern oyster	Concentration Area	-C	Historic													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Concentration Area	-C	Historic													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
734	Bivalve	Atl. jackknife clam	Concentration Area		High													-	-	-	Jan-Dec	Jan-Dec
735	Bivalve	Atl. jackknife clam	Concentration Area		Historic													-	-	-	Jan-Dec	Jan-Dec
736	Bivalve	Eastern oyster	Concentration Area	-C	High													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Concentration Area	-C	Present													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
737	Bivalve	Softshell clam	Concentration Area	-C	Present													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec





MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
746	Pinniped	Harbor seal	Haul Out		Common													-	-	-	-





TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E	Low													-	-	-	-
750	Small Mammal	Beaver	Concentration Area		Common													-	-	-	-
	Small Mammal	Muskrat	Concentration Area		Common													-	-	-	-
	Small Mammal	Northern river otter	Concentration Area		Common													-	-	-	-

BIRDS

	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Diving	Common Loon	Concentration Area	-/T		Low												-	-	-		
	Gull/Tern	D. crested cormorant	Concentration Area			Low												Jun-Sep	-	-		
		G. black-backed gull	Concentration Area			High												-	-	-		
	Raptor	Herring gull	Concentration Area			High												-	-	-		
		Bald eagle	Concentration Area	C/T		15-25												Mar-May	-	-		
	Waterfowl	American black duck	Concentration Area			High												Apr-Aug	-	-		
		American wigeon	Concentration Area			Low												-	-	-		
		Bufflehead	Concentration Area			<100												-	-	-		
		Canada goose	Concentration Area			High												Apr-Aug	-	-		
		Canvasback	Concentration Area			Low												-	-	-		
		Common goldeneye	Concentration Area			200-400												-	-	-		
	Common merganser	Concentration Area			200													-	-	-		
	Greater scaup	Concentration Area			400-800													-	-	-		
	Hooded merganser	Concentration Area			200													-	-	-		
	Lesser scaup	Concentration Area			Med													-	-	-		
	Mallard	Concentration Area			High													Apr-Aug	-	-		
	Red-breasted merganser	Concentration Area			200													-	-	-		
	Scoters	Concentration Area			Med													-	-	-		

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
 Diadromous	Alewife	General Distribution	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	American eel	General Distribution	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	American shad	General Distribution	-/C		-													-	-	-	May-Feb	May-Jul
	Atlantic salmon	General Distribution	-/C	E	Historic													-	-	-	Jan-Dec	May-Mar
	Atlantic sturgeon	Concentration Area	-/T	T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Blueback herring	General Distribution	-/C		-													-	-	-	Jan-Dec	Jan-Dec
	Sea lamprey	General Distribution	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Shortnose sturgeon	Concentration Area	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
 Estuarine Nursery	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec
	Black Seabass	Concentration Area			Low													-	-	-	Jan-Dec	Jan-Dec
 Freshwater	Rainbow smelt	General Distribution	-/C		-													-	-	-	Jan-Dec	Oct-Apr
 Marine Benthic	American sand lance	Concentration Area			Common													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Cunner	Concentration Area			Common													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec

INVERTEBRATES

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence	Spawn	Eggs	Larvae	Juveniles	Adults
 Crab	Horseshoe crab	General Distribution		S	-IC	Common	J F M A M J J A S O N D	May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS






Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence	Spawn	Eggs	Larvae	Juveniles	Adults
 Small Mammal	New England cottontail	General Distribution		E/E		Potential	J F M A M J J A S O N D	-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence	Spawn	Eggs	Larvae	Juveniles	Adults
 Waterfowl	Hooded merganser						J F M A M J J A S O N D	-	-	-	-	-





FISH

Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence	Spawn	Eggs	Larvae	Juveniles	Adults
 Diadromous	Ninespine stickleback						J F M A M J J A S O N D	May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
 Estuarine Nursery	Atlantic menhaden						J F M A M J J A S O N D	-	-	-	Apr-Nov	Apr-Nov
	Bluefish						J F M A M J J A S O N D	-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder						J F M A M J J A S O N D	-	-	-	Jan-Dec	Jan-Dec
	White perch						J F M A M J J A S O N D	Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder						J F M A M J J A S O N D	-	-	-	Jan-Dec	Jan-Dec
	Winter flounder						J F M A M J J A S O N D	-	-	-	Jan-Dec	-
 Estuarine Resident	Atlantic silverside						J F M A M J J A S O N D	Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback						J F M A M J J A S O N D	Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby						J F M A M J J A S O N D	Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog						J F M A M J J A S O N D	Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish						J F M A M J J A S O N D	Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish						J F M A M J J A S O N D	Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback						J F M A M J J A S O N D	May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
 Marine Benthic	Atlantic tomcod						J F M A M J J A S O N D	Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Longhorn sculpin						J F M A M J J A S O N D	Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Red hake						J F M A M J J A S O N D	-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel						J F M A M J J A S O N D	Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Skates						J F M A M J J A S O N D	-	-	-	Jan-Dec	Jan-Dec
	White hake						J F M A M J J A S O N D	-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
 Marine Pelagic	Atlantic mackerel						J F M A M J J A S O N D	-	-	-	May-Nov	May-Nov

REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep


INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Blue mussel													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
	Db grass shrimp													-	-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Harbor seal													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	310.25	0.48
10B	Freshwater Marshes	511.74	0.80
10C	Swamps	1,213.54	1.90
10D	Scrub and Shrub Wetlands	277.05	0.43
9A	Sheltered Tidal Flats	2,172.42	3.39
5	Mixed Sand and Gravel Beaches	25.25	0.04
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	16.64	0.03

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	36,012.59	22.38	17%
10B	Freshwater Marshes	6,328.57	3.93	3%
10C	Swamps	1,352.94	0.84	1%
10D	Scrub and Shrub Wetlands	4.98	0.00	< 1%
9A	Sheltered Tidal Flats	92,053.03	57.20	43%
9B	Vegetated Low Banks	48,499.75	30.14	23%
8A	Sheltered, Impermeable, Rocky Shores	3,765.11	2.34	2%
8B	Sheltered, Solid Man-Made Structures	1,517.96	0.94	1%
8C	Sheltered Riprap	5,592.89	3.48	3%
5	Mixed Sand and Gravel Beaches	12,457.15	7.74	6%
4	Coarse Grained Sand Beaches	2,979.40	1.85	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	2,015.02	1.25	1%

Total ESI Shoreline: 212,579.39 Total ESI Shoreline: 132.09
 Total Shoreline: 105,369.98 Total Shoreline: 65.47

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 55C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence											
			S	F		J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value			Some-Bottom (60-90%)												
SAV	Eelgrass	High Ecological Value			Half (30-60%)												
SAV	Eelgrass	High Ecological Value			Scarce (10-30%)												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence										Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O				
231	Diving	Common Loon	Concentration Area	-T		Low											-	-	-	-
	Shorebird	Spotted sandpiper	Concentration Area			Low											-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area	C/-		Low											-	-	-	-
	Wading	Green heron	Concentration Area			Low											-	Apr	Oct	-
	Waterfowl	Bufflehead	Concentration Area			<100											-	-	-	-
	Waterfowl	Canvasback	Concentration Area			Low											-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area			200-400											-	-	-	-
	Waterfowl	Common merganser	Concentration Area			200											-	-	-	-
	Waterfowl	Greater scaup	Concentration Area			400-800											-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area			200											-	-	-	-
232	Waterfowl	Mallard	Concentration Area			Med											-	Apr-Aug	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			200											-	-	-	-
	Waterfowl	Scoters	Concentration Area			Med											-	-	-	-
	Diving	Common Loon	Concentration Area	-T		Low											-	-	-	-
	Shorebird	Spotted sandpiper	Concentration Area			Low											-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area	C/-		Low											-	-	-	-
	Wading	Green heron	Concentration Area			Low											-	Apr	Oct	-
	Waterfowl	Bufflehead	Concentration Area			<100											-	-	-	-
	Waterfowl	Canvasback	Concentration Area			Low											-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area			200-400											-	-	-	-
235	Waterfowl	Common merganser	Concentration Area			200											-	-	-	-
	Waterfowl	Greater scaup	Concentration Area			400-800											-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area			200											-	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			200											-	-	-	-
	Waterfowl	Scoters	Concentration Area			Med											-	-	-	-
	Passerine	Marsh wren	Concentration Area			Low											-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area			10-50											-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50											-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Med											-	-	-	-
	Wading	Virginia rail	Concentration Area			Low											-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													Apr-Aug	-	-	-
236	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-	-
237	Wading	Virginia rail	Concentration Area			Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area			Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area			Med													-	-	-	-
239	Raptor	Osprey	Nesting	-/C		1-Pair													Apr-Oct	Apr	Oct	-
246	Passerine	Marsh wren	Concentration Area			Low													-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area			10-50													-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50													-	May-Jun	Jul-Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Med													-	-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-	-
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													Apr-Aug	-	-	-
	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-	-
249	Shorebird	Spotted sandpiper	Concentration Area			Low													-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area	C/-		Low													-	-	-	-
	Wading	Green heron	Concentration Area			Low													-	Apr	Oct	-
	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-	-
250	Diving	D. crested cormorant	Concentration Area			Low													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High													-	-	-	-
	Gull/Tern	Herring gull	Concentration Area			High													-	-	-	-
	Raptor	Bald eagle	Concentration Area	C/T		15-25													Mar-May	-	-	-
	Waterfowl	American black duck	Concentration Area			High													Apr-Aug	-	-	-
	Waterfowl	American wigeon	Concentration Area			Low													-	-	-	-
	Waterfowl	Canada goose	Concentration Area			High													Apr-Aug	-	-	-
	Waterfowl	Lesser scaup	Concentration Area			Med													-	-	-	-
	Waterfowl	Mallard	Concentration Area			High													Apr-Aug	-	-	-
251	Diving	Common Loon	Concentration Area	-/T		Low													-	-	-	-
	Waterfowl	Bufflehead	Concentration Area			<100													-	-	-	-
	Waterfowl	Canvasback	Concentration Area			Low													-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area			200-400													-	-	-	-
	Waterfowl	Common merganser	Concentration Area			200													-	-	-	-
	Waterfowl	Greater scaup	Concentration Area			400-800													-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area			200													-	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			200													-	-	-	-
	Waterfowl	Scoters	Concentration Area			Med													-	-	-	-
252	Passerine	Nelson's sharp-tailed sparrow	Nesting	-/C		Low													Sep-Oct	-	Sep-Oct	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		Low													May-Jun	Jul-Oct	Jul-Oct	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D					
287	Diadromous	Alewife	Migration	-/C		-													-	-	-	Apr-Dec	Apr-Jul
301	Diadromous	American eel	Migration	-/C		-													-	-	-	Mar-Oct	Mar-Oct
336	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
412	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-													-	-	-	Jan-Dec	Jan-Dec
461	Diadromous	Alewife	General Distribution	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	General Distribution	-/C		-													-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	General Distribution	-/C		-													-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	General Distribution	-/C	E	Historic													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	General Distribution	-/C		-													-	-	-	Jan-Dec	Jan-Dec
463	Diadromous	Sea lamprey	General Distribution	-/C		-													-	-	-	Apr-Dec	Apr-Jul
	Marine Benthic	American sand lance	Concentration Area			Common													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	T	Rare													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Concentration Area	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Concentration Area			High													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area			Low													-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	General Distribution	-/C		-													-	-	-	Jan-Dec	Oct-Apr
465	Marine Benthic	Cunner	Concentration Area			Common													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Diadromous	Alewife	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May
	Diadromous	American shad	General Distribution	-/C		-													May-Jun	-	-	May-Jun	May-Jun
	Diadromous	Atlantic salmon	General Distribution	-/C	E	Historic													Sep-Nov	-	-	Jan-Dec	Sep-Mar
466	Diadromous	Blueback herring	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jun	Apr-Jun
	Diadromous	Sea lamprey	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May
	Freshwater	Rainbow smelt	General Distribution	-/C		High													Mar-Apr	-	-	Mar-Apr	Mar-Apr
470	Diadromous	Alewife	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May
	Diadromous	Blueback herring	General Distribution	-/C		-													Apr-Jun	-	-	Apr-Jun	Apr-Jun
	Diadromous	Sea lamprey	General Distribution	-/C		-													Apr-May	-	-	Apr-May	Apr-May

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
670	Amphibian	B. spotted salamander	General Distribution	C/C		Very Low												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	General Distribution	C/C		Rare												Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	General Distribution	C/C		Low												Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	General Distribution	E/E		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	General Distribution	T/T		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
671	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T		Very Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Concentration Area	C/C		Low												May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
721	Bivalve	Softshell clam	Concentration Area	-/C		Historic												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
729	Crab	Horseshoe crab	General Distribution	-/C		Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
730	Bivalve	Eastern oyster	Concentration Area	-/C		High												Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
731	Bivalve	Eastern oyster	Concentration Area	-/C		Historic												Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
737	Bivalve	Softshell clam	Concentration Area	-/C		Present												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
738	Bivalve	Brook floater	Vulnerable Occurrence	T/E		Very Low												Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec
739	Bivalve	Squawfoot	Concentration Area	C/C		Very Low												Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec
	Bivalve	Alewife floater	Concentration Area	-/C		Very Low												Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
750	Small Mammal	Beaver	Concentration Area			Common												-	-	-	-	-
	Small Mammal	Muskrat	Concentration Area			Common												-	-	-	-	-
	Small Mammal	Northern river otter	Concentration Area			Common												-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

REPTILES & AMPHIBIANS






Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
	Amphibian	B. spotted salamander	General Distribution	C/C		Very Low												-	-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C		Rare												-	-	-	-	Jan-Dec

TERRESTRIAL MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
	Small Mammal	New England cottontail	General Distribution	E/E		Potential												-	-	-	-	-

FISH



Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
 Diadromous	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
 Estuarine Nursery	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
 Estuarine Resident	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
 Marine Benthic	Atlantic tomcod													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
 Marine Pelagic	Atlantic mackerel													-	-	-	May-Nov	May-Nov


REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Amphibian	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Lobster	American lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
 Shrimp	Db grass shrimp													-	-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Small Mammal	Beaver													-	-	-	-	-
	Muskrat													-	-	-	-	-
	Northern river otter													-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	137.51	0.21
10B	Freshwater Marshes	576.52	0.90
10C	Swamps	1,088.89	1.70
10D	Scrub and Shrub Wetlands	301.85	0.47
9A	Sheltered Tidal Flats	490.91	0.77

ESI SHORELINE HABITAT TYPES

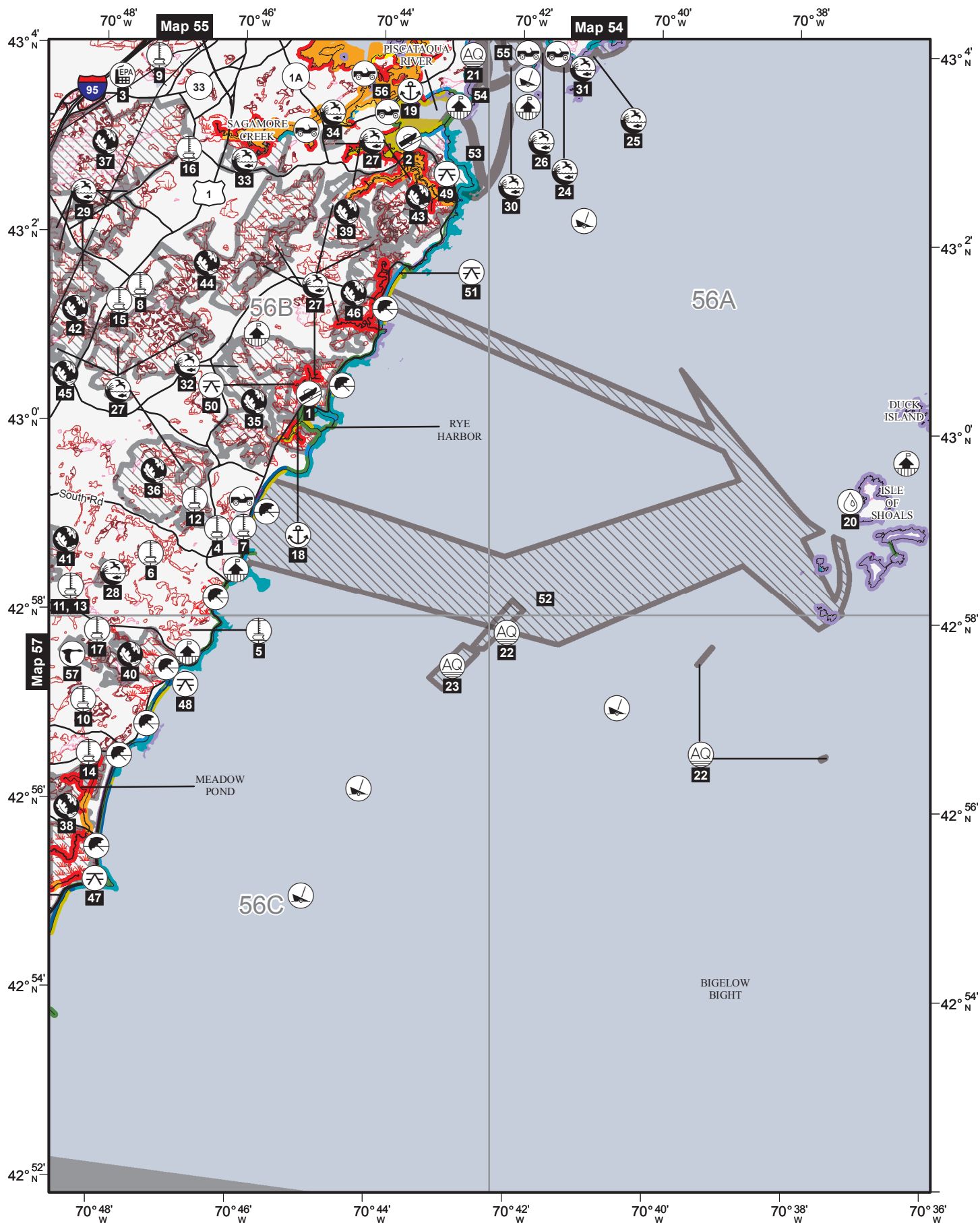
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	14,020.22	8.71	16%
10B	Freshwater Marshes	1,721.10	1.07	2%
10C	Swamps	3,922.39	2.44	4%
10D	Scrub and Shrub Wetlands	88.66	0.06	< 1%
9A	Sheltered Tidal Flats	22,764.71	14.15	25%
9B	Vegetated Low Banks	43,752.04	27.19	49%
8B	Sheltered, Solid Man-Made Structures	1,369.70	0.85	2%
8C	Sheltered Riprap	853.48	0.53	1%
5	Mixed Sand and Gravel Beaches	1,160.92	0.72	1%
4	Coarse Grained Sand Beaches	283.27	0.18	< 1%

Total ESI Shoreline: 89,936.50 Total ESI Shoreline: 55.88
 Total Shoreline: 61,561.90 Total Shoreline: 38.25

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 56

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 56
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			
Map ID	Type	Name	Phone
1	BOAT RAMP	ATLANTIC OCEAN/RYE HARBOR BOAT RAMP	603-431-6865
2	BOAT RAMP	BERRY'S BROOK/LITTLE HARBOR BOAT RAMP	
3	EPA FACILITY	HIGH LINER FOODS (USA), INC.	
4	LOCK AND DAM	BURKE POND DAM	
5	LOCK AND DAM	CHAPEL BROOK DAM	
6	LOCK AND DAM	COUNTRY CLUB ESTATES DAM	
7	LOCK AND DAM	EEL POND DAM	
8	LOCK AND DAM	HOLDING POND DAM	
9	LOCK AND DAM	HOSPITAL CORPORATION DAM	
10	LOCK AND DAM	LAMPREY ICE POND DAM	
11	LOCK AND DAM	LITTLE RIVER DAM	
12	LOCK AND DAM	LOCKE POND DAM	
13	LOCK AND DAM	MILL POND DAM 2	603-319-8246
14	LOCK AND DAM	OLD MILL POND DAM	
15	LOCK AND DAM	PARK POND DAM	
16	LOCK AND DAM	SAGAMORE CREEK DAM	
17	LOCK AND DAM	STEVENS RECREATION POND DAM	603-433-5050
18	MARINA	RYE HARBOR MARINA	
19	MARINA	WENTWORTH-BY-THE-SEA MARINA	
20	WATER INTAKE	SHOALS MARINE LAB	

DISPLAYED ON MAP (POLYGONS)			
Map ID	Type	Name	Phone
21	AQUACULTURE	DR. MICHAEL CHAMBERS AND DR. HUNT HOWELL	603-862-3394
22	AQUACULTURE	ISLES OF SHOALS MARICULTURE, LLC	603-978-1817
23	AQUACULTURE	YANKEE FISHERMAN'S CO-OP	207-624-6550
24	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	
25	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	
26	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	
27	MANAGEMENT AREA	CONSERVATION LAND	207-624-6550
28	MANAGEMENT AREA	MYERS PROPERTY	
29	MANAGEMENT AREA	PORTSMOUTH GREENBELT	
30	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	
31	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	207-624-6550
32	MANAGEMENT AREA	TOWN FOREST	
33	MANAGEMENT AREA	URBAN FORESTRY CENTER	
34	MANAGEMENT AREA	WENTWORTH GROVE OPEN SPACE	
35	NATURE CONSERVANCY	AW/COMIN MARSH	207-729-5181
36	NATURE CONSERVANCY	BAILEY BROOK	207-729-5181
37	NATURE CONSERVANCY	GREAT BOG	207-729-5181

DISPLAYED ON MAP (POLYGONS) (continued)				
Map ID	Type	Name	Contact	Phone
38	NATURE CONSERVANCY	HAMPTON MARSH	THE NATURE CONSERVANCY	207-729-5181
39	NATURE CONSERVANCY	LOWER BERRY'S BROOK	THE NATURE CONSERVANCY	207-729-5181
40	NATURE CONSERVANCY	LOWER LITTLE RIVER	THE NATURE CONSERVANCY	207-729-5181
41	NATURE CONSERVANCY	MIDDLE LITTLE RIVER	THE NATURE CONSERVANCY	207-729-5181
42	NATURE CONSERVANCY	PACKER BOG	THE NATURE CONSERVANCY	207-729-5181
43	NATURE CONSERVANCY	SEAVEY CREEK / FAIRHILL SWAMP	THE NATURE CONSERVANCY	207-729-5181
44	NATURE CONSERVANCY	UPPER BERRY'S BROOK	THE NATURE CONSERVANCY	207-729-5181
45	NATURE CONSERVANCY	UPPER LITTLE RIVER	THE NATURE CONSERVANCY	207-729-5181
46	NATURE CONSERVANCY	WALL'S MARSH	THE NATURE CONSERVANCY	207-729-5181
47	PARK	HAMPTON BEACH STATE PARK	NH DEPT OF RESOURCES & ECON DEV	
48	PARK	NORTH HAMPTON STATE PARK	NH DEPT OF RESOURCES & ECON DEV	
49	PARK	ODIORNE POINT STATE PARK	NH DEPT OF RESOURCES & ECON DEV	
50	PARK	RYE HARBOR STATE PARK	NH DEPT OF RESOURCES & ECON DEV	
51	PARK	WALL'S SANDS STATE PARK	NH DEPT OF RESOURCES & ECON DEV	
52	PIPELINE	CABLE 2		
53	PIPELINE	CABLE 3		
54	PIPELINE	CABLE 4		
55	PIPELINE	CABLE 7		
56	PIPELINE	PIPELINE 11		
57	WILDLIFE REFUGE	BOEIS WILDLIFE PRESERVE	TOWN OF NORTH HAMPTON	

JURISDICTIONS			
COUNTY:	ROCKINGHAM, YORK	FEMA:	REGION I
COAST GUARD:	DISTRICT 1, SECTOR BOSTON, SECTOR NORTHERN NEW ENGLAND	EPA:	REGION 1
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	1,296.48	2.03
10B	Freshwater Marshes	771.46	1.21
10C	Swamps	2,472.79	3.86
10D	Scrub and Shrub Wetlands	925.47	1.45
9A	Sheltered Tidal Flats	449.79	0.70
7	Exposed Tidal Flats	196.82	0.31
5	Mixed Sand and Gravel Beaches	318.63	0.50
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	295.19	0.46

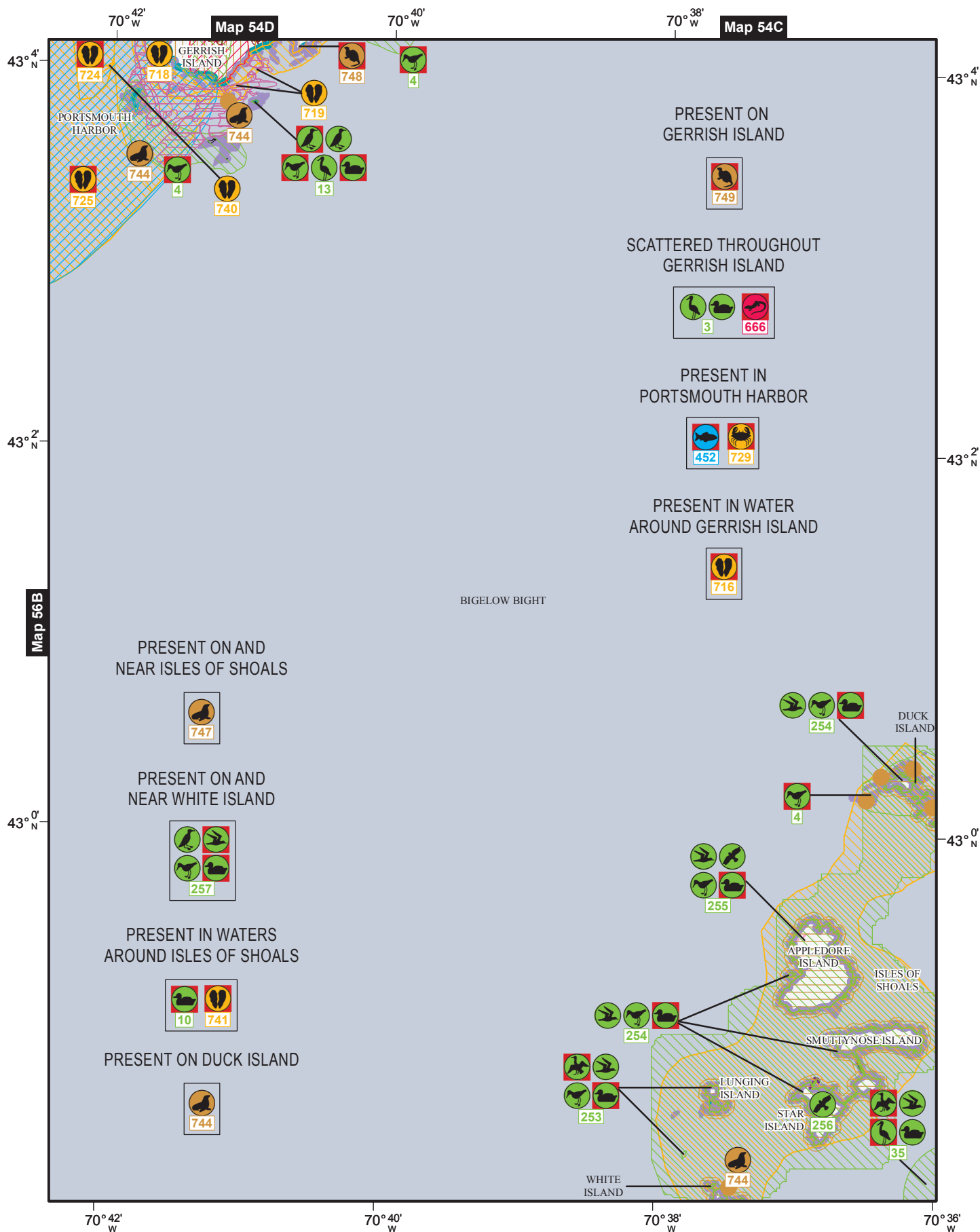
ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	52,512.83	32.63	24%
10B	Freshwater Marshes	26.08	0.02	< 1%
10C	Swamps	1,028.27	0.64	< 1%
10D	Scrub and Shrub Wetlands	31.50	0.02	< 1%
9A	Sheltered Tidal Flats	45,930.15	28.54	21%
9B	Vegetated Low Banks	11,228.23	6.98	5%
8A	Sheltered, Impermeable, Rocky Shores	2,367.01	1.47	1%
8B	Sheltered, Solid Man-Made Structures	1,471.71	0.91	1%
8C	Sheltered Riprap	2,104.49	1.31	1%
7	Exposed Tidal Flats	17,299.68	10.75	8%
6B	Riprap	16,966.75	10.54	8%
5	Mixed Sand and Gravel Beaches	18,760.12	11.66	9%
4	Coarse Grained Sand Beaches	8,977.51	5.58	4%
3A	Fine to Medium Grained Sand Beaches	6,223.98	3.87	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	26,817.20	16.66	12%
1B	Exposed, Solid Man-Made Structures	4,455.78	2.77	2%
Total ESI Shoreline:		216,201.29	134.34	
Total Shoreline:		123,799.92	76.93	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 56A

S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016

Map 56A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value		0% To 10% Cover												
SAV	Eelgrass	High Ecological Value		10% To 40% Cover												
SAV	Eelgrass	High Ecological Value		40% To 70% Cover												
SAV	Eelgrass	High Ecological Value		70% To 100% Cover												
SAV	Eelgrass	High Ecological Value		Some-Bottom (60-90%)												
SAV	Eelgrass	High Ecological Value		Half (30-60%)												
SAV	Eelgrass	High Ecological Value		Scarce (10-30%)												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
3	Wading Waterfowl	Wading birds	Vulnerable Occurrence		-												
		Waterfowl	Vulnerable Occurrence		-												
4	Shorebird	American golden-plover	Concentration Area		Foraging												
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging												
	Shorebird	Baird's sandpiper	Concentration Area		Foraging												
	Shorebird	BB sandpiper	Concentration Area		Foraging												
	Shorebird	Black-bellied plover	Concentration Area		Foraging												
	Shorebird	Dunlin	Concentration Area		Foraging												
	Shorebird	Greater yellowlegs	Concentration Area		Foraging												
	Shorebird	Hudsonian godwit	Concentration Area		Foraging												
	Shorebird	Least sandpiper	Concentration Area		Foraging												
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging												
	Shorebird	Pectoral sandpiper	Concentration Area		Foraging												
	Shorebird	Red Knot	Concentration Area	C/-	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area		Foraging												
	Shorebird	Sanderling	Concentration Area		Foraging												
	Shorebird	Semipalmated plover	Concentration Area		Foraging												
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area		Foraging												
	Shorebird	Solitary sandpiper	Concentration Area		Foraging												
	Shorebird	Stilt sandpiper	Concentration Area		Foraging												
	Shorebird	Western sandpiper	Concentration Area		Foraging												
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging												
	Shorebird	White-rumped sandpiper	Concentration Area		Foraging												
10	Shorebird	Willet	Concentration Area	-/C	Foraging												
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
13	Acid	Black guillemot	Roosting			-												May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting			-												-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-		-												-	-	-	-
35	Wading	BC night-heron	Roosting	E/-		-												May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting			-												May-Aug	-	-	-
	Diving	Common Loon	Rafting	-/T		-												-	-	-	-
	Diving	D. crested cormorant	Rafting			-												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Rafting			-												May-Aug	-	-	-
	Gull/Tern	Herring gull	Rafting			-												-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-												May-Sep	-	-	-
	Waterfowl	American black duck	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Black Scoter	Rafting			-												-	-	-	-
	Waterfowl	Bufflehead	Rafting			-												-	-	-	-
	Waterfowl	Common eider	Rafting			-												May-Aug	-	-	-
	Waterfowl	Goldeneye	Rafting			-												-	-	-	-
	Waterfowl	Green-winged teal	Rafting			-												May-Aug	-	-	-
	Waterfowl	Long-tailed duck	Rafting			-												-	May	Sep	-
	Waterfowl	Mallard	Rafting			-												Apr-Aug	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence			-												-	Dec-Jan	-	-
253	Waterfowl	Scoters	Rafting			-												-	-	-	-
	Waterfowl	Surf scoter	Rafting			-												-	-	-	-
	Diving	D. crested cormorant	Concentration Area			High												-	-	-	-
	Diving	Great cormorant	Concentration Area	T/-		Med												-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												May-Aug	-	-	-
	Gull/Tern	Herring gull	Concentration Area			High												-	-	-	-
	Shorebird	Purple sandpiper	Concentration Area			High												-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area			Med												-	-	-	-
254	Waterfowl	Harlequin duck	Concentration Area	T/-		Low												-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												May-Aug	-	-	-
	Gull/Tern	Herring gull	Concentration Area			High												-	-	-	-
	Shorebird	Purple sandpiper	Concentration Area			High												-	-	-	-
255	Shorebird	Ruddy turnstone	Concentration Area			Med												-	-	-	-
	Waterfowl	Harlequin duck	Concentration Area	T/-		Low												-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												May-Aug	-	-	-
	Gull/Tern	Herring gull	Concentration Area			High												-	-	-	-
	Raptor	Snowy owl	Concentration Area			Few												-	-	-	-
	Shorebird	Purple sandpiper	Concentration Area			High												-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area			Med												-	-	-	-
	Waterfowl	Harlequin duck	Concentration Area	T/-		Low												-	-	-	-
256	Raptor	Snowy owl	Concentration Area			Few												-	-	-	-
257	Acid	Black guillemot	Nesting			-												May-Aug	-	-	-
	Gull/Tern	Arctic tern	Nesting	T/C		3 Pairs												Apr-Oct	Apr	Oct	-
	Gull/Tern	Common tern	Nesting	C/T		2500 Pairs												May-Jul	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
	Gull/Tern	Roseate tern	Nesting	E/E	E	50 Pairs												May-Aug	May	Aug	-	-
	Shorebird	Purple sandpiper	Concentration Area			High												-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area			Med												-	-	-	-	-
	Waterfowl	Harlequin duck	Concentration Area	T/-		Low												-	-	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
452	Diadromous	Alewife	General Distribution	-/C		-												-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	General Distribution	-/C		-												-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	General Distribution	-/C		-												-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	General Distribution	-/C	E	Historic												-	-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	T	Rare												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	General Distribution	-/C		-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	General Distribution	-/C		-												-	-	-	Apr-Jul	Apr-Jul
	Diadromous	Shorthose sturgeon	Concentration Area	E/E	E	Rare												-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	General Distribution	-/C		-												-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	American sand lance	Concentration Area			Common												-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Marine Benthic	Cunner	Concentration Area			Common												Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T		-												-	-	-	Jan-Dec	Jan-Dec
	Snake	Northern black racer	Vulnerable Occurrence	C/-		-												-	-	-	Jan-Dec	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
716	Bivalve	Softshell clam	Harvest Area	-/C		Common												May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
718	Bivalve	Atl. jackknife clam	Harvest Area			Common												-	-	-	Jan-Dec	Jan-Dec
719	Bivalve	Atlantic surfclam	Harvest Area			Common												Jun-Aug	-	-	Jan-Dec	Jan-Dec
724	Bivalve	Sea scallop	Harvest Area	-/C		Common												Jul-Oct	-	-	Jan-Dec	Jan-Dec
725	Bivalve	Sea scallop	Concentration Area	-/C		Common												Jul-Oct	-	-	Jan-Dec	Jan-Dec
729	Crab	Horseshoe crab	General Distribution	-/C		Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
740	Bivalve	Blue mussel	Harvest Area			Common												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
741	Bivalve	Atl. jackknife clam	Concentration Area			Common												-	-	-	Jan-Dec	Jan-Dec
	Bivalve	Blue mussel	Concentration Area			Common												May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	European flat oyster	Concentration Area			Common												Aug-Sep	-	-	Jan-Dec	Jan-Dec
	Bivalve	Sea scallop	Concentration Area	-/C		Common												Jul-Oct	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS




Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Concentration	Mapping Qualifier				
				S	F		J	F	M	A	M	J	J	A	S	O	N	D						
748	Small Mammal	New England cottontail	General Distribution	E/E		Potential															-	-	-	-
749	Small Mammal	New England cottontail	Vulnerable Occurrence	E/E		Low															-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F	J	F	M	A	M	J	J	A	S	O	N	D				
	Atlantic puffin	General Distribution	T/-															-	-	-
	Razorbill	General Distribution	T/-															-	-	-
	Common Loon	General Distribution	-/T															-	-	-
	Great cormorant	General Distribution	T/-															-	-	-
	Arctic tern	General Distribution	T/C															-	-	-
	Common tern	General Distribution	C/T															May-Oct	-	-
	Roseate tern	General Distribution	E/E	E														May-Aug	-	-
	Leach's storm-petrel	General Distribution	C/-															-	-	-
	Red-necked phalarope	General Distribution	C/-															-	Jun	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F	J	F	M	A	M	J	J	A	S	O	N	D					
	Atlantic sturgeon	General Distribution	-/T														-	-	Jan-Dec	Jan-Dec	
	Shortnose sturgeon	General Distribution	E/E														-	-	Jan-Dec	Jan-Dec	
	Striped bass	Concentration Area															-	-	Jan-Dec	Jan-Dec	
	Black Seabass	Concentration Area															-	-	Jan-Dec	Jan-Dec	


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Interstest	Juveniles	Adults
			S	F	J	F	M	A	M	J	J	A	S	O	N	D					
	Green sea turtle	General Distribution	-/-	T													-	-	-	Jun-Nov	Jun-Nov
	K. ridley sea turtle	General Distribution	E/-	E													-	-	-	Jun-Nov	Jun-Nov
	Leatherback sea turtle	General Distribution	E/-	E													-	-	-	Jun-Nov	Jun-Nov
	Loggerhead sea turtle	General Distribution	E/-	T													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES






Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
 Crab	Horseshoe crab	General Distribution	-/C		Low													May-Jul	-	Jan-Dec	Jan-Dec
	Northern shrimp	General Distribution	-/C		Low													Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D			
 Whale	Fin whale	General Distribution	E/-	E	Low													-	-	-
	Humpback whale	General Distribution	E/-	E	Low													-	-	-
	N.A. right whale	General Distribution	E/-	E	Low													-	-	-
	Sei whale	General Distribution	E/-	E	Low													-	-	-
	Sperm whale	General Distribution	E/-	E	Rare													-	-	-





ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS


Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Alcid	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
 Diving	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
 Gull/Tern	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
 Pelagic	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
 Shorebird	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Red phalarope													-	-	-	-
														-	-	-	-

FISH





Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American plaice													-	-	-	Mar-Oct	Mar-Oct
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	American sand lance													-	-	-	Mar-Oct	Mar-Oct
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic tomcod													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Cunner													-	-	-	Mar-Oct	Mar-Oct
	Haddock													-	Mar-Jun	-	Mar-Oct	Mar-Oct
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Red hake													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													-	-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	-	Mar-Oct	Mar-Oct
	Skates													-	-	-	Jan-Dec	Jan-Dec


FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Skates													-	-	Mar-Oct	Mar-Oct
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	White hake													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Butterfish													-	-	May-Oct	May-Oct


INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Atlantic surfclam													-	-	Jan-Dec	Jan-Dec
	Blue mussel													May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Northern quahog													-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	May-Nov	May-Nov
	Db grass shrimp													-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Beaver													-	-	-	-
	Muskrat													-	-	-	-
	Northern river otter													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10B	Freshwater Marshes	9.66	0.02
10D	Scrub and Shrub Wetlands	2.40	0.00
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	193.80	0.30

ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
6B	Riprap	588.24	0.37	3%
5	Mixed Sand and Gravel Beaches	1,968.85	1.22	9%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	18,842.44	11.71	87%
1B	Exposed, Solid Man-Made Structures	160.22	0.10	1%

Total ESI Shoreline: 21,559.76 Total ESI Shoreline: 13.40
 Total Shoreline: 19,580.69 Total Shoreline: 12.17

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Map 56B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
					J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value		Some-Bottom (60-90%)												
SAV	Eelgrass	High Ecological Value		Half (30-60%)												
SAV	Eelgrass	High Ecological Value		Scarce (10-30%)												

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence											
						J	F	M	A	M	J	J	A	S	O	N	D
11	Alcid	Atlantic puffin	General Distribution	TI/-	-												
	Pelagic	Leach's storm-petrel	General Distribution	CI/-	-												
	Shorebird	Red-necked phalarope	General Distribution	CI/-	-												
222	Gull/Tern	Bonaparte's gull	Concentration Area		Med												
	Gull/Tern	Common tern	Concentration Area	C/T	Low												
	Gull/Tern	G. black-backed gull	Concentration Area		High												
	Gull/Tern	Herring gull	Concentration Area		High												
	Gull/Tern	Ring-billed gull	Concentration Area		Med												
	Waterfowl	American black duck	Concentration Area		High												
	Waterfowl	Bufflehead	Concentration Area		Med												
	Waterfowl	Common goldeneye	Concentration Area		Med												
	Waterfowl	Mallard	Concentration Area		High												
	Waterfowl	Red-breasted merganser	Concentration Area		Low												
	Wading	American bittern	Concentration Area		Low												
	Wading	BC night-heron	Concentration Area	E/-	Low												
	Wading	Great blue heron	Concentration Area	CI/-	Low												
	Wading	Great egret	Concentration Area		Low												
	Wading	Green heron	Concentration Area		Low												
	Wading	Snowy egret	Concentration Area		Low												
228	Waterfowl	American black duck	Concentration Area		Low												
	Diving	D. crested cormorant	Concentration Area		Med-High												
	Diving	Great cormorant	Concentration Area	TI/-	Low												
	Gull/Tern	G. black-backed gull	Concentration Area		High												
	Gull/Tern	Herring gull	Concentration Area		High												
	Shorebird	Purple sandpiper	Concentration Area		Med												
	Waterfowl	American black duck	Concentration Area		Low												
	Waterfowl	Common eider	Nesting		Med												
237	Wading	Virginia rail	Concentration Area		Med												
	Waterfowl	American black duck	Concentration Area		Med												
	Waterfowl	Wood duck	Concentration Area		Med												

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
240	Raptor	Bald eagle	Nesting	C/T		5-20												Mar-May	-	-	-
248	Passerine	Grasshopper sparrow	Nesting	E/C		<5												May-Oct	-	-	-
	Passerine	Horned lark	Nesting	-/T		<5												May-Oct	-	-	-
	Passerine	Vesper sparrow	Nesting	-/C		Low												May-Oct	-	-	-
	Shorebird	Upland sandpiper	Nesting	T/E		10-15												Apr-Oct	-	-	-
258	Passerine	Nelson's sharp-tailed sparrow	Nesting	-/C		<50												Sep-Oct	-	Sep-Oct	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		<100												May-Oct	May-Jun	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Low												-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Low												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Low												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area			Low												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Low												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Nesting	-/C		<5												May-Aug	May-Jun	Jul-Sep	-
	Wading	American bittern	Concentration Area			Low												May-Aug	Apr	Oct	-
	Wading	BC night-heron	Concentration Area	E/-		Low												-	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area			Low												-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Low												-	-	-	-
	Wading	Great egret	Concentration Area			Low												-	Apr	Oct	-
	Wading	Green heron	Concentration Area			Low												-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area			Low												-	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Low												-	Apr	Oct	-
	Waterfowl	American black duck	Concentration Area			Low												Apr-Aug	-	-	-
	Waterfowl	Canada goose	Concentration Area			Low												Apr-Aug	-	-	-
259	Passerine	Nelson's sharp-tailed sparrow	Nesting	-/C		<50												Sep-Oct	-	Sep-Oct	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		<100												May-Oct	May-Jun	Jul-Oct	-
	Shorebird	Black-bellied plover	Concentration Area			Low												-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Low												-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Low												-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Low												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area			Low												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Low												-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Nesting	-/C		<5												May-Aug	May-Jun	Jul-Sep	-
	Wading	American bittern	Concentration Area			Low												May-Aug	Apr	Oct	-
	Wading	BC night-heron	Concentration Area	E/-		Low												-	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area			Low												-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Low												-	-	-	-
	Wading	Great egret	Concentration Area			Low												-	Apr	Oct	-
	Wading	Green heron	Concentration Area			Low												-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area			Low												-	Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Low												-	Apr	Oct	-
	Waterfowl	American black duck	Concentration Area			Low												Apr-Aug	-	-	-
	Waterfowl	Canada goose	Concentration Area			Low												Apr-Aug	-	-	-
260	Shorebird	Black-bellied plover	Concentration Area			Low												-	May	Jul-Oct	-
261	Shorebird	Black-bellied plover	Concentration Area			Low												-	May	Jul-Oct	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N				
	Shorebird	Dunlin	Concentration Area			Low												-	May	Aug-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Med												-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			Low												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Med												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Med												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Med												-	May-Jun	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Low												-	May-Jun	Jul-Oct	-
262	Gull/Tern	Bonaparte's gull	Concentration Area			Med												-	-	-	-
	Gull/Tern	Common tern	Concentration Area	C/T		Low												May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												May-Aug	-	-	-
	Gull/Tern	Ring-billed gull	Concentration Area			Med												-	-	-	-
	Waterfowl	American black duck	Concentration Area			High												-	-	-	-
	Waterfowl	Bufflehead	Concentration Area			Med												-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area			Med												-	-	-	-
	Waterfowl	Mallard	Concentration Area			High												Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			Low												-	-	-	-
263	Gull/Tern	Herring gull	Concentration Area			High												-	-	-	-
264	Diving	D. crested cormorant	Concentration Area			Med-High												Jun-Sep	-	-	-
	Diving	Great cormorant	Concentration Area	T/-		Low												-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High												-	-	-	-
	Shorebird	Purple sandpiper	Concentration Area			Med												-	-	-	-
	Waterfowl	American black duck	Concentration Area			Low												-	-	-	-
	Waterfowl	Common eider	Nesting			Med												May-Aug	-	-	-
265	Shorebird	Dunlin	Concentration Area			Low												-	May	Aug-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Med												-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area			Low												-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area			Med												-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area			Med												-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Med												-	May-Jun	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area			Low												-	May-Jun	Jul-Oct	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
287	Diadromous	Alewife	Migration	-C		-												-	-	-	Apr-Dec	Apr-Jul
305	Diadromous	American eel	Migration	-C		-												-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-C		-												-	-	-	Jan-Dec	Oct-Apr
336	Diadromous	Atlantic sturgeon	Migration	-T	T	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration			-												Dec-Feb	-	-	Jan-Dec	Jan-Dec
412	Diadromous	Atlantic sturgeon	Migration	-T	T	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-												-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration			-												-	-	-	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
426	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthead sturgeon	Migration	E/E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	Jan-Dec	Jan-Dec
452	Marine Benthic	Atlantic tomcod	Migration		-													Dec-Feb	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	General Distribution	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	General Distribution	-/C	-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	General Distribution	-/C	-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	General Distribution	-/C	Historic													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	Rare													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	General Distribution	-/C	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	General Distribution	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shorthead sturgeon	Concentration Area	E/E	Rare													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	General Distribution	-/C	-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	American sand lance	Concentration Area		Common													-	Dec-Jun	Jan-Dec	Mar-Nov
	Marine Benthic	Cunner	Concentration Area		Common													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
471	Freshwater	Rainbow smelt	General Distribution	-/C	High													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	American sand lance	Concentration Area		Common													-	Dec-Jun	Jan-Dec	Mar-Nov
	Marine Benthic	Cunner	Concentration Area		Common													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
472	Diadromous	Atlantic sturgeon	Migration	-/T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthead sturgeon	Migration	E/E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	Migration	-/C	-													-	-	Apr-Dec	Apr-Jul
473	Diadromous	American shad	Migration	-/C	-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic sturgeon	Migration	-/T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	Migration	-/C	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shorthead sturgeon	Migration	E/E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
670	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													Apr-May	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													Apr-May	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	General Distribution	C/C	Low													Apr-Jun	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	General Distribution	E/E	Very Low													May-Jul	-	Jan-Dec	Jan-Dec
672	Turtle	Spotted turtle	General Distribution	T/T	Very Low													May-Jul	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	General Distribution	C/C	Low													May-Jul	-	Jan-Dec	Jan-Nov
	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													May-Jul	-	Jan-Dec	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					D																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
678	Shrimp	Northern shrimp	General Distribution	-/C		Low													-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
745	Whale	Fin whale	General Distribution	E/-	E	Low													-			-
	Whale	Humpback whale	General Distribution	E/-	E	Low													-			-
	Whale	N.A. right whale	General Distribution	E/-	E	Low													-			-
	Whale	Sei whale	General Distribution	E/-	E	Low													-			-
	Whale	Sperm whale	General Distribution	E/-	E	Rare													-			-
746	Pinniped	Harbor seal	Haul Out			Common													-			-

TERRESTRIAL MAMMALS



Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	Mating	Calving	Pupping	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D					
750	Small Mammal	Beaver	Concentration Area			Common													-			-	-
	Small Mammal	Muskrat	Concentration Area			Common													-			-	-
	Small Mammal	Northern river otter	Concentration Area			Common													-			-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)


BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Concentration	Mapping Qualifier	Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D					
	Alcid	Razorbill	General Distribution	T/-		-													-			-	-
	Diving	Common Loon	General Distribution	-/T		-													-			-	-
		Great cormorant	General Distribution	T/-		-													-			-	-
	Gull/Tern	Arctic tern	General Distribution	T/C		-													-			-	-
		Common tern	General Distribution	C/T		-													-			-	-
		Roseate tern	General Distribution	E/E	E	-													-			-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults	
			S	F	J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Atlantic sturgeon	-/T	T	Rare													-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	E/E	E	Rare													-	-	Jan-Dec	Jan-Dec
		Striped bass	Concentration Area			High												-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass			Low													-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS






Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Hatch	Internest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Turtle	Green sea turtle	-/-	T	Rare													-	-	Jun-Nov	Jun-Nov
		K. ridley sea turtle	E/-	E	Rare													-	-	Jun-Nov	Jun-Nov
		Leatherback sea turtle	E/-	E	Low													-	-	Jun-Nov	Jun-Nov
		Loggerhead sea turtle	E/-	T	Low													-	-	Jun-Nov	Jun-Nov

INVERTEBRATES

	Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Crab	Horseshoe crab	General Distribution	-/C	C	Low													May-Jul	-	Jan-Dec	Jan-Dec





ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Black guillemot												May-Aug	-	-	-
		Common murre												-	-	-	-
	Diving	Dovekie												-	-	-	-
		Thick-billed murre												-	-	-	-
		D. crested cormorant												Jun-Sep	-	-	-
		Horned grebe												-	-	-	-
		Red-necked grebe												-	-	-	-
	Gull/Tern	Red-throated loon												-	-	-	-
		G. black-backed gull												-	-	-	-
		Herring gull												-	-	-	-
	Pelagic	Ring-billed gull												-	-	-	-
		Cory's shearwater												-	-	-	-
		Great shearwater												-	-	-	-
		Manx shearwater												-	-	-	-
		Northern fulmar												-	-	-	-
	Shorebird	Northern gannet												-	-	-	-
		Sooty shearwater												-	-	-	-
		Wilson's storm-petrel												-	-	-	-
		Red phalarope												-	-	-	-

FISH

Monthly Presence

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Ninespine stickleback													May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Striped bass													-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	Oct-May	Jan-Dec	Apr-Dec
	Atlantic menhaden													-	-	Apr-Nov	Apr-Nov
	Black Seabass													-	-	Jan-Dec	Jan-Dec
	Bluefish													-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	Jan-Dec	-
	Winter flounder													-	-	Mar-Oct	Mar-Oct
	Atlantic silverside													Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	Jan-Dec	Jan-Dec
	American plaice													-	-	Mar-Oct	Mar-Oct
	American plaice													-	Mar-Jun	Mar-Nov	Mar-Nov
	American sand lance													-	-	Mar-Oct	Mar-Oct
	American sand lance													-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic tomcod													Dec-Feb	-	Jan-Dec	Jan-Dec
	Atlantic Wolffish													Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													-	-	Mar-Oct	Mar-Oct
	Cunner													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	-
	Haddock													-	Mar-Jun	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Longhorn sculpin													-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	Mar-Oct	Mar-Oct
	Northern searobin													-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	Jan-Dec	Jan-Dec
	Ocean pout													-	-	Mar-Oct	Mar-Oct
	Pollock													-	Nov-Feb	Jan-Dec	-
	Red hake													-	-	Mar-Oct	Mar-Oct
	Red hake													-	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	Mar-Oct	Mar-Oct

FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	Skates													-	-	Jan-Dec	Jan-Dec
	Skates													-	-	Mar-Oct	Mar-Oct
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	White hake													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
Marine Pelagic	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Butterfish													-	-	May-Oct	May-Oct

REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
Amphibian	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
Bivalve	Blue mussel													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
Crab	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
Echinoderm	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	American lobster													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
Shrimp	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec
	Db grass shrimp													-	-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
Pinniped	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
Whale	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-
	Minke whale													-	-	-	-

TERRESTRIAL MAMMALS

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D
	Beaver												
	Muskrat												
	Northern river otter												

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
	Salt and Brackish Water Marshes	870.34	1.36
10B	Freshwater Marshes	709.98	1.11
10C	Swamps	2,317.82	3.62
10D	Scrub and Shrub Wetlands	798.19	1.25
9A	Sheltered Tidal Flats	450.32	0.70
7	Exposed Tidal Flats	196.82	0.31
5	Mixed Sand and Gravel Beaches	232.11	0.36
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	80.14	0.13

ESI SHORELINE HABITAT TYPES

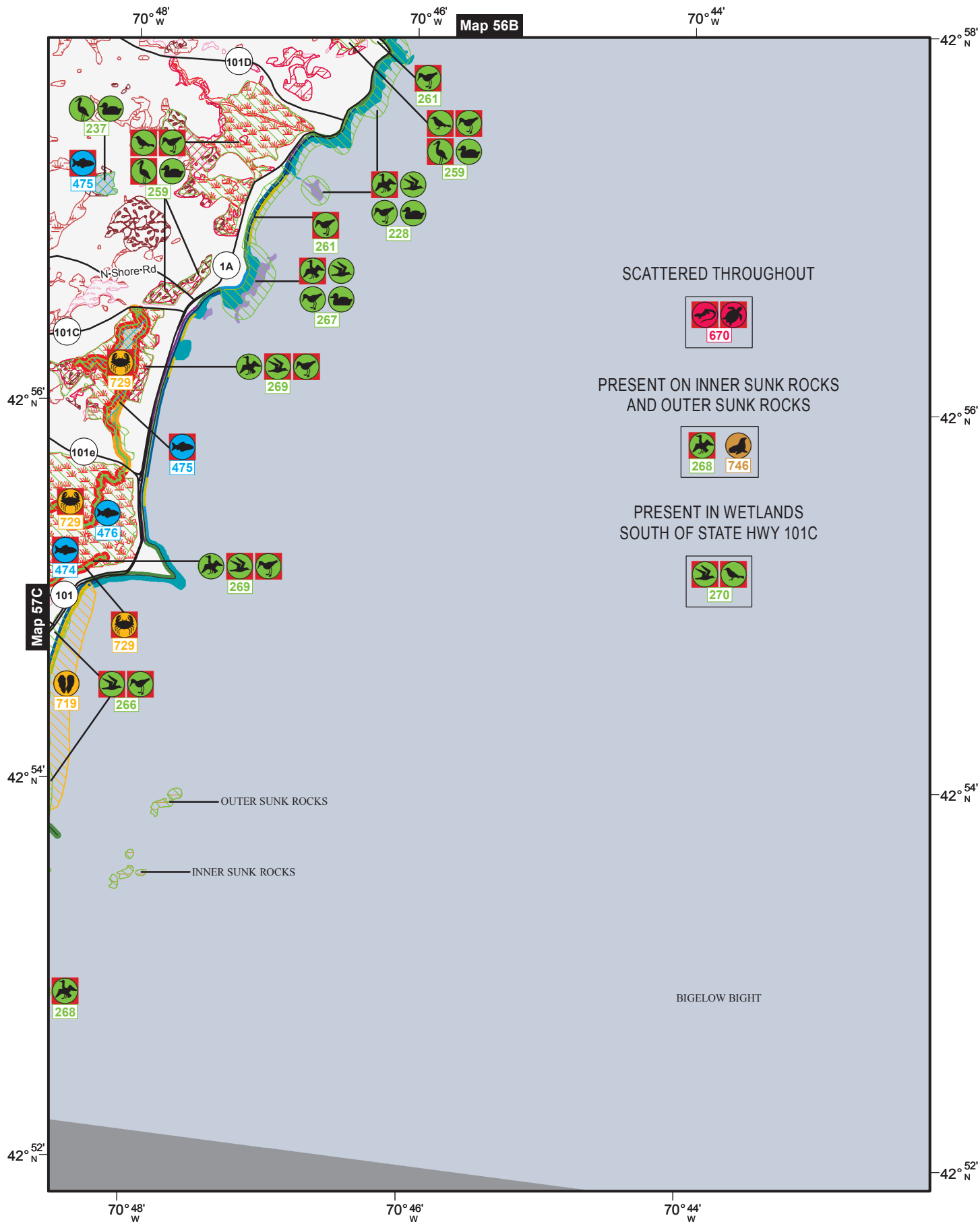
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	45,047.04	27.99	27%
10B	Freshwater Marshes	26.08	0.02	< 1%
10C	Swamps	915.37	0.57	1%
10D	Scrub and Shrub Wetlands	31.50	0.02	< 1%
9A	Sheltered Tidal Flats	45,940.14	28.55	28%
9B	Vegetated Low Banks	9,877.63	6.14	6%
8A	Sheltered, Impermeable, Rocky Shores	2,367.01	1.47	1%
8B	Sheltered, Solid Man-Made Structures	1,432.96	0.89	1%
8C	Sheltered Riprap	2,104.49	1.31	1%
7	Exposed Tidal Flats	14,665.44	9.11	9%
6B	Riprap	10,991.22	6.83	7%
5	Mixed Sand and Gravel Beaches	12,603.96	7.83	8%
4	Coarse Grained Sand Beaches	7,312.22	4.54	4%
3A	Fine to Medium Grained Sand Beaches	1,863.47	1.16	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	7,513.63	4.67	5%
1B	Exposed, Solid Man-Made Structures	1,633.29	1.01	1%

Total ESI Shoreline: 164,325.45 Total ESI Shoreline: 102.11
Total Shoreline: 86,416.35 Total Shoreline: 53.70

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov

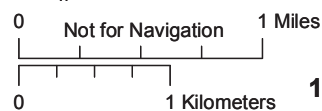




Map 56C
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 56C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
228	Diving	D. crested cormorant	Concentration Area		Med-High													Jun-Sep	-	-	-
	Diving	Great cormorant	Concentration Area	T/-	Low													-	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area		High													-	-	-	-
	Gull/Tern	Herring gull	Concentration Area		High													-	-	-	-
	Shorebird	Purple sandpiper	Concentration Area		Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Low													-	-	-	-
	Waterfowl	Common eider	Nesting		Med													May-Aug	-	-	-
237	Wading	Virginia rail	Concentration Area		Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area		Med													-	-	-	-
259	Passerine	Nelson's sharp-tailed sparrow	Nesting	-C	<50													Sep-Oct	-	Sep-Oct	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C	<100													May-Jun	May-Jun	Jul-Oct	-
	Shorebird	Black-bellied plover	Concentration Area		Low													-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area		Low													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Low													-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Nesting	-C	<5													May-Aug	May-Jun	Jul-Sep	-
	Wading	American bittern	Concentration Area		Low													May-Aug	Apr	Oct	-
	Wading	BC night-heron	Concentration Area	E/-	Low													-	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area		Low													-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-	Low													-	-	-	-
	Wading	Great egret	Concentration Area		Low													-	Apr	Oct	-
	Wading	Green heron	Concentration Area		Low													-	Apr	Oct	-
	Wading	Little blue heron	Concentration Area		Low													-	Apr	Oct	-
	Wading	Snowy egret	Concentration Area		Low													-	Apr	Oct	-
	Waterfowl	American black duck	Concentration Area		Low													Apr-Aug	-	-	-
	Waterfowl	Canada goose	Concentration Area		Low													Apr-Aug	-	-	-
261	Shorebird	Black-bellied plover	Concentration Area		Low													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area		Low													-	May	Aug-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Med													-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area		Med													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area		Med													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Med													-	May-Jun	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area		Low													-	May-Jun	Jul-Oct	-

Southern Maine and New Hampshire: Map 56C

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)		Mig.(F)		Molt
				S	F	J	F	M	A	M	J	J	A	S	O	N	D		May-Aug	Apr-Sep	May	Apr-Sep	
266	Gull/Tern	Least tern	Nesting	E/E	E													May-Aug		May	Aug		-
	Shorebird	Piping plover	Nesting	E/E	E													Apr-Sep		Apr	Sep		-
	Shorebird	Purple sandpiper	Concentration Area															-		-	-		-
	Shorebird	Sanderling	Concentration Area															-		Apr-May	-		-
267	Diving	Common Loon	Concentration Area	-J	T													-		-	-		-
	Diving	D. crested cormorant	Concentration Area															Jun-Sep		-	-		-
	Diving	Great cormorant	Concentration Area	T/-														-		-	-		-
	Gull/Tern	G. black-backed gull	Concentration Area															-		-	-		-
	Gull/Tern	Herring gull	Concentration Area															-		-	-		-
	Shorebird	Purple sandpiper	Concentration Area															-		-	-		-
	Waterfowl	American black duck	Concentration Area															-		-	-		-
	Waterfowl	Common eider	Concentration Area															May-Aug		-	-		-
	Waterfowl	Red-breasted merganser	Concentration Area															-		-	-		-
	Waterfowl	Scoters	Concentration Area															-		-	-		-
268	Diving	D. crested cormorant	Concentration Area															Jun-Sep		-	-		-
	Diving	Great cormorant	Concentration Area	T/-														-		-	-		-
269	Diving	D. crested cormorant	Concentration Area															Jun-Sep		-	-		-
	Gull/Tern	G. black-backed gull	Concentration Area															-		-	-		-
	Gull/Tern	Herring gull	Concentration Area															-		-	-		-
	Gull/Tern	Laughing gull	Concentration Area	C/-														-		-	-		-
	Shorebird	Black-bellied plover	Concentration Area															-		May	Jul-Oct		-
	Shorebird	Dunlin	Concentration Area															-		May	Aug-Oct		-
	Shorebird	Hudsonian godwit	Concentration Area															-		-	Jul-Oct		-
	Shorebird	Piping plover	Concentration Area	E/E	E													-		Apr	Sep		-
	Shorebird	Red Knot	Concentration Area	C/-	T													-		May	Aug-Oct		-
	Shorebird	Ruddy turnstone	Concentration Area															-		May-Jun	Jul-Oct		-
270	Shorebird	Sanderling	Concentration Area															-		Apr-May	-		-
	Shorebird	Semipalmated plover	Concentration Area															-		May-Jun	Jul-Oct		-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-														-		May-Jun	Jul-Oct		-
	Shorebird	Short-billed dowitcher	Concentration Area															-		May-Jun	Jul-Oct		-
	Shorebird	Whimbrel	Concentration Area	C/-														-		-	Jul-Oct		-
	Shorebird	White-rumped sandpiper	Concentration Area															-		May-Jun	Jul-Oct		-
	Shorebird	Willet	Concentration Area	-C														May-Aug		May-Jun	Jul-Sep		-
	Gull/Tern	Common tern	Nesting	C/T														May-Jul		-	-		-
	Passerine	Seaside sparrow	Nesting	-C														May-Aug		-	-		-
																							-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults		
				S	F	J	F	M	A	M	J	J	A	S	O	N	D							
474	Diadromous	Alewife	General Distribution	-C														-	-	-	Apr-Jul	Apr-Dec	Mar-Oct	May-Jul
	Diadromous	American eel	General Distribution	-C														-	-	-	Mar-Oct	May-Feb	May-Jul	May-Mar
	Diadromous	American shad	General Distribution	-C														-	-	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Diadromous	Atlantic salmon	General Distribution	-C	E													-	-	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	General Distribution	-C														-	-	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec

FISH (continued)

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
								J	F	M	A	M	J	J	A	S	O	N	D				
	Diadromous	Sea lamprey	-/C	General Distribution	-/C	-	-													-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	-/C	General Distribution	-/C	-	-													-	-	Jan-Dec	Oct-Apr
	Marine Benthic	American sand lance		Concentration Area			Common														Dec-Jun	Jan-Dec	Mar-Nov
	Marine Benthic	Cunner		Concentration Area			Common													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
475	Diadromous	Alewife	-/C	General Distribution	-/C	-	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	-/C	General Distribution	-/C	-	-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	-/C	General Distribution	-/C	-	-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	-/C	General Distribution	-/C	E	Historic													-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	-/C	General Distribution	-/C	-	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	-/C	General Distribution	-/C	-	-													-	-	Apr-Jul	Apr-Jul
	Freshwater	Rainbow smelt	-/C	General Distribution	-/C	-	-													-	-	Jan-Dec	Oct-Apr
476	Marine Benthic	American sand lance		Concentration Area			Common													-	Dec-Jun	Jan-Dec	Mar-Nov
	Marine Benthic	Cunner		Concentration Area			Common													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence												Nest	Hatch	Interstest	Juveniles	Adults
								J	F	M	A	M	J	J	A	S	O	N	D					
670	Amphibian	B. spotted salamander	C/C	General Distribution	C/C		Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	C/C	General Distribution	C/C		Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	C/C	General Distribution	C/C		Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	E/E	General Distribution	E/E		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	T/T	General Distribution	T/T		Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	C/C	General Distribution	C/C		Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

INVERTEBRATES



Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
								J	F	M	A	M	J	J	A	S	O	N	D					
719	Bivalve	Atlantic surfclam		Harvest Area			Common													Jun-Aug	-	-	Jan-Dec	Jan-Dec
729	Crab	Horseshoe crab	-/C	General Distribution	-/C		Common													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

MARINE MAMMALS



Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
746	Pinniped	Harbor seal		Haul Out			Common													-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)



BIRDS

Map ID	Subelement	Species	ME/NH	Mapping Qualifier	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
	Alcid	Atlantic puffin	T/-	General Distribution	T/-		-													-	-	-	-
		Razorbill	T/-	General Distribution	T/-		-													-	-	-	-
	Diving	Common Loon	-/T	General Distribution	-/T		-													-	-	-	-
		Great cormorant	T/-	General Distribution	T/-		-													-	-	-	-


BIRDS (continued)

Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Eggs	Larvae	Juveniles	Adults
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D				
	Gull/Tern	Arctic tern	T/C		-												May-Oct	-	-	-	-
		Common tern	C/T		-												May-Aug	-	-	-	-
		Roseate tern	E/E	E	-												-	-	-	-	-
	Pelagic	Leach's storm-petrel	C/-		-												-	-	-	-	-
	Shorebird	Red-necked phalarope	C/-		-												-	Jun	-	-	-

FISH

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous	Atlantic sturgeon	-/T	T	Rare													-	-	-	Jan-Dec	Jan-Dec
		Shortnose sturgeon	E/E	E	Rare													-	-	-	Jan-Dec	Jan-Dec
		Striped bass			High													-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass			Low													-	-	-	Jan-Dec	Jan-Dec


REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Turtle	Green sea turtle	-/-	T	Rare													-	-	-	Jun-Nov	Jun-Nov
		K. ridley sea turtle	E/-	E	Rare													-	-	-	Jun-Nov	Jun-Nov
		Leatherback sea turtle	E/-	E	Low													-	-	-	Jun-Nov	Jun-Nov
		Loggerhead sea turtle	E/-	T	Low													-	-	-	Jun-Nov	Jun-Nov

INVERTEBRATES






Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
			S	F		J	F	M	A	M	J	J	A	S	O	N	D					
	Crab	Horseshoe crab	-/C		Low													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Shrimp	Northern shrimp	-/C		Low													-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr

MARINE MAMMALS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Mating	Calving	Pupping	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
	Whale	Fin whale	E/-	E	Low													-	-	-	-
		Humpback whale	E/-	E	Low													-	-	-	-
		N.A. right whale	E/-	E	Low													-	-	-	-
		Sei whale	E/-	E	Low													-	-	-	-
		Sperm whale	E/-	E	Rare													-	-	-	-




BIRDS

Monthly Presence



Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	Black guillemot													May-Aug	-	-	-
	Common murre													-	-	-	-
	Dovekie													-	-	-	-
	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
	G. black-backed gull													-	-	-	-
	Herring gull													-	-	-	-
	Ring-billed gull													-	-	-	-
	Cory's shearwater													-	-	-	-
	Great shearwater													-	-	-	-
	Manx shearwater													-	-	-	-
	Northern fulmar													-	-	-	-
	Northern gannet													-	-	-	-
	Sooty shearwater													-	-	-	-
	Wilson's storm-petrel													-	-	-	-
	Dunlin													May	Aug-Oct	-	-
	Red phalarope													-	-	-	-

FISH


Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Striped bass													-	-	-	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Black Seabass													-	-	-	Jan-Dec	Jan-Dec
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Mar-Oct	Mar-Oct
	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec






FISH (continued)

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
	American plaice													-	-	Mar-Oct	Mar-Oct
	American plaice													Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Mar-Oct	Mar-Oct
	American sand lance													-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic tomcod													Dec-Feb	-	Jan-Dec	Jan-Dec
	Atlantic Wolffish													Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Cunner													-	-	Mar-Oct	Mar-Oct
	Haddock													Mar-Jun	Mar-Jun	Mar-Jun	-
	Haddock													Mar-Jun	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													-	-	Mar-Oct	Mar-Oct
	Longhorn sculpin													Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	Jul-Oct	Jul-Oct
	Northern searobin													-	-	Mar-Oct	Mar-Oct
	Ocean pout													-	-	Jan-Dec	Jan-Dec
	Ocean pout													-	-	Mar-Oct	Mar-Oct
	Pollock													Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	-	Mar-Oct	Mar-Oct
	Red hake													-	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													-	-	Mar-Oct	Mar-Oct
	Rock gunnel													Dec-Mar	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	Sep-May	Sep-May
	Shorthorn sculpin													-	-	Mar-Oct	Mar-Oct
	Silver hake													-	-	Apr-Nov	Apr-Nov
	Silver hake													-	-	Mar-Oct	Mar-Oct
	Skates													-	-	Jan-Dec	Jan-Dec
	Skates													-	-	Mar-Oct	Mar-Oct
	White hake													-	-	Mar-Oct	Mar-Oct
	White hake													Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder													Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													Jun-Jul	Jun-Jul	Mar-Oct	Mar-Oct
	Atlantic mackerel													-	-	May-Nov	May-Nov
	Butterfish													-	-	May-Oct	May-Oct




REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D				
 Bivalve	Northern quahog													-	-	Jan-Dec	Jan-Dec
 Crab	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
 Echinoderm	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	 Lobster													Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
														Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
 Shrimp	American lobster													-	-	Jan-Dec	Jan-Dec
	Db grass shrimp													-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
 Dolphin	Atl. wh.-side dolphin													-	-	-	-
	Dolphins													-	-	-	-
 Pinniped	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
 Whale	Lf pilot whale													-	-	-	-
	Minke whale													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	426.04	0.67
10B	Freshwater Marshes	51.83	0.08
10C	Swamps	154.78	0.24
10D	Scrub and Shrub Wetlands	125.26	0.20
5	Mixed Sand and Gravel Beaches	86.52	0.14
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	17.97	0.03

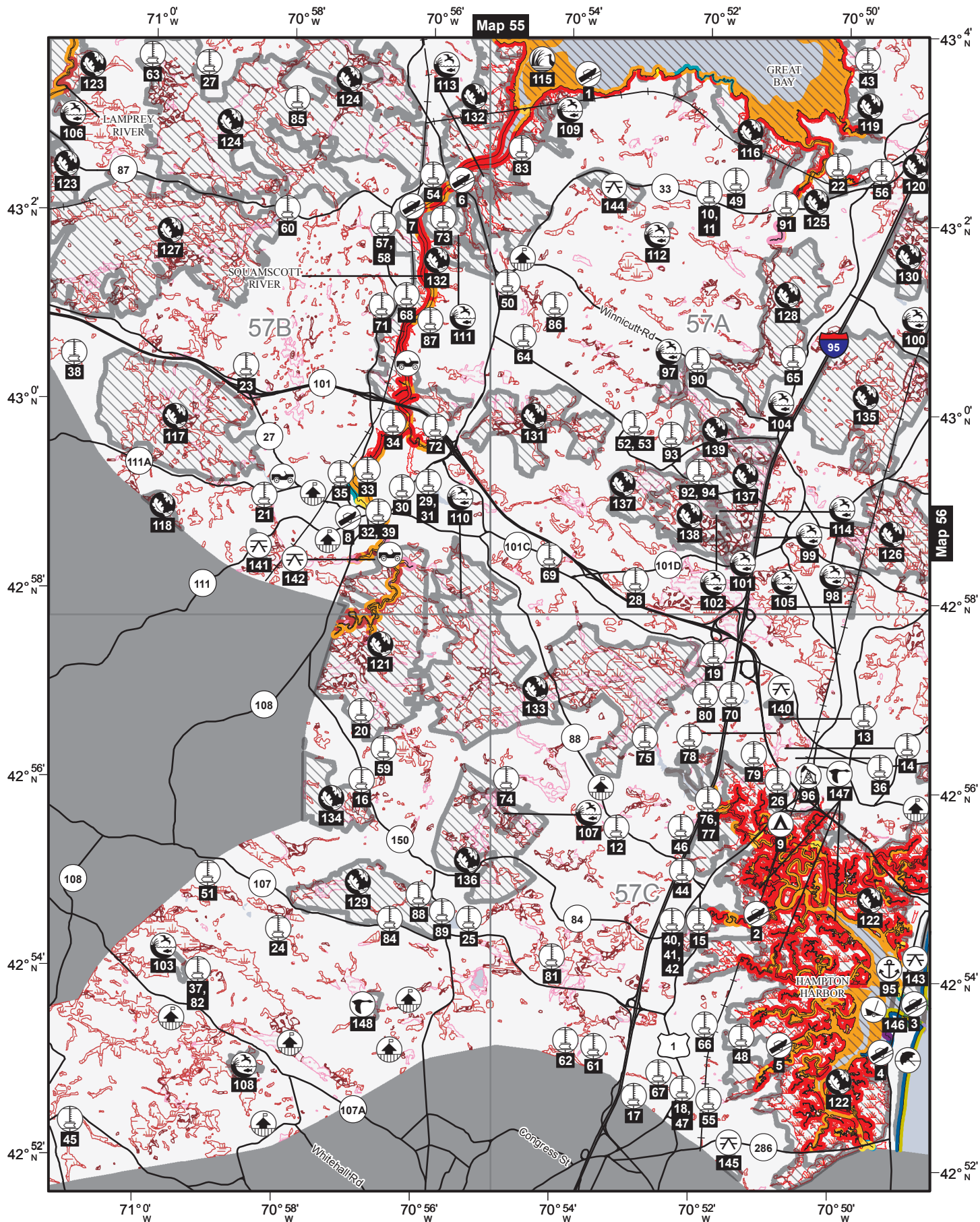
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	7,465.99	4.64	25%
10C	Swamps	112.90	0.07	< 1%
9B	Vegetated Low Banks	1,358.88	0.84	5%
8B	Sheltered, Solid Man-Made Structures	38.76	0.02	< 1%
7	Exposed Tidal Flats	2,633.14	1.64	9%
6B	Riprap	5,387.00	3.35	18%
5	Mixed Sand and Gravel Beaches	4,217.73	2.62	14%
4	Coarse Grained Sand Beaches	1,665.29	1.03	6%
3A	Fine to Medium Grained Sand Beaches	4,359.40	2.71	15%
1B	Exposed, Solid Man-Made Structures	2,662.27	1.65	9%
Total ESI Shoreline:		29,901.37	18.58	
Total Shoreline:		17,360.61	10.79	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 57
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped resources and
other resources that occur in mapped area.
Data Published: October 2016

0 Not for Navigation 2 Miles
0 2 Kilometers

1:100,000



Map 57
Southern Maine and New Hampshire

HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)				
Map ID	Type	Name	Contact	Phone
1	BOAT RAMP	GRANT BAY BOAT RAMP	STATE - NHFG	
2	BOAT RAMP	HAMPTON FALLS RIVER BOAT RAMP	TOWN - HAMPTON FALLS	
3	BOAT RAMP	HAMPTON HARBOR BOAT RAMP 1	STATE - DRED	
4	BOAT RAMP	HAMPTON HARBOR BOAT RAMP 2	TOWN - SEABROOK	
5	BOAT RAMP	MILL CREEK BOAT RAMP	UNKNOWN	
6	BOAT RAMP	SQUAMSCOTT RIVER BOAT RAMP 1	STATE - NHFG	
7	BOAT RAMP	SQUAMSCOTT RIVER BOAT RAMP 2	TOWN - NEWFIELDS	
8	BOAT RAMP	SQUAMSCOTT RIVER BOAT RAMP 3	TOWN - EXETER	
9	CAMPGROUND	TIDEWATER CAMPGROUND		
10	LOCK AND DAM	ALLEN FARM SUBDIVISION PD 1	MR & MRS KROITZSH	
11	LOCK AND DAM	ALLEN FARM SUBDIVISION PD 2	SHAWMUT BANK	
12	LOCK AND DAM	APPLECREST FARMS DAM	APPLECREST FARM ORCHARDS INC	
13	LOCK AND DAM	BATCHELDER POND DAM aka:COFFIN POND	SAU 90	
14	LOCK AND DAM	BEAVER BROOK MILL DAM	FOSS MANUFACTURING COMPANY INC	
15	LOCK AND DAM	BIG DODGE POND DAM	TOWN OF HAMPTON FALLS	
16	LOCK AND DAM	BRANCH GREAT BROOK DAM	RICHARD & MURIEL WELSH	
17	LOCK AND DAM	CAINS BROOK DAM 1	SALISBURY WATER SUPPLY CO	
18	LOCK AND DAM	CAINS BROOK DAM 2	TOWN OF SEABROOK	
19	LOCK AND DAM	CAR BARN POND	HENLEY MANUFACTURING CO	
20	LOCK AND DAM	CARPENTER DAM	MR HARLOW CARPENTER	
21	LOCK AND DAM	COLCORD POND DAM	TOWN OF EXETER PUBLIC WORKS	
22	LOCK AND DAM	COUNTRY CLUB POND	PORTSMOUTH COUNTRY CLUB	
23	LOCK AND DAM	COURMA LTD DAM	COURMA LIMITED	
24	LOCK AND DAM	DINGMAN DAM	MR MICHAEL DINGMAN	
25	LOCK AND DAM	DOW POND	MR CHARLES MABARDY	
26	LOCK AND DAM	DRAKES RIVER DAM	TOWN OF HAMPTON	
27	LOCK AND DAM	DUG POND DAM 1	CONDOMINIUM ADVISORS INC	
28	LOCK AND DAM	ELDRIDGE DAM	MR DAVID ELDRIDGE	
29	LOCK AND DAM	EXETER BACKWASH PONDS	TOWN OF EXETER	
30	LOCK AND DAM	EXETER COUNTRY CLUB DAM	EXETER COUNTRY CLUB	
31	LOCK AND DAM	EXETER RESERVOIR DAM	TOWN OF EXETER PUBLIC WORKS	
32	LOCK AND DAM	EXETER RIVER FISH LADDER	NH FISH AND GAME DEPARTMENT	
33	LOCK AND DAM	EXETER SEWAGE HOLDING POND	TOWN OF EXETER PUBLIC WORKS	
34	LOCK AND DAM	EXETER SEWAGE LAGOON	TOWN OF EXETER PUBLIC WORKS	
35	LOCK AND DAM	FORT ROCK FARM POND DAM	MS PHYLLIS CAREY	
36	LOCK AND DAM	FOSS MANUFACTURING POND 1	FOSS MANUFACTURING COMPANY INC	
37	LOCK AND DAM	FURNALD POND	MR CLINTON FURNALD	
38	LOCK AND DAM	GRAVEL PIT DAM	BELL & FLYNN INC	
39	LOCK AND DAM	GREAT DAM	TOWN OF EXETER PUBLIC WORKS	
40	LOCK AND DAM	HAMPTON FALLS RIVER I DAM	MRS DOUGLAS WOODWARD	

DISPLAYED ON MAP (POINTS) (continued)

Map ID	Type	Name	Contact	Phone
41	LOCK AND DAM	HAMPTON FALLS RIVER II DAM	MRS DOUGLAS WOODWARD	
42	LOCK AND DAM	HAMPTON FALLS RIVER III DAM	MRS DOUGLAS WOODWARD	
43	LOCK AND DAM	KENNARD DAM	TOWN OF NEWINGTON	
44	LOCK AND DAM	KENNEY BROOK	TOWN OF HAMPTON FALLS	
45	LOCK AND DAM	LEACH FIRE POND DAM	ARLYN R & ELIZABETH B LEACH	
46	LOCK AND DAM	MARELLI DAM	MS LOUIS MARELLI	
47	LOCK AND DAM	MARYS POND DAM	TOWN OF SEABROOK	
48	LOCK AND DAM	MC WASHBY POND DAM	PSNH	
49	LOCK AND DAM	MCKAY SKATING POND DAM	MR CHARLES MCKAY	
50	LOCK AND DAM	MILL BROOK POND	MR GRAYSON KIRTLAND	
51	LOCK AND DAM	MONAHAM FARM POND	MR CHARLES WALKER	
52	LOCK AND DAM	MONTROSE CONDO POND I DAM	JIS REALTY INC	
53	LOCK AND DAM	MONTROSE CONDO POND II DAM	CONDOMINIUM ADVISORS INC	
54	LOCK AND DAM	NEWFIELDS SEWAGE LAGOON	NEWFIELDS VILLAGE SEWER DISTRICT	
55	LOCK AND DAM	NOYES POND	MR STANLEY A HAMEL	
56	LOCK AND DAM	PACKER BROOK POND	MAX HOENE	
57	LOCK AND DAM	PARTING BROOK DAM 1	MR G W PAUL	
58	LOCK AND DAM	PARTING BROOK DAM 2	DR THOMAS R HACKETT	
59	LOCK AND DAM	PHILBRICK POND	MELVIN & SUSAN ARMSTRONG III	
60	LOCK AND DAM	PISCASSIC ICE POND DAM	MR GILBERT L LANG SR	
61	LOCK AND DAM	POLAND SPRING DAM 3	MR MICHAEL P CONNELLY	
62	LOCK AND DAM	POLAND SPRING DAM 4	MR MICHAEL P CONNELLY	
63	LOCK AND DAM	RECREATION POND DAM 4	MS JUNE KULAKOWSKI	
64	LOCK AND DAM	SANDERSON DAM	MR RODNEY SANDERSON	
65	LOCK AND DAM	SANDERSON POND DAM	MR JEB SANDERSON	
66	LOCK AND DAM	SEABROOK INVESTMENT DAM	SEABROOK INVESTMENT GROUP	
67	LOCK AND DAM	SECOND POND DAM	TOWN OF SEABROOK	
68	LOCK AND DAM	SHARP POND DAM	MR DWIGHT SHARP	
69	LOCK AND DAM	SHEVENELL WILDLIFE POND DAM	MR JOHN P SHEVENELL	
70	LOCK AND DAM	SIGNAL COMPANY DAM	THERMO FISHER SCIENTIFIC	
71	LOCK AND DAM	SLOANS BROOK DAM	TOWN OF EXETER PUBLIC WORKS	
72	LOCK AND DAM	STRATHAM CROSSING FIRE POND	TURNBERRY CONDOMINIUM ASSOCIATION	
73	LOCK AND DAM	STUART FARM POND	MR JOHN C MERRILL	
74	LOCK AND DAM	TAYLOR RIVER DAM	TOWN OF HAMPTON FALLS	
75	LOCK AND DAM	TAYLOR RIVER POND DAM 1	MR L J RICE	
76	LOCK AND DAM	TAYLOR RIVER POND DAM 2	NH DOT	
77	LOCK AND DAM	TAYLOR RIVER POND DIKE	NH DOT	
78	LOCK AND DAM	TOWLE FARM DAM	TOWLE FARM REALTY TRUST	
79	LOCK AND DAM	TR DRAKES BROOK	MR PHILLIP A TOWLE	
80	LOCK AND DAM	UNITIL POND DAM	UNITIL SERVICE CORP mail returned	
81	LOCK AND DAM	WEARES MILL DAM	MR NEAL PARA	
82	LOCK AND DAM	WHIPPOORWILL FARM POND	MR CLINTON FURNALD	
83	LOCK AND DAM	WILD LIFE POND	TURNBERRY CONDOMINIUM ASSOC	
84	LOCK AND DAM	WILDLIFE POND DAM 1	MR GEORGE GAUTIS	
85	LOCK AND DAM	WILDLIFE POND DAM 2	MR & MRS MCALLISTER	

DISPLAYED ON MAP (POINTS) (continued)

Map ID	Type	Name	Contact	Phone
86	LOCK AND DAM	WILDLIFE POND DAM 4	MS HELEN GALLANT	
87	LOCK AND DAM	WINDLESTRAW CONDO POND	MR RONALD MACLAREN	
88	LOCK AND DAM	WINKLEY BROOK DAM 1	HEIRS OF HOWARD EASTMAN	
89	LOCK AND DAM	WINKLEY BROOK DAM 2	HERBERT EASTMAN & ARTHUR BATCHELDER	
90	LOCK AND DAM	WINNICUT MILLS POND DAM	MR CHARLES PEABODY	
91	LOCK AND DAM	WINNICUT RIVER DAM 1	NH FISH AND GAME DEPARTMENT	
92	LOCK AND DAM	WINNICUT RIVER DAM 2	TOWN OF HAMPTON	
93	LOCK AND DAM	WINNICUT VALLEY EST POND 1	MR RAYMOND CARYE	
94	LOCK AND DAM	WOLLMAN POND DAM	DICK & MARY WOLLMAR	603-929-1422
95	MARINA	HAMPTON HARBOR MARINA		
96	OIL FACILITY	HAMPTON FACILITY	FOSS MANUFACTURING COMPANY LLC	

DISPLAYED ON MAP (POLYGONS)

Map ID	Type	Name	Contact	Phone
97	MANAGEMENT AREA	BARTER FARM	TOWN OF STRATHAM	
98	MANAGEMENT AREA	CABRAL EASEMENT	TOWN OF NORTH HAMPTON	
99	MANAGEMENT AREA	CHEN PROPERTY	TOWN OF NORTH HAMPTON	
100	MANAGEMENT AREA	CONSERVATION LAND	TOWN OF RYE	
101	MANAGEMENT AREA	DALTON EASEMENT	TOWN OF NORTH HAMPTON	
102	MANAGEMENT AREA	DONAIS PROPERTY	TOWN OF NORTH HAMPTON	
103	MANAGEMENT AREA	EATON STATE FOREST	NH DEPT OF RESOURCES & ECON DEV	
104	MANAGEMENT AREA	FIRE HOLE	TOWN OF NORTH HAMPTON	
105	MANAGEMENT AREA	FLARGHTY PROPERTY	TOWN OF NORTH HAMPTON	
106	MANAGEMENT AREA	GEORGE FALLS WOODS	TOWN OF EPPING	
107	MANAGEMENT AREA	JANVRIN NATURAL AREA	TOWN OF HAMPTON FALLS	
108	MANAGEMENT AREA	POWWOW RIVER STATE FOREST	NH DEPT OF RESOURCES & ECON DEV	
109	MANAGEMENT AREA	SANDY POINT DISCOVERY CENTER	NH DEPT OF FISH & GAME	
110	MANAGEMENT AREA	SMITH/PAGE CONSERVATION AREA	TOWN OF EXETER	
111	MANAGEMENT AREA	STUART FARM	STATE OF NEW HAMPSHIRE	
112	MANAGEMENT AREA	TESSIER PROPERTY	TOWN OF STRATHAM	
113	MANAGEMENT AREA	WIGGIN FARM	STATE OF NEW HAMPSHIRE	
114	MANAGEMENT AREA	WOLMAR EASEMENT 3	TOWN OF NORTH HAMPTON	
115	NATIONAL ESTUARINE RESEARCH RESERVE	NATURAL ESTUARINE RESEARCH RESERVE		
116	NATURE CONSERVANCY	BAYSIDE POINT	THE NATURE CONSERVANCY	207-729-5181
117	NATURE CONSERVANCY	BLOODY AND DUDLEY BROOKS	THE NATURE CONSERVANCY	207-729-5181
118	NATURE CONSERVANCY	DOGTOWN SWAMP	THE NATURE CONSERVANCY	207-729-5181
119	NATURE CONSERVANCY	FABYAN POINT	THE NATURE CONSERVANCY	207-729-5181
120	NATURE CONSERVANCY	GREAT BOG	THE NATURE CONSERVANCY	207-729-5181
121	NATURE CONSERVANCY	GREAT MEADOWS	THE NATURE CONSERVANCY	207-729-5181
122	NATURE CONSERVANCY	HAMPTON MARSH	THE NATURE CONSERVANCY	207-729-5181
123	NATURE CONSERVANCY	LAMPREY RIVER	THE NATURE CONSERVANCY	207-729-5181
124	NATURE CONSERVANCY	LOWER PISCASSIC RIVER	THE NATURE CONSERVANCY	207-729-5181
125	NATURE CONSERVANCY	LOWER WINNICUT RIVER	THE NATURE CONSERVANCY	207-729-5181
126	NATURE CONSERVANCY	MIDDLE LITTLE RIVER	THE NATURE CONSERVANCY	207-729-5181
127	NATURE CONSERVANCY	MIDDLE PISCASSIC RIVER	THE NATURE CONSERVANCY	207-729-5181

DISPLAYED ON MAP (POLYGONS) (continued)				
Map ID	Type	Name	Contact	Phone
128	NATURE CONSERVANCY	MIDDLE WINNICUT RIVER	THE NATURE CONSERVANCY	207-729-5181
129	NATURE CONSERVANCY	MUDDY POND	THE NATURE CONSERVANCY	207-729-5181
130	NATURE CONSERVANCY	PACKER BOG	THE NATURE CONSERVANCY	207-729-5181
131	NATURE CONSERVANCY	PARKMAN BROOK	THE NATURE CONSERVANCY	207-729-5181
132	NATURE CONSERVANCY	SQUAMSCOTT RIVER	THE NATURE CONSERVANCY	207-729-5181
133	NATURE CONSERVANCY	TAYLOR RIVER AND THE COVE	THE NATURE CONSERVANCY	207-729-5181
134	NATURE CONSERVANCY	UPPER GREAT BROOK	THE NATURE CONSERVANCY	207-729-5181
135	NATURE CONSERVANCY	UPPER LITTLE RIVER	THE NATURE CONSERVANCY	207-729-5181
136	NATURE CONSERVANCY	UPPER TAYLOR RIVER	THE NATURE CONSERVANCY	207-729-5181
137	NATURE CONSERVANCY	UPPER WINNICUT AND WINNICUT / CORNELIUS BRK	THE NATURE CONSERVANCY	207-729-5181
138	NATURE CONSERVANCY	UPPER WINNICUT RIVER	THE NATURE CONSERVANCY	207-729-5181
139	NATURE CONSERVANCY	WINNICUT RIVER / CORNELIUS BROOK	THE NATURE CONSERVANCY	207-729-5181
140	PARK	BATCHELDER PARK	TOWN OF HAMPTON	
141	PARK	BRICKYARD PARK	EXETER PARKS & RECREATION DEPT	
142	PARK	GILMAN PARK	EXETER PARKS & RECREATION DEPT	
143	PARK	HAMPTON BEACH STATE PARK	NH DEPT OF RESOURCES & ECON DEV	
144	PARK	STRATHAM HILL PARK	TOWN OF STRATHAM	
145	PARK	VETERANS MEMORIAL PARK	TOWN OF SEABROOK	
146	PIPELINE	CABLE 1		
147	WILDLIFE REFUGE	AUDUBON PRESERVE	AUDUBON SOCIETY OF NH	
148	WILDLIFE REFUGE	AUDUBON SOCIETY OF NEW HAMPSHIRE	AUDUBON SOCIETY OF NH	
ALSO PRESENT IN MAPPED AREA (POLYGONS)				
Type	Name		Contact	Phone
STATE PROTECTED AREA	GREAT BAY WILDLIFE AREA AND ACCESS		NH DEPT OF FISH & GAME	
STATE PROTECTED AREA	RICHARD SARGENT MANAGEMENT AREA 1		NH DEPT OF FISH & GAME	
STATE PROTECTED AREA	RICHARD SARGENT MANAGEMENT AREA 2		NH DEPT OF FISH & GAME	
STATE PROTECTED AREA	SALT MARSH WILDLIFE MANAGEMENT AREA		NH DEPT OF FISH & GAME	
JURISDICTIONS				
COUNTY:	ROCKINGHAM			
COAST GUARD:	DISTRICT 1, SECTOR BOSTON, SECTOR NORTHERN NEW ENGLAND			
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT			
			FEMA:	REGION I
			EPA:	REGION 1

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	3,980.76	6.22
10B	Freshwater Marshes	2,658.46	4.15
10C	Swamps	6,970.78	10.89
10D	Scrub and Shrub Wetlands	2,072.82	3.24
9A	Sheltered Tidal Flats	1,468.05	2.29
7	Exposed Tidal Flats	22.06	0.03
5	Mixed Sand and Gravel Beaches	5.88	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	2.72	0.00

ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	219,436.86	136.35	47%
10B	Freshwater Marshes	3,198.24	1.99	1%
10C	Swamps	11,025.20	6.85	2%
10D	Scrub and Shrub Wetlands	991.11	0.62	< 1%
9A	Sheltered Tidal Flats	184,333.07	114.54	39%
9B	Vegetated Low Banks	28,776.43	17.88	6%
8A	Sheltered, Impermeable, Rocky Shores	169.00	0.11	< 1%
8B	Sheltered, Solid Man-Made Structures	2,737.84	1.70	1%
8C	Sheltered Riprap	2,687.65	1.67	1%
7	Exposed Tidal Flats	5,513.98	3.43	1%
6B	Riprap	1,725.57	1.07	< 1%
5	Mixed Sand and Gravel Beaches	2,498.07	1.55	1%
4	Coarse Grained Sand Beaches	306.50	0.19	< 1%
3A	Fine to Medium Grained Sand Beaches	5,807.90	3.61	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	63.58	0.04	< 1%
1B	Exposed, Solid Man-Made Structures	265.46	0.16	< 1%
Total ESI Shoreline:		469,536.47	291.76	
Total Shoreline:		263,846.05	163.95	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response: [restoration.noaa.gov](https://www.noaa.gov/restoration)



Map 57A
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BENTHIC

Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S
SAV	Eelgrass	High Ecological Value				Some-Bottom (60-90%)									
SAV	Eelgrass	High Ecological Value				Half (30-60%)									
SAV	Eelgrass	High Ecological Value				Scarce (10-30%)									
SAV	Eelgrass	High Ecological Value				Dense (90-100%)									

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D				
237	Wading	Virginia rail	Concentration Area				Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area				Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area				Med													-	-	-	-
239	Raptor	Osprey	Nesting		-C		1-Pair													Apr-Oct	Apr	Oct	-
241	Shorebird	Black-bellied plover	Concentration Area				Low													-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area				Med													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area				Med													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area		C/-		Med													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area				Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area		C/-		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area				Low													-	May-Jun	Jul-Oct	-
	Wading	American bittern	Concentration Area				Low													May-Aug	Apr	Oct	-
	Wading	BC night-heron	Concentration Area		E/-		Low													-	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area				Low													-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area		C/-		Low													-	-	-	-
	Wading	Great egret	Concentration Area				Low													-	Apr	Oct	-
	Waterfowl	American black duck	Concentration Area				1000-2000													Apr-Aug	-	-	-
	Waterfowl	American wigeon	Concentration Area				50													-	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area				<50													-	-	-	-
	Waterfowl	Canada goose	Concentration Area				3000-6000													Apr-Aug	-	-	-
	Waterfowl	Northern pintail	Concentration Area				<50													-	-	-	-
242	Diving	Pied-billed grebe	Concentration Area		-T		Low													Apr-Oct	-	-	-
	Raptor	Bald eagle	Concentration Area		C/T		Low													Mar-May	-	-	-
	Raptor	Osprey	Concentration Area		-C		Low													Apr-Oct	Apr	Oct	-
	Raptor	Peregrine falcon	Concentration Area		E/T		Low													-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area				Low													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area				Low													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area		C/-		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area		C/-		50													-	May-Jun	Jul-Oct	-

Southern Maine and New Hampshire: Map 57A

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Wading	Great blue heron	Concentration Area	C/-		Low													May-Sep	-	-
	Wading	Least bittern	Concentration Area	E/C		Low													May-Sep	-	-
	Wading	Sora	Concentration Area	-/C		Low													-	-	-
	Wading	Virginia rail	Concentration Area			Low													May-Aug	-	-
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-
	Waterfowl	American wigeon	Concentration Area			>100													-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-
	Waterfowl	Bufflehead	Concentration Area			Low													-	-	-
	Waterfowl	Common goldeneye	Concentration Area			Low													-	-	-
	Waterfowl	Greater scaup	Concentration Area			Low													-	-	-
	Waterfowl	Green-winged teal	Concentration Area			150													-	-	-
	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-
	Waterfowl	Northern pintail	Concentration Area			Low													-	-	-
	Waterfowl	Ring-necked duck	Concentration Area			Low													-	-	-
	Waterfowl	Wood duck	Concentration Area			200													Oct	-	-
244	Shorebird	Solitary sandpiper	Concentration Area			Low													-	Jun	-
	Shorebird	Spotted sandpiper	Concentration Area			Low													-	Jun-Aug	-
	Wading	Green heron	Concentration Area			Low													-	Apr	Oct
	Wading	Snowy egret	Concentration Area			Low													-	Apr	Oct
	Waterfowl	Gadwall	Concentration Area			Low													-	-	-
248	Passerine	Grasshopper sparrow	Nesting	E/C		<5													May-Oct	-	-
	Passerine	Horned lark	Nesting	-/T		<5													May-Oct	-	-
	Passerine	Vesper sparrow	Nesting	-/C		Low													May-Oct	-	-
	Shorebird	Upland sandpiper	Nesting	T/E		10-15													Apr-Oct	-	-
271	Shorebird	Black-bellied plover	Concentration Area			Low													-	May	Jul-Oct
	Shorebird	Greater yellowlegs	Concentration Area			Med													-	May	Jul-Oct
	Shorebird	Least sandpiper	Concentration Area			Med													-	May-Jun	Jul-Oct
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Med													-	May-Jun	Jul-Oct
	Shorebird	Semipalmated plover	Concentration Area			Low													-	May-Jun	Jul-Oct
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Low													-	May-Jun	Jul-Oct
	Shorebird	Short-billed dowitcher	Concentration Area			Low													-	May-Jun	Jul-Oct
	Shorebird	Solitary sandpiper	Concentration Area			Low													-	Jun	-
	Shorebird	Spotted sandpiper	Concentration Area			Low													-	Jun-Aug	-
	Wading	American bittern	Concentration Area			Low													May-Aug	Apr	Oct
	Wading	BC night-heron	Concentration Area	E/-		Low													-	Apr	Oct
	Wading	Glossy ibis	Concentration Area			Low													-	Apr	Oct
	Wading	Great blue heron	Concentration Area	C/-		Low													-	-	-
	Wading	Green egret	Concentration Area			Low													-	Apr	Oct
	Wading	Green heron	Concentration Area			Low													-	Apr	Oct
	Wading	Snowy egret	Concentration Area			Low													-	Apr	Oct
	Waterfowl	American black duck	Concentration Area			1000-2000													Apr-Aug	-	-
	Waterfowl	American wigeon	Concentration Area			50													-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			<50													-	-	-
	Waterfowl	Canada goose	Concentration Area			3000-6000													Apr-Aug	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
272	Waterfowl	Gadwall	Concentration Area			Low													-	-	-
	Waterfowl	Northern pintail	Concentration Area			<50													-	-	-
	Diving	Common Loon	Concentration Area	-JT		Low													-	-	-
	Diving	D. crested cormorant	Concentration Area			Low												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High													-	-	-
	Gull/Tern	Herring gull	Concentration Area			High													-	-	-
	Raptor	Bald eagle	Concentration Area	C/T		15-25												Mar-May	-	-	-
	Waterfowl	Bufflehead	Concentration Area			<100													-	-	-
	Waterfowl	Canvasback	Concentration Area			Low													-	-	-
	Waterfowl	Common goldeneye	Concentration Area			200-400													-	-	-
273	Waterfowl	Common merganser	Concentration Area			200													-	-	-
	Waterfowl	Greater scaup	Concentration Area			400-800													-	-	-
	Waterfowl	Hooded merganser	Concentration Area			200													-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			200													-	-	-
	Waterfowl	Scooters	Concentration Area			Med													-	-	-
	Waterfowl	American black duck	Concentration Area			High												Apr-Aug	-	-	-
	Waterfowl	American wigeon	Concentration Area			Low													-	-	-
	Waterfowl	Canada goose	Concentration Area			High												Apr-Aug	-	-	-
	Waterfowl	Lesser scaup	Concentration Area			Med													-	-	-
	Waterfowl	Mallard	Concentration Area			High												Apr-Aug	-	-	-
274	Diving	D. crested cormorant	Concentration Area			Med												Jun-Sep	-	-	-
	Passerine	Marsh wren	Concentration Area			Low													-	-	-
	Passerine	Nelson's sharp-tailed sparrow	Nesting	-IC		Low												Sep-Oct	-	Sep-Oct	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		Med (<100)												May-Oct	May-Jun	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			10-50												-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50												-	May-Jun	Jul-Oct	-
	Shorebird	Spotted sandpiper	Concentration Area			Med												-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area	C/-		Med												-	-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-
	Waterfowl	American black duck	Concentration Area			Med												Apr-Aug	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low												-	-	-	-
	Waterfowl	Canada goose	Concentration Area			Med												Apr-Aug	-	-	-
	Waterfowl	Common merganser	Concentration Area			Med												-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area			Med												-	-	-	-
	Waterfowl	Mallard	Concentration Area			Med												Apr-Aug	-	-	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Eggs	Larvae	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D				
336	Diadromous	Atlantic sturgeon	Migration	-/T	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration		-													-	-	Jan-Dec	Jan-Dec
412	Marine Benthic	Atlantic tomcod	Migration		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-/T	T													-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	-													-	-	Jan-Dec	Jan-Dec
477	Diadromous	Striped bass	Migration		-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	General Distribution	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	General Distribution	-/C	-													-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	General Distribution	-/C	-													-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	General Distribution	-/C	E													-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Concentration Area	-/T	T													-	-	Jan-Dec	Jan-Dec
	Diadromous	Blueback herring	General Distribution	-/C	-													-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	General Distribution	-/C	-													-	-	Apr-Dec	Apr-Jul
	Diadromous	Shortnose sturgeon	Concentration Area	E/E	E													-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Concentration Area		High													-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area		Low													-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	General Distribution	-/C	-													-	-	Jan-Dec	Oct-Apr
478	Marine Benthic	American sand lance	Concentration Area		Common													-	Dec-Jun	Jan-Dec	Mar-Nov
	Marine Benthic	Cunner	Concentration Area		Common													Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Diadromous	Alewife	General Distribution	-/C	-													Apr-Jun	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	General Distribution	-/C	-													Apr-May	-	Apr-May	Apr-May
	Diadromous	Blueback herring	General Distribution	-/C	-													Apr-Jun	-	Apr-Jun	Apr-Jun

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
						J	F	M	A	M	J	J	A	S	O	N	D					
670	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	General Distribution	C/C	Low													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	General Distribution	E/E	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	General Distribution	T/T	Very Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	General Distribution	C/C	Low													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
672	Amphibian	B. spotted salamander	General Distribution	C/C	Very Low													-	-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C	Rare													-	-	-	-	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
721	Bivalve	Softshell clam	Concentration Area	-/C		Historic												May-Oct	May-Oct	Jan-Dec	Jan-Dec
729	Crab	Horseshoe crab	General Distribution	-/C		Common												May-Jul	-	Jan-Dec	Jan-Dec
730	Bivalve	Eastern oyster	Concentration Area	-/C		High												Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
731	Bivalve	Eastern oyster	Concentration Area	-/C		Historic												Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
732	Bivalve	Softshell clam	Concentration Area	-/C		High												May-Oct	May-Oct	Jan-Dec	Jan-Dec
733	Bivalve	Eastern oyster	Concentration Area	-/C		Historic												Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
736	Bivalve	Softshell clam	Concentration Area	-/C		Historic												May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Bivalve	Eastern oyster	Concentration Area	-/C		High												Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Bivalve	Softshell clam	Concentration Area	-/C		Present												May-Oct	May-Oct	Jan-Dec	Jan-Dec

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Waterfowl	Hooded merganser													-	-	-	-



FISH

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
Diadromous	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
Estuarine Resident	Winter flounder													-	-	-	Jan-Dec	Jan-Dec
	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
Marine Benthic	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	Atlantic tomcod													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
Marine Pelagic	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Atlantic mackerel													-	-	-	May-Nov	May-Nov

REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Amphibian	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Lobster	American lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
 Shrimp	Db grass shrimp													-	-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	-	Jan-Dec	Jan-Dec

TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
 Small Mammal	Beaver													-	-	-	-	-
	Muskrat													-	-	-	-	-
	Northern river otter													-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	465.31	0.73
10B	Freshwater Marshes	953.97	1.49
10C	Swamps	1,922.82	3.00
10D	Scrub and Shrub Wetlands	838.03	1.31
9A	Sheltered Tidal Flats	721.14	1.13
5	Mixed Sand and Gravel Beaches	5.88	0.01
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	0.99	0.00

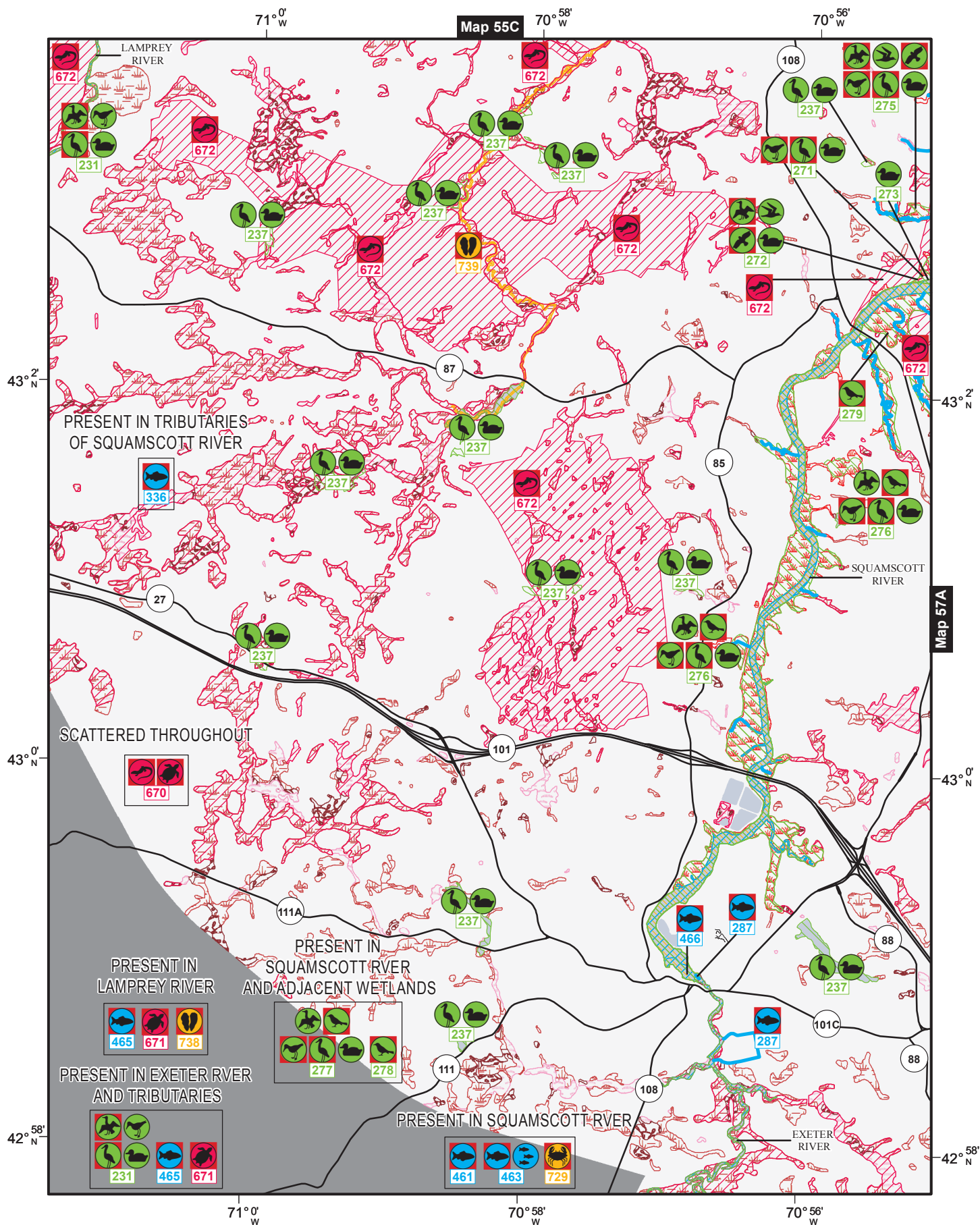
ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	24,999.22	15.53	43%
10B	Freshwater Marshes	1,201.07	0.75	2%
10C	Swamps	349.84	0.22	1%
10D	Scrub and Shrub Wetlands	45.71	0.03	< 1%
9A	Sheltered Tidal Flats	24,614.02	15.29	43%
9B	Vegetated Low Banks	3,961.25	2.46	7%
8A	Sheltered, Impermeable, Rocky Shores	169.00	0.11	< 1%
8B	Sheltered, Solid Man-Made Structures	78.46	0.05	< 1%
8C	Sheltered Riprap	306.72	0.19	1%
5	Mixed Sand and Gravel Beaches	1,952.75	1.21	3%
Total ESI Shoreline:		57,678.04	35.84	
Total Shoreline:		30,507.01	18.96	

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov

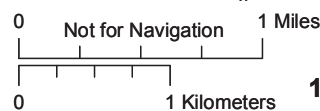




Map 57B
S. Maine/ New Hampshire



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2016



1:50,000



Map 57B
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
231	Diving	Common Loon	Concentration Area	-JT	Low													-	-	-	-
	Shorebird	Spotted sandpiper	Concentration Area		Low													-	Jun-Aug	-	-
	Wading	Great blue heron	Concentration Area	C/-	Low													-	-	-	-
	Wading	Green heron	Concentration Area		Low													-	Apr	Oct	-
	Waterfowl	Bufflehead	Concentration Area		<100													-	-	-	-
	Waterfowl	Canvasback	Concentration Area		Low													-	-	-	-
	Waterfowl	Common goldeneye	Concentration Area		200-400													-	-	-	-
	Waterfowl	Common merganser	Concentration Area		200													-	-	-	-
	Waterfowl	Greater scaup	Concentration Area		400-800													-	-	-	-
	Waterfowl	Hooded merganser	Concentration Area		200													-	-	-	-
	Waterfowl	Mallard	Concentration Area		Med													Apr-Aug	-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area		200													-	-	-	-
	Waterfowl	Scoters	Concentration Area		Med													-	-	-	-
237	Wading	Virginia rail	Concentration Area		Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area		Med													-	-	-	-
271	Shorebird	Black-bellied plover	Concentration Area		Low													-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area		Med													-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area		Med													-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Med													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Low													-	May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Spotted sandpiper	Concentration Area		Low													-	Jun	-	-
	Wading	American bittern	Concentration Area		Low													-	Jun-Aug	-	-
	Wading	BC night-heron	Concentration Area	E/-	Low													May-Aug	Apr	Oct	-
	Wading	Glossy ibis	Concentration Area		Low													-	Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-	Low													-	Apr	Oct	-
	Wading	Great egret	Concentration Area		Low													-	Apr	Oct	-
	Wading	Green heron	Concentration Area		Low													-	Apr	Oct	-
	Wading	Snowy egret	Concentration Area		Low													-	Apr	Oct	-
	Waterfowl	American black duck	Concentration Area		1000-2000													-	Apr-Aug	-	-
	Waterfowl	American wigeon	Concentration Area		50													-	-	-	-
	Waterfowl	Blue-winged teal	Concentration Area		<50													-	-	-	-
	Waterfowl	Canada goose	Concentration Area		3000-6000													Apr-Aug	-	-	-
	Waterfowl	Gadwall	Concentration Area		Low													-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
272	Waterfowl	Northern pintail	Concentration Area			<50													-	-	-
	Diving	Common Loon	Concentration Area	-/T		Low													-	-	-
	Diving	D. crested cormorant	Concentration Area			Low												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High													-	-	-
	Gull/Tern	Herring gull	Concentration Area			High													-	-	-
	Raptor	Bald eagle	Concentration Area	C/T		15-25												Mar-May	-	-	-
	Waterfowl	Bufflehead	Concentration Area			<100													-	-	-
	Waterfowl	Canvasback	Concentration Area			Low													-	-	-
	Waterfowl	Common goldeneye	Concentration Area			200-400													-	-	-
	Waterfowl	Common merganser	Concentration Area			200													-	-	-
273	Waterfowl	Greater scaup	Concentration Area			400-800													-	-	-
	Waterfowl	Hooded merganser	Concentration Area			200													-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			200													-	-	-
	Waterfowl	Scoters	Concentration Area			Med													-	-	-
	Waterfowl	American black duck	Concentration Area			High												Apr-Aug	-	-	-
	Waterfowl	American wigeon	Concentration Area			Low													-	-	-
	Waterfowl	Canada goose	Concentration Area			High												Apr-Aug	-	-	-
	Waterfowl	Lesser scaup	Concentration Area			Med													-	-	-
	Waterfowl	Mallard	Concentration Area			High												Apr-Aug	-	-	-
	Diving	Common Loon	Concentration Area	-/T		Low													-	-	-
275	Diving	D. crested cormorant	Concentration Area			Low												Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area			High													-	-	-
	Gull/Tern	Herring gull	Concentration Area			High													-	-	-
	Raptor	Bald eagle	Concentration Area	C/T		15-25												Mar-May	-	-	-
	Shorebird	Black-bellied plover	Concentration Area			Low													May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Concentration Area			Med													May	Jul-Oct	-
	Shorebird	Least sandpiper	Concentration Area			Med													May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Med													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Concentration Area			Low													May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-		Low													May-Jun	Jul-Oct	-
	Shorebird	Short-billed dowitcher	Concentration Area			Low													May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Concentration Area			Low													Jun	-	-
	Shorebird	Spotted sandpiper	Concentration Area			Low													Jun-Aug	-	-
	Wading	American bittern	Concentration Area			Low												May-Aug	Apr	Oct	-
	Wading	BC night-heron	Concentration Area	E/-		Low													Apr	Oct	-
	Wading	Glossy ibis	Concentration Area			Low													Apr	Oct	-
	Wading	Great blue heron	Concentration Area	C/-		Low													-	-	-
	Wading	Great egret	Concentration Area			Low													Apr	Oct	-
	Wading	Green heron	Concentration Area			Low													Apr	Oct	-
	Wading	Snowy egret	Concentration Area			Low													Apr	Oct	-
	Waterfowl	American black duck	Concentration Area			1000-2000												Apr-Aug	-	-	-
	Waterfowl	American wigeon	Concentration Area			50													-	-	-
	Waterfowl	Blue-winged teal	Concentration Area			<50													-	-	-
	Waterfowl	Bufflehead	Concentration Area			<100													-	-	-
																			-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
	Waterfowl	Canada goose	Concentration Area			3000-6000													Apr-Aug	-	-
	Waterfowl	Canvasback	Concentration Area			Low													-	-	-
	Waterfowl	Common goldeneye	Concentration Area			200-400													-	-	-
	Waterfowl	Common merganser	Concentration Area			200													-	-	-
	Waterfowl	Gadwall	Concentration Area			Low													-	-	-
	Waterfowl	Greater scaup	Concentration Area			400-800													-	-	-
	Waterfowl	Hooded merganser	Concentration Area			200													-	-	-
	Waterfowl	Northern pintail	Concentration Area			<50													-	-	-
	Waterfowl	Red-breasted merganser	Concentration Area			200													-	-	-
	Waterfowl	Scoters	Concentration Area			Med													-	-	-
276	Diving	D. crested cormorant	Concentration Area			Med													Jun-Sep	-	-
	Passerine	Marsh wren	Concentration Area			Low													-	-	-
	Passerine	Nelson's sharp-tailed sparrow	Nesting	-C		Low													Sep-Oct	-	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		Low													May-Oct	May-Jun	Jul-Oct
	Shorebird	Greater yellowlegs	Concentration Area			10-50													-	May	Jul-Oct
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50													-	May-Jun	Jul-Oct
	Shorebird	Spotted sandpiper	Concentration Area			Med													-	Jun-Aug	-
	Wading	Great blue heron	Concentration Area	C/-		Med													-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													Apr-Aug	-	-
	Waterfowl	Common merganser	Concentration Area			Med													-	-	-
	Waterfowl	Hooded merganser	Concentration Area			Med													-	-	-
	Waterfowl	Mallard	Concentration Area			Med													Apr-Aug	-	-
277	Diving	D. crested cormorant	Concentration Area			Med													Jun-Sep	-	-
	Passerine	Marsh wren	Concentration Area			Low													-	-	-
	Passerine	Nelson's sharp-tailed sparrow	Nesting	-C		Low													Sep-Oct	-	Sep-Oct
	Shorebird	Greater yellowlegs	Concentration Area			10-50													-	May	Jul-Oct
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		10-50													-	May-Jun	Jul-Oct
	Shorebird	Spotted sandpiper	Concentration Area			Med													-	Jun-Aug	-
	Wading	Great blue heron	Concentration Area	C/-		Med													-	-	-
	Wading	Virginia rail	Concentration Area			Low													-	-	-
	Waterfowl	American black duck	Concentration Area			Med													Apr-Aug	-	-
	Waterfowl	Blue-winged teal	Concentration Area			Low													-	-	-
	Waterfowl	Canada goose	Concentration Area			Med													Apr-Aug	-	-
	Waterfowl	Common merganser	Concentration Area			Med													-	-	-
	Waterfowl	Hooded merganser	Concentration Area			Med													-	-	-
	Waterfowl	Mallard	Concentration Area			Med													-	-	-
278	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		Low													Apr-Aug	-	-
	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		Med (<100)													May-Oct	May-Jun	Jul-Oct
279	Passerine	Saltmarsh sharp-tailed sparrow	Nesting	C/C		Med (<100)													May-Oct	May-Jun	Jul-Oct

FISH

[illegible]

REPTILES & AMPHIBIANS







Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Hatch	Nest	Interest	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
670	Amphibian	B. spotted salamander	General Distribution	C/C													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	
	Amphibian	Jefferson salamander	General Distribution	C/C													Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	
	Amphibian	Northern leopard frog	General Distribution	C/C													Apr-Jun	May-Jul	-	May-Sep	Jan-Dec	
	Turtle	Blanding's turtle	General Distribution	E/E													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	
671	Turtle	Spotted turtle	General Distribution	T/T													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	
	Turtle	Wood turtle	General Distribution	C/C													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	
	Turtle	Blanding's turtle	Vulnerable Occurrence	E/E													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	
672	Turtle	Wood turtle	Concentration Area	C/C													May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	
	Amphibian	B. spotted salamander	General Distribution	C/C													-	-	-	-	Jan-Dec	
	Amphibian	Jefferson salamander	General Distribution	C/C													-	-	-	-	Jan-Dec	

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N					
729	Crab	Horseshoe crab	General Distribution	-/C		Common												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
738	Bivalve	Brook floater	Vulnerable Occurrence	T/E		Very Low												Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec
	Bivalve	Squawfoot	Concentration Area	C/C		Very Low												Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec
739	Bivalve	Alewite floater	Concentration Area	-/C		Very Low												Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)


FISH

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Diadromous													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Estuarine Nursery													-	-	-	Apr-Nov	Apr-Nov
														-	-	-	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
														Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
														Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	-
														Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
														Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
														Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
														Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
														Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
														Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
														May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
														Dec-Feb	-	-	Jan-Dec	Jan-Dec
														Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
														Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
														-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
														Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
														-	-	-	Jan-Dec	Jan-Dec
														-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
														-	-	-	May-Nov	May-Nov

REPTILES & AMPHIBIANS


Subelement	Species	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Amphibian													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
														Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
	Shrimp													-	-	-	Jan-Dec	Jan-Dec

Southern Maine and New Hampshire: Map 57B

TERRESTRIAL MAMMALS

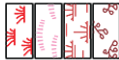
Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
	Beaver												
	Muskrat												
	Northern river otter												

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	368.52	0.58
10B	Freshwater Marshes	554.28	0.87
10C	Swamps	2,073.44	3.24
10D	Scrub and Shrub Wetlands	433.29	0.68



ESI SHORELINE HABITAT TYPES

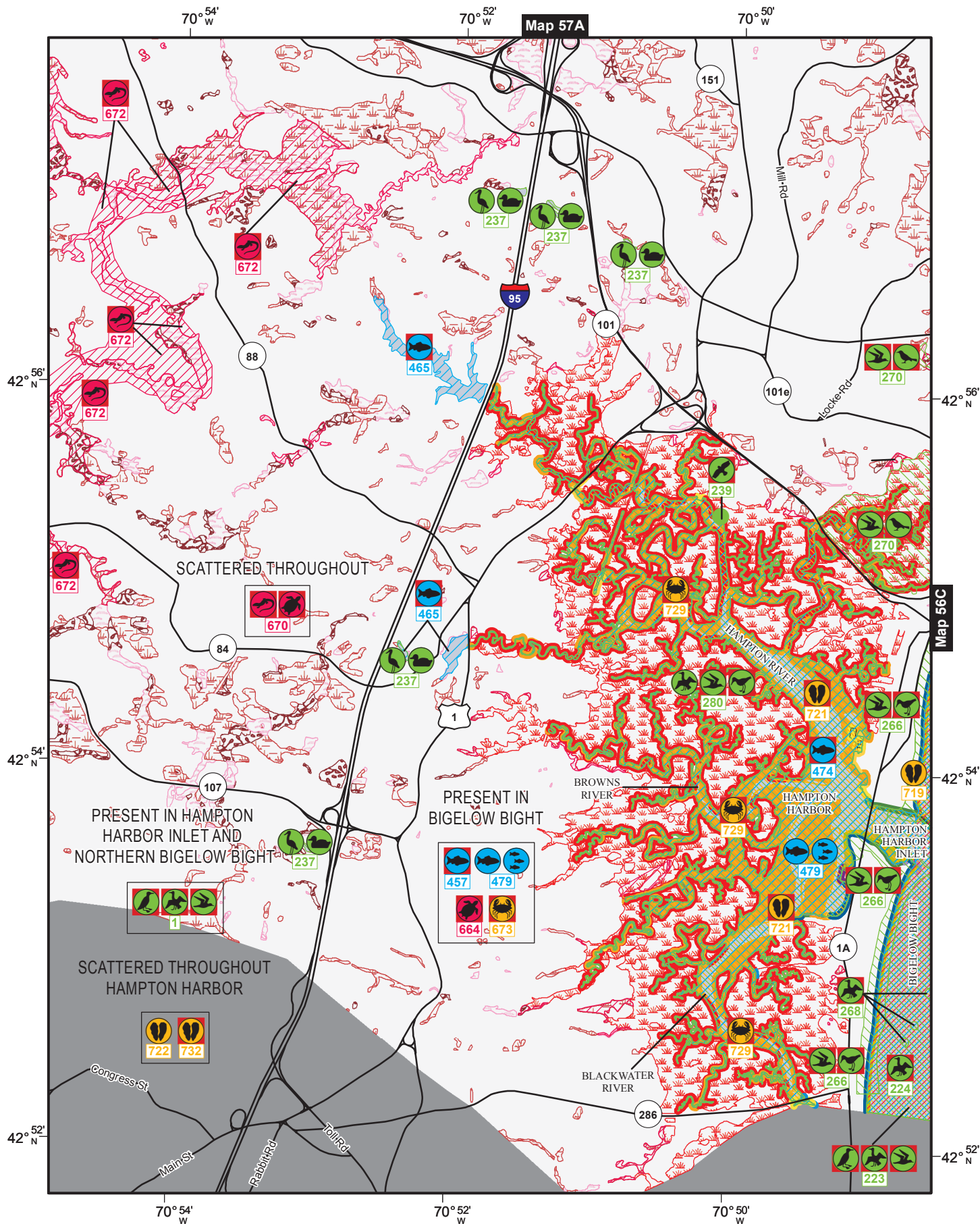
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	15,220.69	9.46	34%
10B	Freshwater Marshes	1,217.99	0.76	3%
10C	Swamps	7,611.25	4.73	17%
10D	Scrub and Shrub Wetlands	825.27	0.51	2%
9B	Vegetated Low Banks	18,469.23	11.48	41%
8B	Sheltered, Solid Man-Made Structures	885.82	0.55	2%
8C	Sheltered Riprap	224.52	0.14	< 1%
5	Mixed Sand and Gravel Beaches	490.08	0.30	1%

Total ESI Shoreline: 44,944.85
Total ESI Shoreline: 27.93
Total Shoreline: 36,508.33
Total Shoreline: 22.69

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov





Map 57C
S. Maine/ New Hampshire



SEE BACK OF MAP
 for details about mapped species and
 other species that occur in mapped area.
 Data Published: October 2016

0 Not for Navigation 1 Miles
 0 1 Kilometers

1:50,000



Map 57C
Southern Maine and New Hampshire

BIOLOGICAL RESOURCES

Note: An asterisk (*) indicates that life stage occurs in this range but not in all months included

DISPLAYED ON MAP

BIRDS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH S F	Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
						J	F	M	A	M	J	J	A	S	O	N	D				
1	Acid	Razorbill	General Distribution	T/-	-													-	-	-	-
	Diving	Common Loon	General Distribution	-/T	-													-	-	-	-
	Diving	Great cormorant	General Distribution	T/-	-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C	-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T	-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E E	-													-	-	-	-
223	Acid	Razorbill	General Distribution	T/-	-													-	-	-	-
	Diving	Common Loon	General Distribution	-/T	-													-	-	-	-
	Gull/Tern	Arctic tern	General Distribution	T/C	-													May-Oct	-	-	-
	Gull/Tern	Common tern	General Distribution	C/T	-													May-Aug	-	-	-
	Gull/Tern	Roseate tern	General Distribution	E/E E	-													-	-	-	-
224	Diving	Great cormorant	General Distribution	T/-	-													-	-	-	-
237	Wading	Virginia rail	Concentration Area		Med													-	-	-	-
	Waterfowl	American black duck	Concentration Area		Med													-	-	-	-
	Waterfowl	Wood duck	Concentration Area		Med													-	-	-	-
239	Raptor	Osprey	Nesting	-/C	1-Pair													Apr-Oct	Apr	Oct	-
266	Gull/Tern	Least tern	Nesting	E/E E	1-2 Pairs													May-Aug	May	Aug	-
	Shorebird	Piping plover	Nesting	E/E E	4-8 Pairs													Apr-Sep	Apr	Sep	-
	Shorebird	Purple sandpiper	Concentration Area		100-150													-	-	-	-
	Shorebird	Sanderling	Concentration Area		Med-High													-	Apr-May	-	-
268	Diving	D. crested cormorant	Concentration Area		Low													Jun-Sep	-	-	-
	Diving	Great cormorant	Concentration Area	T/-	Low													-	-	-	-
270	Gull/Tern	Common tern	Nesting	C/T	20 Pairs													May-Jul	-	-	-
	Passerine	Seaside sparrow	Nesting	-/C	1-2 Pairs													May-Aug	-	-	-
280	Diving	D. crested cormorant	Concentration Area		50-400													Jun-Sep	-	-	-
	Gull/Tern	G. black-backed gull	Concentration Area		Med													-	-	-	-
	Gull/Tern	Herring gull	Concentration Area		Med													-	-	-	-
	Gull/Tern	Laughing gull	Concentration Area	C/-	Low													-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area		50-300													-	May	Jul-Oct	-
	Shorebird	Dunlin	Concentration Area		50-100													-	May	Aug-Oct	-
	Shorebird	Hudsonian godwit	Concentration Area		2-4													-	-	Jul-Oct	-
	Shorebird	Piping plover	Concentration Area	E/E E	Low													-	Apr	Sep	-
	Shorebird	Red Knot	Concentration Area	C/- T	Low													-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Concentration Area		Low													-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Concentration Area		Low													-	Apr-May	-	-
	Shorebird	Semipalmated plover	Concentration Area		200-600													-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	200-600													-	May-Jun	Jul-Oct	-

Southern Maine and New Hampshire: Map 57C

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
	Shorebird	Short-billed dowitcher	Concentration Area															-	May-Jun	Jul-Oct	Jan-Dec	-
	Shorebird	Whimbrel	Concentration Area	C/-														-	Jul-Oct	Jul-Oct	Jan-Dec	-
	Shorebird	White-rumped sandpiper	Concentration Area															-	May-Jun	Jul-Oct	Jan-Dec	-

FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
457	Diadromous	Atlantic sturgeon	General Distribution	-/T	E													-	-	-	Jan-Dec	Jan-Dec
465	Diadromous	Shortnose sturgeon	General Distribution	E/E	E													-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Alewife	General Distribution	-/C														Apr-Jun	-	-	Apr-Jul	Apr-Jul
	Diadromous	American eel	General Distribution	-/C														Apr-May	-	-	Apr-May	Apr-May
	Diadromous	American shad	General Distribution	-/C														May-Jun	-	-	May-Jun	May-Jun
	Diadromous	Atlantic salmon	General Distribution	-/C	E													Sep-Nov	-	-	Jan-Dec	Sep-Mar
474	Diadromous	Blueback herring	General Distribution	-/C														Apr-Jun	-	-	Apr-Jun	Apr-Jun
	Diadromous	Sea lamprey	General Distribution	-/C														Apr-May	-	-	Apr-May	Apr-May
	Diadromous	Alewife	General Distribution	-/C														-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	General Distribution	-/C														-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	General Distribution	-/C														-	-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	General Distribution	-/C	E													-	-	-	Jan-Dec	May-Mar
	Diadromous	Blueback herring	General Distribution	-/C														-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Sea lamprey	General Distribution	-/C														-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	General Distribution	-/C														-	-	-	Jan-Dec	Oct-Apr
	Marine Benthic	American sand lance	Concentration Area															-	-	Dec-Jun	Jan-Dec	Mar-Nov
479	Marine Benthic	Cunner	Concentration Area															Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Concentration Area															-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area															-	-	-	Jan-Dec	Jan-Dec

REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Nest	Hatch	Internest	Juveniles	Adults
				S	F	J	F	M	A	M	J	J	A	S	O	N	D					
664	Turtle	Green sea turtle	General Distribution	-/-	T													-	-	-	Jun-Nov	Jun-Nov
	Turtle	K. ridley sea turtle	General Distribution	E/-	E													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	E													-	-	-	Jun-Nov	Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T													-	-	-	Jun-Nov	Jun-Nov
670	Amphibian	B. spotted salamander	General Distribution	C/C														Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Jefferson salamander	General Distribution	C/C														Apr-May	May-Jun	-	Jan-Dec	Apr-Jun
	Amphibian	Northern leopard frog	General Distribution	C/C														Apr-Jun	May-Jul	-	May-Sep	Jan-Dec
	Turtle	Blanding's turtle	General Distribution	E/E														May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	General Distribution	T/T														May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
672	Turtle	Wood turtle	General Distribution	C/C														May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
	Amphibian	B. spotted salamander	General Distribution	C/C														-	-	-	-	Jan-Dec
	Amphibian	Jefferson salamander	General Distribution	C/C														-	-	-	-	Jan-Dec

INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH		Monthly Presence												Eggs	Larvae	Juveniles	Adults
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D			
673	Crab	Horseshoe crab	General Distribution	-/C		Low												May-Jul	-	Jan-Dec	Jan-Dec
719	Bivalve	Atlantic surfclam	Harvest Area			Common												Jun-Aug	-	Jan-Dec	Jan-Dec
721	Bivalve	Softshell clam	Concentration Area	-/C		Historic												May-Oct	May-Oct	Jan-Dec	Jan-Dec
722	Bivalve	Blue mussel	Concentration Area			High												May-Nov	May-Nov	Jan-Dec	Jan-Dec
729	Crab	Horseshoe crab	General Distribution	-/C		Common												May-Jul	-	Jan-Dec	Jan-Dec
732	Bivalve	Softshell clam	Concentration Area	-/C		High												May-Oct	May-Oct	Jan-Dec	Jan-Dec

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

BIRDS

Subelement	Species	Mapping Qualifier	ME/NH		Concentration	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
			S	F		J	F	M	A	M	J	J	A	S	O	N	D				
Gull/Tern	Common tern	Concentration Area	C/T		High													May-Aug	-	-	-
	Least tern	Concentration Area	E/E	E	Rare													May-Aug	May	Aug	-
Passerine	Nelson's sharp-tailed sparrow	Nesting	-/C		Low													Sep-Oct	-	Sep-Oct	-
	Saltmarsh sharp-tailed sparrow	Nesting	C/C		300 Pairs													May-Aug	May-Jun	Jul-Oct	-
Raptor	Northern harrier	Concentration Area	-/E		Low													-	-	-	-
	Peregrine falcon	Concentration Area	E/T		Low													-	-	-	-
Shorebird	Red-tailed hawk	Concentration Area			Low													-	-	-	-
	Willet	Concentration Area	-/C		Low													-	-	-	-
Wading	American bittern	Nesting			Low													May-Aug	May-Jun	Jul-Sep	-
	BC night-heron	Concentration Area	E/-		Low													May-Aug	Apr	Oct	-
	Glossy ibis	Concentration Area			1-3													May-Sep	Apr	Oct	-
	Great blue heron	Concentration Area	C/-		10-30													May-Sep	Apr	Oct	-
	Great egret	Concentration Area			5-15													May-Sep	-	-	-
	Green heron	Concentration Area			5-15													May-Sep	Apr	Oct	-
	Little blue heron	Concentration Area			1-2													May-Sep	Apr	Oct	-
	Snowy egret	Concentration Area			1-2													May-Sep	Apr	Oct	-
Waterfowl	Virginia rail	Concentration Area			25-50													May-Sep	Apr	Oct	-
	American black duck	Concentration Area			Low													May-Aug	-	-	-
	Mallard	Concentration Area			Med													Apr-Aug	-	-	-
					Low													Apr-Aug	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

BIRDS

Subelement	Species	Monthly Presence												Nest	Mig.(S)	Mig.(F)	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
Alcid	Black guillemot													May-Aug	-	-	-
	Dovekie													-	-	-	-
Diving	Thick-billed murre													-	-	-	-
	D. crested cormorant													Jun-Sep	-	-	-
	Horned grebe													-	-	-	-
	Red-necked grebe													-	-	-	-
	Red-throated loon													-	-	-	-
														-	-	-	-

Southern Maine and New Hampshire: Map 57C






BIRDS (continued)

Monthly Presence

Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Eggs	Larvae	Juveniles	Molt
	G. black-backed gull													-	-	-	-	-
	Herring gull													-	-	-	-	-
	Ring-billed gull													-	-	-	-	-
	Northern gannet													-	-	-	-	-
	Dunlin													-	May	Aug-Oct	-	-

FISH

Monthly Presence






Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
	Ninespine stickleback													May-Jul	May-Jul	May-Jul	Jan-Dec	Jan-Dec
	Atlantic herring													-	-	Oct-May	Jan-Dec	Apr-Dec
	Atlantic menhaden													-	-	-	Apr-Nov	Apr-Nov
	Bluefish													-	-	-	Jan-Dec	Jan-Dec
	Smooth flounder													-	-	-	Jan-Dec	Jan-Dec
	White perch													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Windowpane flounder													-	-	-	Jan-Dec	Jan-Dec
	Winter flounder													-	-	-	Jan-Dec	-
	Atlantic silverside													Apr-Jun	Apr-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	Fourspine stickleback													Apr-Jun	Apr-Jun	Apr-Jun	Jan-Dec	Jan-Dec
	Grubby													Dec-Mar	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Mummichog													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Northern pipefish													Apr-Aug	-	Apr-Oct	Jan-Dec	Jan-Dec
	Striped killifish													Jun-Aug	Jun-Aug	Jun-Sep	Jan-Dec	Jan-Dec
	Threespine stickleback													May-Aug	May-Aug	May-Aug	Jan-Dec	Jan-Dec
	American plaice													-	Mar-Jun	Mar-Jul	Mar-Nov	Mar-Nov
	American sand lance													-	-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod													Nov-Mar	Nov-Jun	Nov-Jul	Jan-Dec	Oct-Jul
	Atlantic tomcod													Dec-Feb	-	-	Jan-Dec	Jan-Dec
	Atlantic Wolffish													Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec	Jan-Dec
	Cunner													Mar-Aug	Mar-Aug	Mar-Sep	Jan-Dec	Jan-Dec
	Haddock													-	Mar-Jun	Mar-Jun	Mar-Jun	-
	Longhorn sculpin													Dec-Apr	Dec-Apr	Jan-Jun	Jan-Dec	Jan-Dec
	Northern searobin													-	-	-	Jul-Oct	Jul-Oct
	Ocean pout													-	-	-	Mar-Oct	Mar-Oct
	Ocean pout													-	-	-	Jan-Dec	Jan-Dec
	Pollock													-	Nov-Feb	Nov-Mar	Jan-Dec	-
	Red hake													-	Jun-Oct	Jun-Oct	Mar-Nov	May-Nov
	Rock gunnel													Dec-Mar	Dec-Apr	Jan-May	Jan-Dec	Jan-Dec
	Shorthorn sculpin													-	-	-	Sep-May	Sep-May
	Silver hake													-	-	-	Apr-Nov	Apr-Nov
	Skates													-	-	-	Jan-Dec	Jan-Dec
	White hake													-	Jul-Oct	Jul-Oct	May-Nov	May-Nov
	Yellowtail flounder													-	Apr-Sep	Apr-Sep	Apr-Sep	-
	Atlantic mackerel													-	-	-	May-Nov	May-Nov
	Butterfish													-	-	-	May-Oct	May-Oct

Southern Maine and New Hampshire: Map 57C



REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												Nest	Hatch	Interest	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Spotted salamander													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Wood Frog													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep

INVERTEBRATES

Subelement	Species	Monthly Presence												Spawn	Eggs	Larvae	Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D					
	Blue mussel													May-Nov	May-Nov	-	Jan-Dec	Jan-Dec
	Northern quahog													Jun-Aug	-	-	Jan-Dec	Jan-Dec
	Atlantic rock crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jun-Aug	Jan-Dec	Jan-Dec
	Jonah crab													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec	Jan-Dec
	American lobster													Jun-Oct	Jun-Oct	Jun-Oct	Jan-Dec	May-Nov
	American lobster													Jun-Oct	-	-	Jan-Dec	Jan-Dec
	Db grass shrimp													-	-	-	Jan-Dec	Jan-Dec
	Sevenspine bay shrimp													-	-	-	Jan-Dec	Jan-Dec

MARINE MAMMALS

Subelement	Species	Monthly Presence												Mating	Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D				
	Harbor porpoise													-	-	-	-
	Gray seal													-	-	-	-
	Harbor seal													-	-	-	-
	Harp seal													-	-	-	-
	Hooded seal													-	-	-	-
														-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov

ESI POLYGON HABITAT TYPES

<i>ESI Rank</i>	<i>Habitat Classification</i>	<i>Area (Acres)</i>	<i>Area (Sq. Miles)</i>
10A	Salt and Brackish Water Marshes	3,147.04	4.92
10B	Freshwater Marshes	587.25	0.92
10C	Swamps	1,251.56	1.96
10D	Scrub and Shrub Wetlands	339.57	0.53
9A	Sheltered Tidal Flats	747.79	1.17
7	Exposed Tidal Flats	22.06	0.03
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1.73	0.00

ESI SHORELINE HABITAT TYPES

<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>	<i>Length (Meters)</i>	<i>Length (Miles)</i>	<i>% of ESI Shoreline</i>
10A	Salt and Brackish Water Marshes	179,219.64	111.36	50%
9A	Sheltered Tidal Flats	159,724.32	99.25	45%
9B	Vegetated Low Banks	2,301.54	1.43	1%
8B	Sheltered, Solid Man-Made Structures	1,773.55	1.10	< 1%
8C	Sheltered Riprap	2,156.42	1.34	1%
7	Exposed Tidal Flats	5,515.09	3.43	2%
6B	Riprap	1,725.86	1.07	< 1%
5	Mixed Sand and Gravel Beaches	55.24	0.03	< 1%
4	Coarse Grained Sand Beaches	306.50	0.19	< 1%
3A	Fine to Medium Grained Sand Beaches	5,809.00	3.61	2%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	63.58	0.04	< 1%
1B	Exposed, Solid Man-Made Structures	265.46	0.16	< 1%

Total ESI Shoreline: 358,916.21 Total ESI Shoreline: 223.02
 Total Shoreline: 192,011.20 Total Shoreline: 119.31

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

All underlying GIS data can be obtained from response.restoration.noaa.gov



Human-Use Features

	Abandoned Vessel		Renewable Energy
	Access		Repeated Measurement Site
	Airport		River Mile
	Anchorage		State Protected Area
	Aquaculture		Tribal Land
	Army Corp of Engineers		Water Intake
	Beach		Wildlife Refuge
	Boat Ramp		Road
	Campground		State Highway or Route
	Critical Habitat		US Highway
	EPA Facility		Interstate
	Essential Habitat		Ferry Route
	Heliport		Pipeline
	Historic Wreck		Rail Route
	Historical Site		Shipping Lane
	Lock and Dam		Management
	Management		Map ID
	Marina		
	Military		
	Mine Site		
	National Estuarine Research Reserve		
	National Park		
	Nature Conservancy		
	Oil Facility		
	Park		
	Port		

ESI Shoreline and Habitat Ranking

	1A) Exposed, Rocky Shores
	1B) Exposed, Solid Man-Made Structures
	2A) Exposed Wave-Cut Platforms (Bedrock/Mud/Clay)
	2B) Exposed Scarps and Steep Slopes (Clay)
	3A) Fine to Medium Grained Sand Beaches
	3B) Scarps and Steep Slopes (Sand)
	4) Coarse-Grained Sand Beaches
	5) Mixed Sand and Gravel Beaches
	6A) Gravel Beaches
	6B) Riprap
	7) Exposed Tidal Flats
	8A) Sheltered Scarps (Bedrock/Mud/Clay)
	8A) Sheltered, Impermeable, Rocky Shores
	8B) Sheltered, Solid Man-Made Structures
	8C) Sheltered Riprap
	8D) Sheltered, Rocky, Rubble Shores
	9A) Sheltered Tidal Flats
	9B) Vegetated Low Banks
	10A) Salt and Brackish Water Marshes
	10B) Freshwater Marshes
	10C) Swamps
	10D) Scrub and Shrub Wetlands

Examples of Double and Triple Shoreline Rankings:

10D & 2A

10C & 10A & 4

Shorelines often contain varied geomorphology, and therefore may require two or three ESI types to describe. These symbols will look similar to the examples above. The first shoreline type listed is the most landward shore type.

Sensitive Biological Resources



Birds



Birds



Alcid/Pelagic



Diving



Gull/Tern/Bird



Passerine



Raptor



Shorebird



Wading



Waterfowl



Fish



Fish



Fish



Fish



Invertebrates



Invertebrates



Crab/Invertebrate/Shellfish



Bivalve/Barnacle/Chordate



Cephalopod



Insect



Echinoderm



Gastropod



Lobster



Marine Mammals



Dolphin



Pinniped



Whale



Terrestrial Mammals



Small Mammal



Habitats



Upland/Wetland/Plant



Reptiles & Amphibians



Amphibian/Snake



Turtle



Threatened or
Endangered
Species

1 2 3 4 5 6 Map ID

Guidelines for Interpreting Environmental Sensitivity Index (ESI) Maps

The following guidelines may help map users interpret the ESI maps. Additional information about resources mapped for this atlas can be found in the ESI Intro pages and associated metadata.

Sensitive Biological Resources (1:50,000 scale maps): Species are arranged into eight major categories or "elements" and further subdivided into "subelement" groupings representing species that share similar lifestyle characteristics and risks to oiling.

Biological resources may be mapped as points, lines, and/or polygons. Each element is represented by a unique color and/or hatch pattern, and icons illustrate the subelement(s) found within each feature. If a species is state or federally listed as threatened or endangered, a solid red square is placed behind the icon. When multiple elements occur in the same location, overlapping hatch patterns will be shown.

The associated Map ID "links" to the map report where the species and attributes are listed. To maximize readability, biological polygons covering more than 10 square km are not displayed on the map. Instead, these species are listed in the "Widespread in Mapped Area" section of the report. Occurrences of non-listed species assigned a "General Distribution" mapping qualifier are listed under "Also Present in Mapped Area" regardless of polygon size.

Shoreline Habitat Resources (all maps): The shoreline was mapped at mean-high water, then classified based on vulnerability to spilled oil and ease of clean-up. Shorelines are ranked on a scale from 1 (least vulnerable) to 10 (most vulnerable). Cooler colors represent less vulnerable shoreline types; warm and hot colors indicate increased vulnerability. A shoreline may have more than one habitat type present. When this happens, the most landward shoreline type is mapped on the shoreline, and the more seaward type(s) are mapped adjacent to the water. The areal extent of intertidal and marsh habitats may also be mapped as polygons. Most often these polygons represent tidal flats and marshes, though in particularly rocky shored areas, these may include exposed, wave-cut platforms and sand and gravel beaches.

Human-Use Features (1:100,000 scale maps): Locations of human-use features and jurisdictional boundaries are mapped as points, lines, or polygons. As with biological features, the human-use features appearing on the map include Map ID which "links" to a description of the feature in the map report. Additional features, particularly jurisdictional and management boundaries that cover the majority or entirety of the mapped area, are listed in the report, but not shown on the map.

