

# Environmental Sensitivity Index Maps

*A Guide to Coastal Resources at Risk to Spilled Oil*

## Maine and New Hampshire: Volume 2



**Office of Response and Restoration**

September 2016

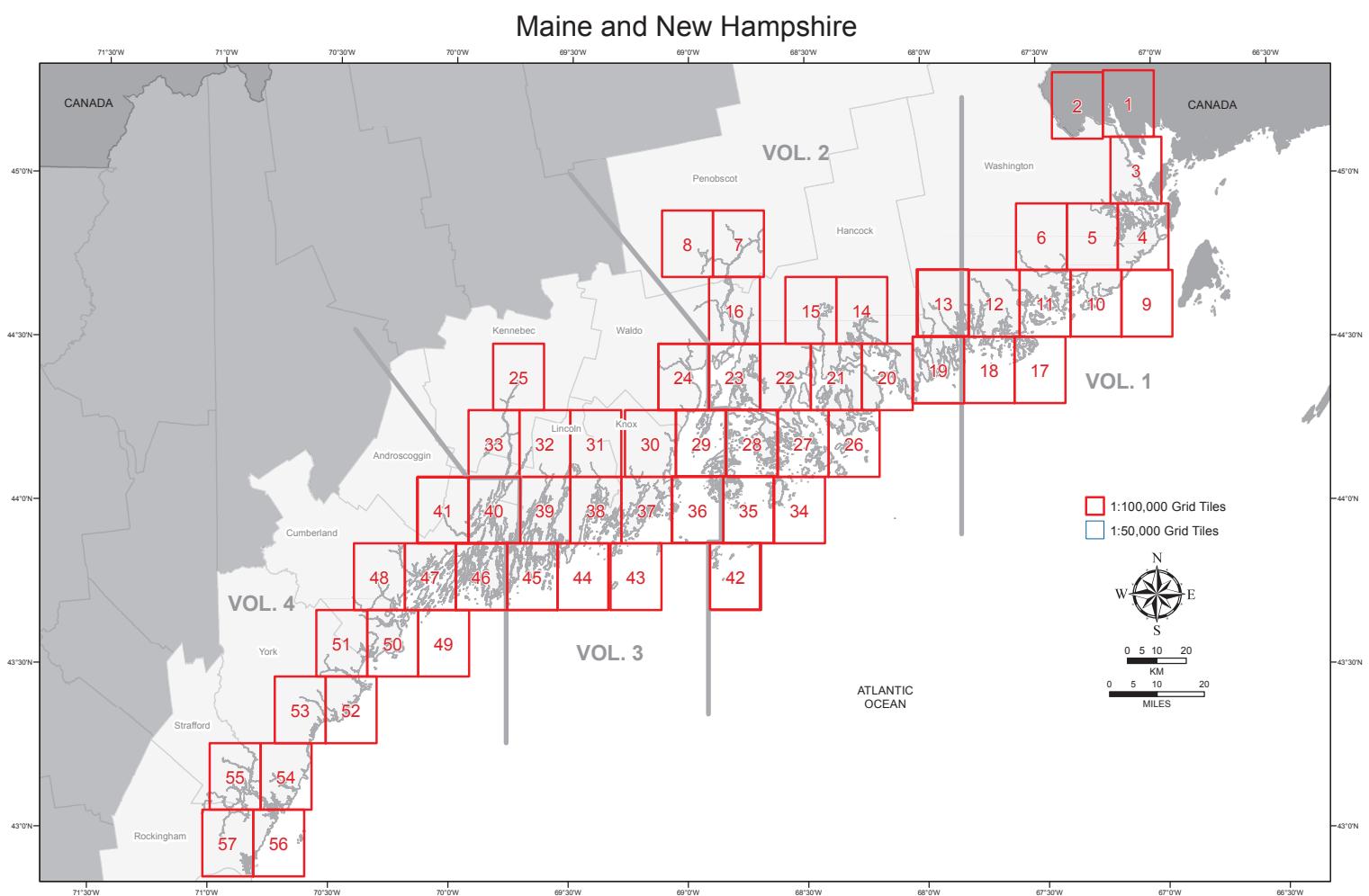


# NOAA

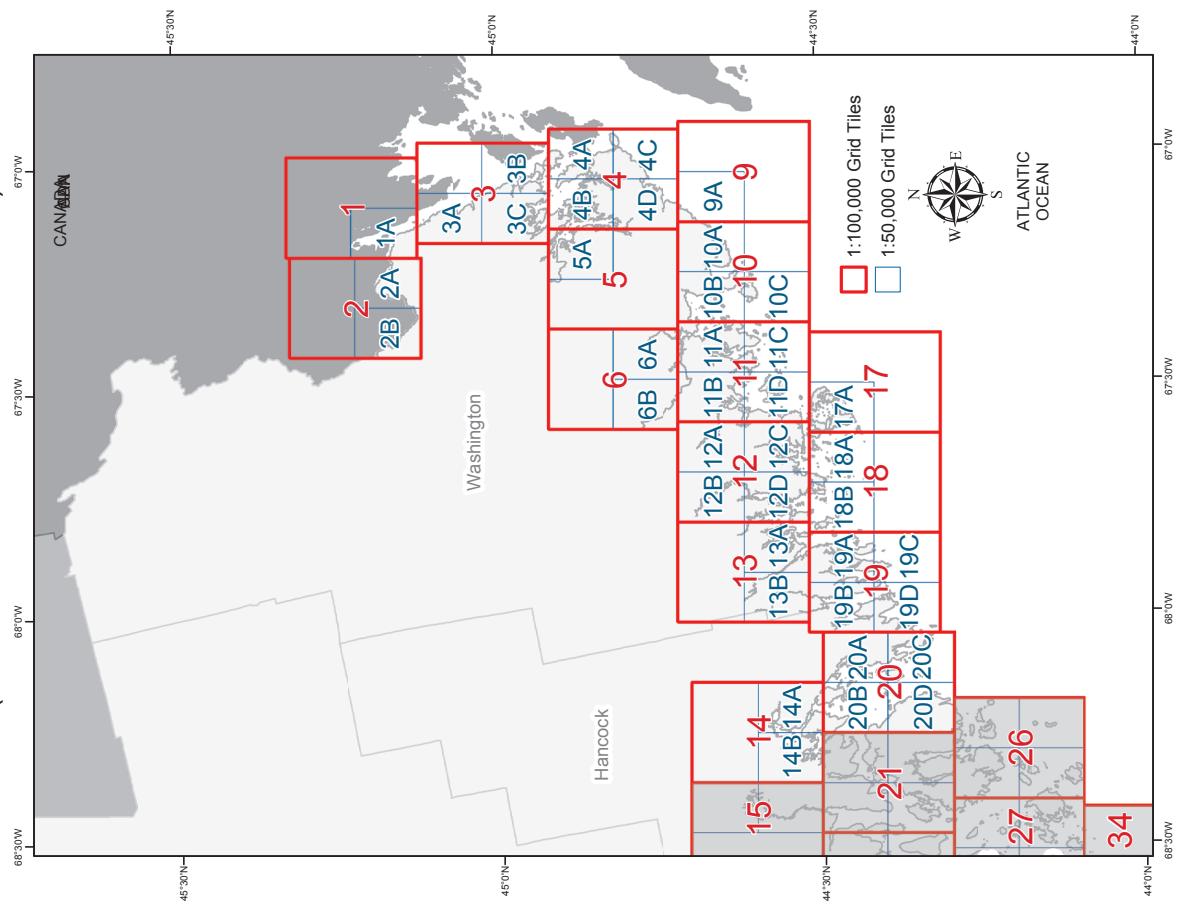
## Environmental Sensitivity Index Maps

A Guide to Coastal Resources at Risk to Spilled Oil

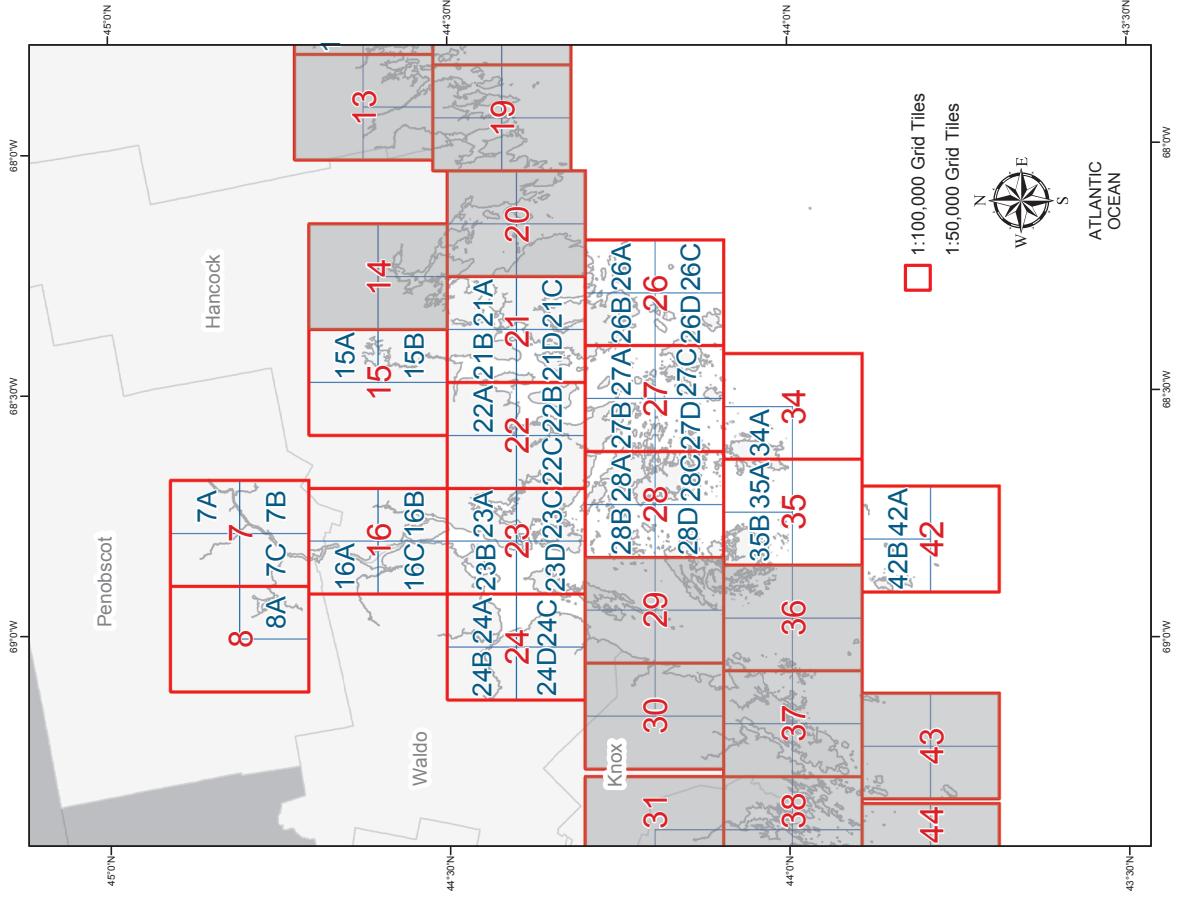
### Maine and New Hampshire



Maine and New Hampshire: Volume 1  
(Downeast Maine and Midcoast Maine)



Maine and New Hampshire: Volume 2  
(Midcoast Maine)



## CONTENTS

Introduction .....	iv
Shoreline Habitat Mapping .....	iv
Sensitive Biological Resources .....	vi
Marine Mammals .....	ix
Birds .....	x
Herpetofauna .....	xiv
Terrestrial Mammals .....	xv
Fish .....	xvi
Invertebrates .....	xviii
Benthic .....	xx
Habitats .....	xxi
Invasive Species .....	xxiii
Wildlife Rehabilitation .....	xxiii
Human Use Resources .....	xxiv
Geographic Information System .....	xxxix
Acknowledgements .....	xxx
Appropriate Use of Atlas and Data .....	xxx
Species List .....	xxxi
Shoreline Descriptions .....	xxxvi
Exposed, Rocky Shores: ESI = 1A .....	xxxvi
Exposed, Solid Man-Made Structures: ESI = 1B .....	xxxvii
Exposed, Wave-Cut Platforms in Bedrock: ESI = 2A .....	xxxviii
Exposed Scarps and Steep Slopes in Clay: ESI = 2B .....	xxxix
Fine- to Medium-Grained Sand Beaches: ESI = 3A .....	xl
Scarps and Steep Slopes in Sand: ESI = 3B .....	xli
Coarse-Grained Sand Beaches: ESI = 4 .....	xlii
Mixed Sand and Gravel Beaches: ESI = 5 .....	xliii
Gravel Beaches: ESI = 6A .....	xliv
Riprap: ESI = 6B .....	xlv
Exposed Tidal Flats: ESI = 7 .....	xlii
Sheltered, Impermeable, Rocky Shores ESI = 8A .....	xlvii
Sheltered, Solid Man-Made Strucutres: ESI = 8B .....	xlviii
Sheltered Riprap: ESI = 8C .....	xlix
Sheltered Tidal Flats: ESI = 9A .....	1
Vegetated Low Banks: ESI = 9B .....	li
Salt- and Brackish-Water Marshes: ESI = 10A .....	lii
Freshwater Marshes: ESI = 10B .....	liii
Swamps: ESI = 10C .....	liv
Scrub-Shrub Wetlands: ESI = 10D .....	lv

## Environmental Sensitivity Index Maps (Maps 1-6 contained in Volume 1)

Map 7 : Human Use Resources .....	389
Map 7A : Biological Resources .....	393
Map 7B : Biological Resources .....	399
Map 7C : Biological Resources .....	405
Map 8 : Human Use Resources .....	411
Map 8A : Biological Resources .....	413

## Maps 9-14 contained in Volume 1

Map 15 : Human Use Resources .....	417
Map 15A : Biological Resources .....	421
Map 15B : Biological Resources .....	425
Map 16 : Human Use Resources .....	431
Map 16A : Biological Resources .....	435
Map 16B : Biological Resources .....	441
Map 16C : Biological Resources .....	447

## Maps 17-20 contained in Volume 1

Map 21 : Human Use Resources .....	453
Map 21A : Biological Resources .....	457
Map 21B : Biological Resources .....	465
Map 21C : Biological Resources .....	471
Map 21D : Biological Resources .....	477

Map 22 : Human Use Resources .....	485
Map 22A : Biological Resources .....	489
Map 22B : Biological Resources .....	495
Map 22C : Biological Resources .....	501

Map 23 : Human Use Resources .....	509
Map 23A : Biological Resources .....	513
Map 23B : Biological Resources .....	521
Map 23C : Biological Resources .....	527
Map 23D : Biological Resources .....	535

Map 24 : Human Use Resources .....	541
Map 24A : Biological Resources .....	545
Map 24B : Biological Resources .....	553
Map 24C : Biological Resources .....	559

## Map 25 contained in Volume 3

Map 26 : Human Use Resources .....	567
Map 26A : Biological Resources .....	571
Map 26B : Biological Resources.....	581
Map 26C : Biological Resources .....	591
Map 26D : Biological Resources.....	599
Map 27 : Human Use Resources .....	609
Map 27A : Biological Resources.....	613
Map 27B : Biological Resources.....	623
Map 27C : Biological Resources .....	633
Map 27D : Biological Resources.....	647
Map 28 : Human Use Resources .....	659
Map 28A : Biological Resources.....	663
Map 28B : Biological Resources .....	671
Map 28C : Biological Resources .....	681
Map 28D : Biological Resources .....	691
Maps 29-33 contained in Volume 3	
Map 34 : Human Use Resources .....	699
Map 34A : Biological Resources.....	703
Map 35 : Biological Resources .....	717
Map 35A : Biological Resources .....	721
Map 35B : Biological Resources.....	729
Maps 36-41 contained in Volume 3	
Map 42 : Biological Resources .....	743
Map 42A : Biological Resources.....	745
Map 42B : Biological Resources.....	751
Maps 43-45 contained in Volume 3, Maps 46-57 contained in Volume 4	

# **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

<b>Element</b>	<b>Qualifier</b>	<b>Guidelines</b>
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 (MDWFW) 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 melanotos*) 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 (IWH), a Significant Wildlife Habitat defined under Maine's Natural Resources Protection Act (NRPA; <http://www.maine.gov/dep/blwq/docstand/nrpapage.htm>). IWHs with a high or moderate rating meet the Significant Wildlife Habitat definition and are protected under NRPA. Low-rated IWHs 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 ( $\leq 1$  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 IWH 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 IWH 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

*NPRA – 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 bairdii*), 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 (*Acitis 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 melanodus*) (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 (*Placopecten 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 (*Alasmidonta 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 "Maine's 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, 2<sup>nd</sup> 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 Sunkhaze 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	Common Name	Scientific Name	
<b>BENTHIC</b>			<b>BIRDS, cont.</b>	
Eelgrass	<i>Zostera marina</i>	<b>PELAGIC</b>		
Worm bed	-	Cory's shearwater		
<b>BIRDS</b>			<i>Calonectris diomedea</i>	
<b>ALCID</b>			Great shearwater	
<u>Atlantic puffin</u>	<i>Fratercula arctica</i>	Leach's storm-petrel	<i>Puffinus gravis</i>	
Black guillemot	<i>Cephus grylle</i>	Manx shearwater	<i>Oceanodroma leucorhoa</i>	
Common murre	<i>Uria aalge</i>	Northern fulmar	<i>Puffinus puffinus</i>	
Dovekie	<i>Alle alle</i>	Northern gannet	<i>Fulmarus glacialis</i>	
<u>Razorbill</u>	<i>Alca torda</i>	Sooty shearwater	<i>Morus bassanus</i>	
Thick-billed murre	<i>Uria lomvia</i>	Wilson's storm-petrel	<i>Puffinus griseus</i>	
<b>DIVING</b>			<i>Oceanites oceanicus</i>	
<u>Common Loon</u>	<i>Gavia immer</i>	<b>RAPTOR</b>		
Double-crested cormorant	<i>Phalacrocorax auritus</i>	<u>Bald eagle</u>	<i>Haliaeetus leucocephalus</i>	
<u>Great cormorant</u>	<i>Phalacrocorax carbo</i>	<u>Northern harrier</u>	<i>Circus cyaneus</i>	
Horned grebe	<i>Podiceps auritus</i>	Osprey	<i>Pandion haliaetus</i>	
<u>Pied-billed grebe</u>	<i>Podilymbus podiceps</i>	<u>Peregrine falcon</u>	<i>Falco peregrinus</i>	
Red-necked grebe	<i>Podiceps grisegena</i>	Red-tailed hawk	<i>Buteo jamaicensis</i>	
Red-throated loon	<i>Gavia stellata</i>	Snowy owl	<i>Nyctea scandiaca</i>	
<b>GULL_TERN</b>			<b>SHOREBIRD</b>	
<u>Arctic tern</u>	<i>Sterna paradisaea</i>	American golden-plover	<i>Pluvialis dominica</i>	
<u>Black tern</u>	<i>Chlidonias niger</i>	American oystercatcher	<i>Haematopus palliatus</i>	
Bonaparte's gull	<i>Larus philadelphia</i>	Baird's sandpiper	<i>Calidris bairdii</i>	
<u>Common tern</u>	<i>Sterna hirundo</i>	Black-bellied plover	<i>Pluvialis squatarola</i>	
Glaucous-winged/herring gull hybrid	<i>Larus spp.</i>	Buff-breasted sandpiper	<i>Tryngites subruficollis</i>	
Great black-backed gull	<i>Larus marinus</i>	Dunlin	<i>Calidris alpina</i>	
Herring gull	<i>Larus argentatus</i>	Greater yellowlegs	<i>Tringa melanoleuca</i>	
Laughing gull	<i>Larus atricilla</i>	Hudsonian godwit	<i>Limosa haemastica</i>	
<u>Least tern</u>	<i>Sterna antillarum</i>	Least sandpiper	<i>Calidris minutilla</i>	
Ring-billed gull	<i>Larus delawarensis</i>	Lesser yellowlegs	<i>Tringa flavipes</i>	
<u>Roseate tern</u>	<i>Sterna dougallii</i>	Pectoral sandpiper	<i>Calidris melanotos</i>	
<b>PASSERINE</b>			<u>Piping plover</u>	
<u>Grasshopper sparrow</u>	<i>Ammodramus savannarum</i>	Purple sandpiper	<i>Charadrius melanotos</i>	
<u>Horned lark</u>	<i>Eremophila alpestris</i>	<u>Red Knot</u>	<i>Calidris maritima</i>	
Marsh wren	<i>Cistothorus palustris</i>	Red phalarope	<i>Calidris canutus</i>	
Nelson's sharp-tailed sparrow	<i>Ammodramus nelsoni</i>	Red-necked phalarope	<i>Phalaropus fulicaria</i>	
Saltmarsh sharp-tailed sparrow	<i>Ammodramus caudacutus</i>	Ruddy turnstone	<i>Phalaropus lobatus</i>	
Seaside sparrow	<i>Ammodramus maritimus</i>	Sanderling	<i>Arenaria interpres</i>	
<u>Sedge wren</u>	<i>Cistothorus platensis</i>	Semipalmated plover	<i>Calidris alba</i>	
Vesper sparrow	<i>Pooecetes gramineus</i>	Semipalmated sandpiper	<i>Charadrius semipalmatus</i>	

# SPECIES LIST

Common Name	Scientific Name	Common Name	Scientific Name
<b>BIRDS, cont.</b>		<b>BIRDS, cont.</b>	
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>
<b>WADING</b>		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>	<b>FISH</b>	
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>
<b>WATERFOWL</b>		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>Centropristes 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</i> (sea run)
Common merganser	<i>Mergus merganser</i>	Brown trout (sea run)	<i>Salmo trutta</i> (sea run)
Gadwall	<i>Anas strepera</i>	Butterfish	<i>Peprilus triacanthus</i>
Goldeneye	<i>Bucephala spp.</i>	Cunner	<i>Tautogolabrus adspersus</i>
Greater scaup	<i>Aythya marila</i>	Fourspine stickleback	<i>Apeltes quadratus</i>
Green-winged teal	<i>Anas crecca</i>	Grubby	<i>Myoxocephalus aenaeus</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 octodecemspinosis</i>
Lesser scaup	<i>Aythya affinis</i>		

# SPECIES LIST

Common Name	Scientific Name	Common Name	Scientific Name
<b>FISH, cont.</b>		<b>HABITATS, cont.</b>	
Mummichog	<i>Fundulus heteroclitus</i>	Eastern annual saltmarsh aster	<i>Symphyotrichum subulatum</i>
Ninespine stickleback	<i>Pungitius pungitius</i>	Eastern grasswort	<i>Lilaeopsis chinensis</i>
Northern pipefish	<i>Syngnathus fuscus</i>	Eaton's beggarticks	<i>Bidens eatonii</i>
Northern searobin	<i>Prionotus carolinus</i>	<u>Endangered plant</u>	-
Ocean pout	<i>Macrozoarces americanus</i>	Estuary beggarticks	<i>Bidens hyperborea</i>
Pollock	<i>Pollachius virens</i>	Estuary pipewort	<i>Eriocaulon parkeri</i>
Rainbow smelt	<i>Osmerus mordax</i>	<u>Foxtail clubmoss</u>	<i>Lycopodiella alopecuroides</i>
Red hake	<i>Urophycis chuss</i>	Fragrant woodfern	<i>Dryopteris fragrans</i>
Rock gunnel	<i>Pholis gunnellus</i>	Hooded arrowhead	<i>Sagittaria calycina var. spongiosa</i>
Sea lamprey	<i>Petromyzon marinus</i>	<u>Horned pondweed</u>	<i>Zannichellia palustris</i>
Shorthorn sculpin	<i>Myoxocephalus scorpius</i>	<u>Indiangrass</u>	<i>Sorghastrum nutans</i>
<u>Shortnose sturgeon</u>	<i>Acipenser brevirostrum</i>	<u>Jesuit's bark</u>	<i>Iva frutescens ssp. oraria</i>
Silver hake	<i>Merluccius bilinearis</i>	<u>Lesser brown sedge</u>	<i>Carex adusta</i>
Skates	-	<u>Limber honeysuckle</u>	<i>Lonicera dioica</i>
Smooth flounder	<i>Pleuronectes putnami</i>	<u>Long's bittercress</u>	<i>Cardamine longii</i>
Striped bass	<i>Morone saxatilis</i>	<u>Marsh felwort</u>	<i>Lomatogonium rotatum</i>
Striped killifish	<i>Fundulus majalis</i>	Meadow garlic	<i>Allium canadense</i>
Threespine stickleback	<i>Gasterosteus aculeatus</i>	<u>Meadow spikemoss</u>	<i>Selaginella apoda</i>
White hake	<i>Urophycis tenuis</i>	<u>Middleton false foxglove</u>	<i>Agalinis neoscotica</i>
White perch	<i>Morone americana</i>	Mountain laurel	<i>Kalmia latifolia</i>
Windowpane flounder	<i>Scophthalmus aquosus</i>	<u>Nantucket serviceberry</u>	<i>Amelanchier nantucketensis</i>
Winter flounder	<i>Pleuronectes americanus</i>	<u>New England blazing star</u>	<i>Liatris scariosa var. novae-angliae</i>
Yellowtail flounder	<i>Pleuronectes ferrugineus</i>	<u>New England bulrush</u>	<i>Bolboschoenus novae-angliae</i>
<b>HABITATS</b>		Northern blueberry	<i>Vaccinium boreale</i>
<b>PLANT</b>		<u>Orangefruit horse-gentian</u>	<i>Triosteum aurantiacum</i>
<u>Allegheny vine</u>	<i>Adlumia fungosa</i>	<u>Pickering's reedgrass</u>	<i>Calamagrostis pickeringii</i>
Annual water minerslettuce	<i>Montia fontana</i>	<u>Pursh seepweed</u>	<i>Suaeda calceoliformis</i>
Appalachian stitchwort	<i>Minuartia glabra</i>	Ramp	<i>Allium tricoccum</i>
Atlantic white cedar	<i>Chamaecyparis thyoides</i>	Rare plant	-
<u>Beach plum</u>	<i>Prunus maritima</i>	<u>Eupatorium rotundifolium var. ovatum</u>	<i>Eupatorium rotundifolium var. ovatum</i>
<u>Beaked spikerush</u>	<i>Eleocharis rostellata</i>	Saltmarsh false foxglove	<i>Agalinis maritima</i>
Bearded flatsedge	<i>Cyperus squarrosus</i>	Sassafras	<i>Sassafras albidum</i>
Birdeye primrose	<i>Primula laurentiana</i>	<u>Scarlet oak</u>	<i>Quercus coccinea</i>
<u>Bitternut hickory</u>	<i>Carya cordiformis</i>	Seaside brookweed	<i>Samolus valerandi ssp. parviflorus</i>
Button sedge	<i>Carex bullata</i>		
Coastal sweetpepperbush	<i>Clethra alnifolia</i>		
<u>Combleaf mermaidweed</u>	<i>Proserpinaca pectinata</i>		
Dryspike sedge	<i>Carex siccata</i>		
Dwarf saltwort	<i>Salicornia bigelovii</i>		

# SPECIES LIST

Common Name	Scientific Name	Common Name	Scientific Name
<b>HABITATS, cont.</b>			<b>HERPETOFAUNA, cont.</b>
Sessilefruit arrowhead	<i>Sagittaria rigida</i>	Northern leopard frog	<i>Rana pipiens</i>
Slender blue iris	<i>Iris prismatica</i>	Rare salamander	-
<u>Smallflower halfchaff sedge</u>	<i>Lipocarpha micrantha</i>	Spotted salamander	<i>Ambystoma maculatum</i>
Smooth winterberry	<i>Ilex laevigata</i>	Wood Frog	<i>Lithobates sylvaticus</i>
<u>Striped prince's pine</u>	<i>Chimaphila maculata</i>	<b>SNAKE</b>	
<u>Swamp azalea</u>	<i>Rhododendron viscosum</i>	<u>Eastern ribbon snake</u>	<i>Thamnophis sauritus</i>
<u>Tall horned beaksedge</u>	<i>Rhynchospora macrostachya</i>	Northern black racer	<i>Coluber constrictor constrictor</i>
Threadleaf arrowhead	<i>Sagittaria filiformis</i>	<b>TURTLE</b>	
<u>Threatened plant</u>	-	<u>Blanding's turtle</u>	<i>Emydoidea blandingii</i>
Tidal spikerush	<i>Eleocharis aestuum</i>	<u>Green sea turtle</u>	<i>Chelonia mydas</i>
<u>Twining screwstem</u>	<i>Bartonia paniculata</i>	<u>Kemp's ridley sea turtle</u>	<i>Lepidochelys kempii</i>
<u>Variable sedge</u>	<i>Carex polymorpha</i>	<u>Leatherback sea turtle</u>	<i>Dermochelys coriacea</i>
<u>Velvet sedge</u>	<i>Carex vestita</i>	<u>Loggerhead sea turtle</u>	<i>Caretta caretta</i>
Water pygmyweed	<i>Crassula aquatica</i>	<u>Spotted turtle</u>	<i>Clemmys guttata</i>
Welsh mudwort	<i>Limosella australis</i>	Wood turtle	<i>Glyptemys insculpta</i>
<b>UPLAND</b>			
Coastal dune grassland	-	<b>INVERTEBRATES</b>	
Northern comandra	<i>Geocaulon lividum</i>	<b>BIVALVE</b>	
Rare upland community	-	Alewife floater	<i>Anodonta implicata</i>
Spruce pine-hardwood mesic flatwood	-	Atlantic jackknife clam	<i>Ensis directus</i>
<b>WETLAND</b>		Atlantic surfclam	<i>Spisula solidissima</i>
Brackish marsh	-	Blue mussel	<i>Mytilus edulis</i>
Estuarine scrub-shrub	-	<u>Brook floater</u>	<i>Alasmidonta varicosa</i>
Forested wetland	-	Eastern oyster	<i>Crassostrea virginica</i>
Freshwater tidal marsh	-	European flat oyster	<i>Ostrea edulis</i>
<u>Long's bulrush</u>	<i>Scirpus longii</i>	Northern quahog	<i>Mercenaria mercenaria</i>
<u>Moonwort</u>	<i>Botrychium lunaria</i>	Sea scallop	<i>Placopecten magellanicus</i>
Rare ecological community	-	Softshell clam	<i>Mya arenaria</i>
Rare wetland community	-	Squawfoot	<i>Strophitus undulatus</i>
<u>Red goosefoot</u>	<i>Chenopodium rubrum</i>	<u>Yellow lampmussel</u>	<i>Lampsilis cariosa</i>
Salt marsh	-	<b>CRAB</b>	
Salt meadow cordgrass (wiregrass)	<i>Spartina patens</i>	Atlantic rock crab	<i>Cancer irroratus</i>
Tidal Marsh	-	Blue crab	<i>Callinectes sapidus</i>
<b>HERPETOFAUNA</b>		Horseshoe crab	<i>Limulus polyphemus</i>
<b>AMPHIBIAN</b>		Jonah crab	<i>Cancer borealis</i>
Blue-spotted salamander	<i>Ambystoma laterale</i>	<b>ECHINODERM</b>	
Jefferson salamander	<i>Ambystoma opacum</i>	Green urchin	<i>Strongylocentrotus droebachiensis</i>
<b>GASTROPOD</b>			
Rare snail			

## SPECIES LIST

Common Name	Scientific Name	Common Name	Scientific Name
<b>INVERTEBRATES, cont.</b>			<b>TERRESTRIAL MAMMALS</b>
<b>INSECT</b>			
Arrowhead spiketail	<i>Cordulegaster obliqua</i>	Beaver	<i>Castor canadensis</i>
<u>Hessel's hairstreak</u>	<u><i>Callophrys hesseli</i></u>	Muskrat	<i>Ondatra zibethicus</i>
Little bluet	<i>Enallagma minusculum</i>	<u>New England cottontail</u>	<u><i>Sylvilagus transitionalis</i></u>
Pale swallowtail	<i>Papilio eurymedon</i>	Northern river otter	<i>Lutra canadensis</i>
Rare insect	-	* 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.	
<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>		
<b>LOBSTER</b>			
American lobster	<i>Homarus americanus</i>		
<b>SHRIMP</b>			
Daggerblade grass shrimp	<i>Palaemonetes pugio</i>		
Northern shrimp	<i>Pandalus borealis</i>		
Sevenspine bay shrimp	<i>Crangon septemspinosa</i>		

## **MARINE MAMMALS**

<b>DOLPHIN</b>	
Atlantic white-sided dolphin	<i>Lagenorhynchus acutus</i>
Dolphins	-
Harbor porpoise	<i>Phocoena phocoena</i>
<b>PINNIPED</b>	
Gray seal	<i>Halichoerus grypus</i>
Harbor seal	<i>Phoca vitulina</i>
Harp seal	<i>Pagophilus groenlandicus</i>
Hooded seal	<i>Cystophora cristata</i>
<b>WHALE</b>	
<u>Fin whale</u>	<u><i>Balaenoptera physalus</i></u>
<u>Humpback whale</u>	<u><i>Megaptera novaeangliae</i></u>
Long-finned pilot whale	<i>Globicephala melas</i>
Minke whale	<i>Balaenoptera acutorostrata</i>
<u>North Atlantic right whale</u>	<u><i>Eubalaena glacialis</i></u>
<u>Sei whale</u>	<u><i>Balaenoptera borealis</i></u>
<u>Sperm whale</u>	<u><i>Physeter macrocephalus</i></u>

# 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



Photo Credit: Alan Kolnik, NOAA

- 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

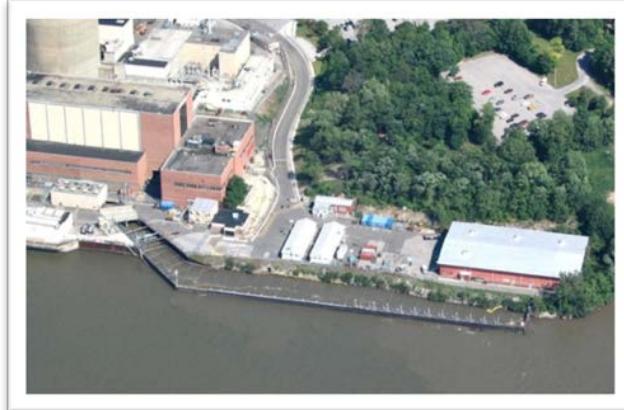
ESI = 1B

### 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

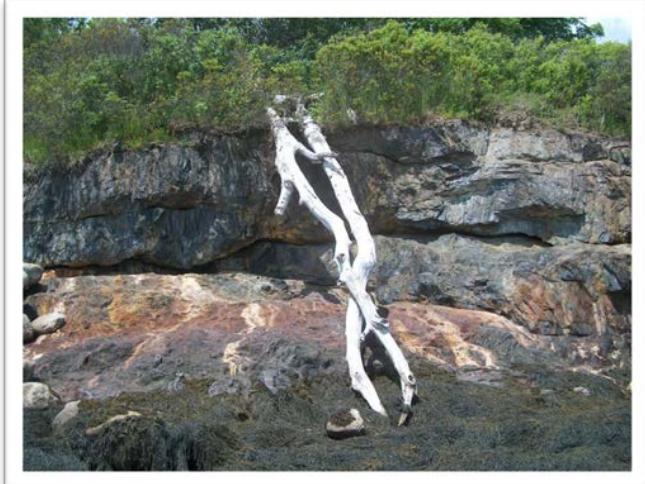
ESI = 2B

### 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 mothering or lethal oil concentrations in the interstitial water
- Biological impacts include temporary declines in infaunal populations, which can also affect important shorebird foraging areas



Photo Credit: William Folsom, NOAA, NMFS

### 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

Photo Credit: Mr. David Sinson, NOAA Office of Coast Survey



### 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



Photo Credit: Capt Albert Theberge, NOAA Corps (ret.)

- 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 uncleared, 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



Photo Credit: David Sinson, NOAA, Office of Coast Survey

- 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

### 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

ESI = 10C



### 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

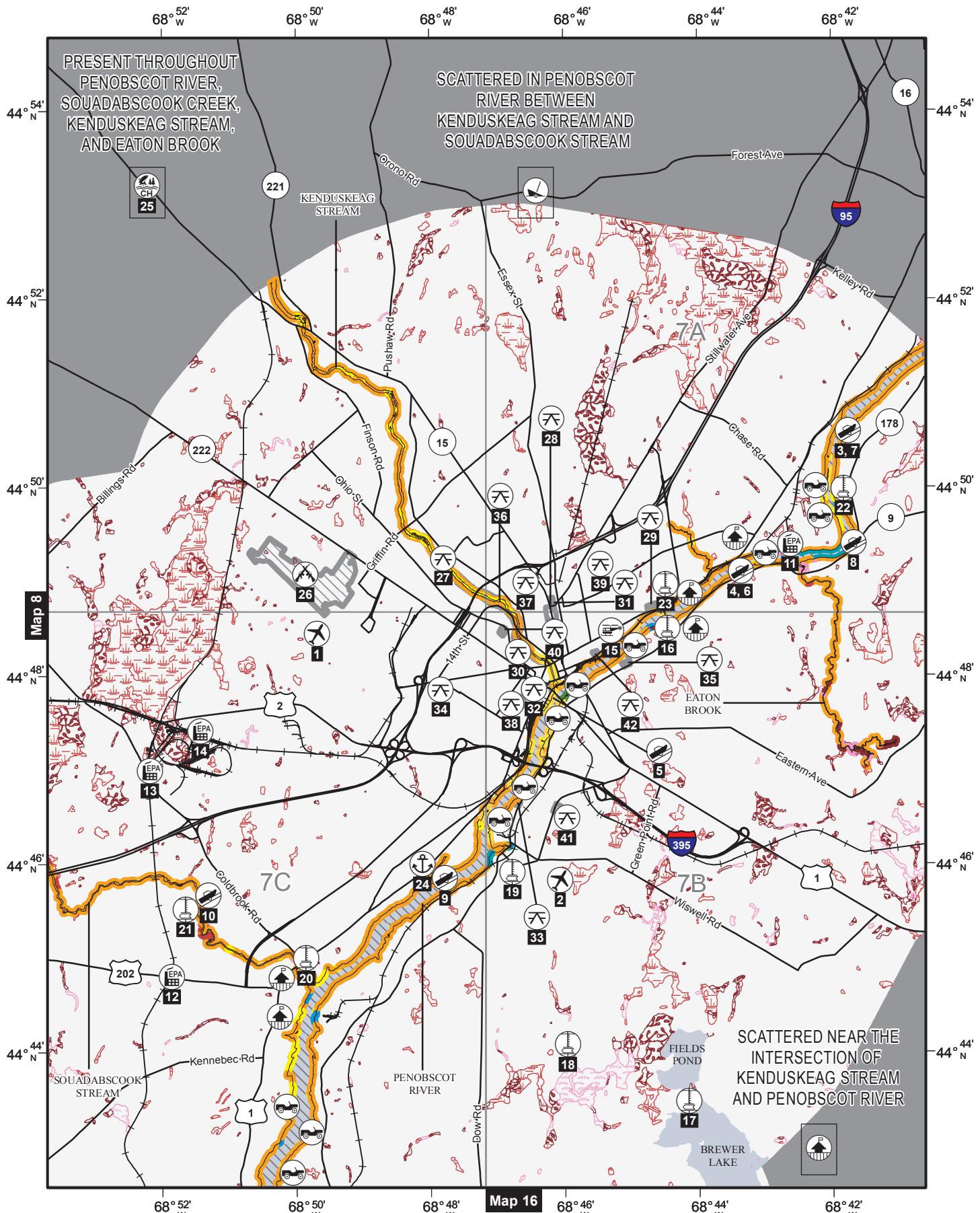
- Oil behavior depends on water level
- During high water, most of the oil passes through the wetland, coating the vegetation above the waterline
- Woody vegetation is less sensitive than grasses to oil
- Some oil can be trapped and pooled on the surface as water levels drop
- Penetration into the soils 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 7**  
Midcoast Maine



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

## Map 7 Midcoast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name	Map ID	Type	Name
1	AIRPORT	BANGOR INTERNATIONAL AIRPORT	25	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT
2	AIRPORT	BREWER AIRPORT	26	MILITARY	BANGOR IAP
3	BOAT RAMP	BANGOR HYDRO BOAT LAUNCH	27	PARK	BANGOR, UNIDENTIFIED PARK
4	BOAT RAMP	BREWER BOAT LANDING	28	PARK	BROADWAY PARK
5	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 1	29	PARK	CASCADE PARK
6	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 2	30	PARK	COE PARK
7	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 3	31	PARK	DAKIN PARK
8	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 4	32	PARK	DAVENPORT PARK
9	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 6	33	PARK	EASTERN PARK
10	BOAT RAMP	SQUADABSCOOK STREAM BOAT RAMP	34	PARK	FAIRMONT PARK
11	EPA FACILITY	CASCO BAY ENERGY COMPANY, LLC	35	PARK	INDIAN TRAIL PARK
12	EPA FACILITY	HAMPDEN BULK LP PLANT	36	PARK	KENDUSKEAG STREAM PARK
13	EPA FACILITY	MAINE PROPANE DISTRIBUTORS COLDBROOK PLANT	37	PARK	LITTLE CITY PARK
14	EPA FACILITY	PINE TREE PROpane, LLC			
15	HELIPORT	EASTERN MAINE MEDICAL CENTER			
16	LOCK AND DAM	BANGOR DAM			
17	LOCK AND DAM	BREWER LAKE DAM			
18	LOCK AND DAM	EAST ORRINGTON DAM			
19	LOCK AND DAM	MILL STREET DAM			
20	LOCK AND DAM	SQUADABSCOOK DAM			
21	LOCK AND DAM	TEMPLE MILL DAM			
22	LOCK AND DAM	VIEZIE DAM			
23	LOCK AND DAM	WATER WORKS DAM			
24	MARINA	HAMLIN'S MARINA			
			Map ID	Type	Contact
			20	CRITICAL HABITAT	REBECCA HUPP
			21	MILITARY	BREWER AIRPORT, INC
			22	PARK	EDDINGTON BREWER
			23	PARK	BANGOR BREWER
			24	PARK	PPL-MAINE EDDINGTON SAL. CL.
			25	PARK	HAMPDEN DIFW
			26	PARK	207-973-1220
			27	PARK	207-356-2741
			28	PARK	207-947-4525
			29	PARK	207-848-2705
			30	PARK	207-945-7020
			31	PARK	ANN M DYER
			32	PARK	CITY OF BANGOR
			33	PARK	GRT BANGOR BREWER DEVELO
			34	PARK	EASTERN FINE PAPER CO
			35	PARK	GRT BANGOR BREWER DEVELO
			36	PARK	STATE OF ME
			37	PARK	BANGOR HYDRO ELECTRIC CO
					CITY OF BANGOR
					207-907-4385

**DISPLAYED ON MAP (POLYGONS) (continued)**

<i>Map ID</i>	<i>Type</i>	<i>Name</i>	<i>Contact</i>	<i>Phone</i>
38	PARK	SECOND STREET PARK	CITY OF BANGOR	
39	PARK	STILLWATER PARK	CITY OF BANGOR	
40	PARK	SUMMIT PARK	CITY OF BANGOR	
41	PARK	SUNSET PARK	CITY OF BREWER	
42	PARK	WILLIAMS PARK	CITY OF BANGOR	

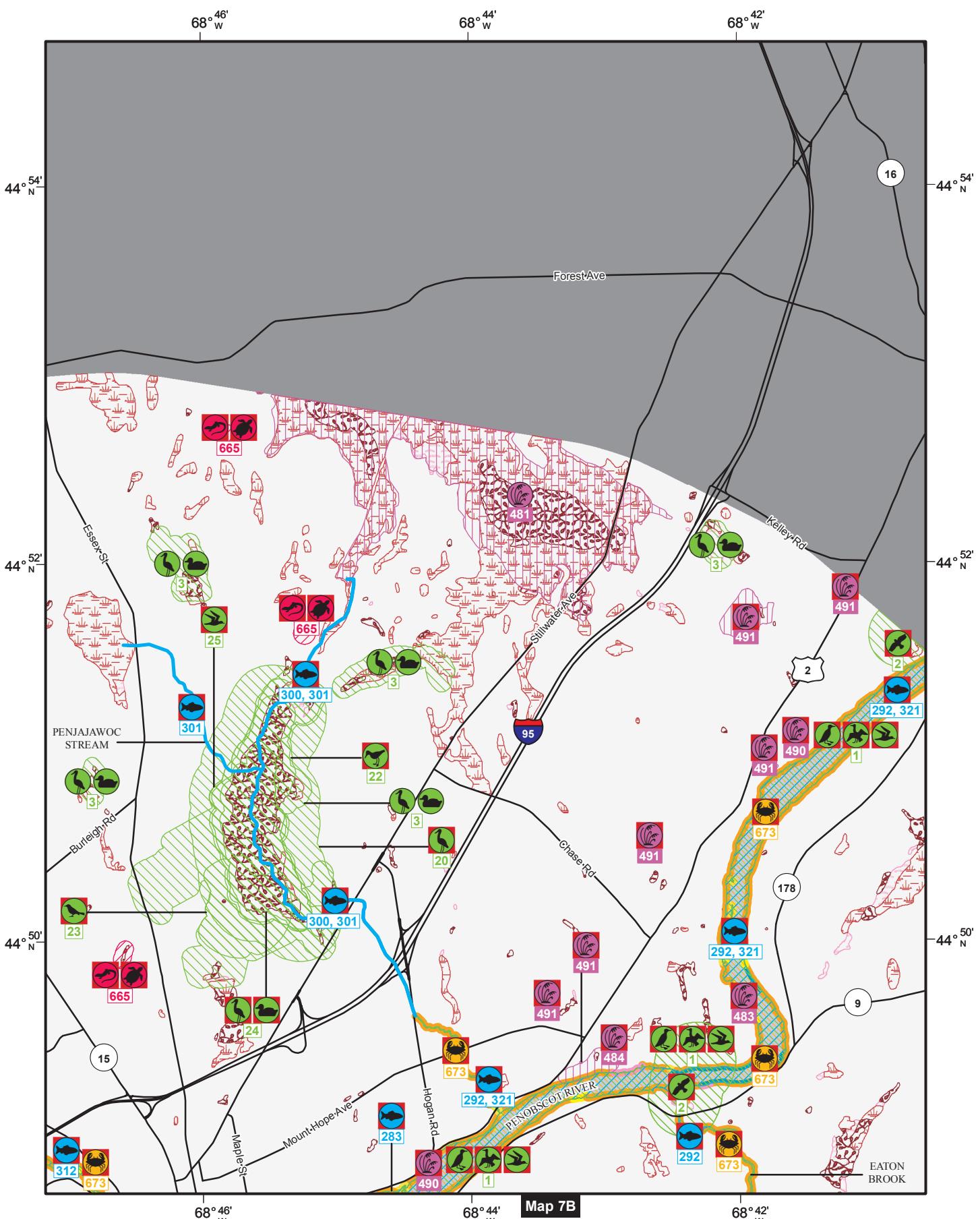
**ALSO PRESENT IN MAPPED AREA (POLYGONS)**

<i>Type</i>	<i>Name</i>	<i>Contact</i>	<i>Phone</i>
STATE PROTECTED AREA	CARIBOU BOG - PENJAWOC - PHASE III	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	

**JURISDICTIONS**

<i>COUNTY:</i>	PENOBSQUIT	<i>FEMA:</i>	REGION I
<i>COAST GUARD:</i>	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	<i>EPA:</i>	REGION 1
<i>USACE:</i>	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		





**Map 7A**  
Midcoast Maine



## Map 7A Midcoast Maine

### 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	Monthly Presence														
				J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
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	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	Passerine	Sedge wren	Vulnerable Occurrence	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	Wading	BC night-heron	Vulnerable Occurrence	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American coot	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common gallinule	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	Gull/Tern	Black tern	Vulnerable Occurrence	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence															
				J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
283	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Striped bass	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
292	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## FISH (continued)

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

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
481	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
484	Plant	Endangered plant	Vulnerable Occurrence	E/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
490	Plant	Nantucket serviceberry	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Low	Common	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	May-Jul	-	Jan-Dec	Apr-Jun	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	Mar-May	Apr-Jun	-	May-Sep	Mar-Jun	May-Sep	Mar-Sep	Mar-Sep	Mar-Sep
	Amphibian	Spotted salamander	Concentration Area	C/C	Very Low	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Amphibian	Wood Frog	Concentration Area	C/C	Very Low	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	Jan-Nov	Jan-Nov	Jan-Nov	Jan-Nov
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	Jan-Nov	Jan-Nov	Jan-Nov	Jan-Nov
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	Jan-Nov	Jan-Nov	Jan-Nov	Jan-Nov

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

Monthly Presence											
	J	F	M	A	M	J	J	A	S	O	N
Sublement	Species										
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-
Diving	Thick-billed murre	-	-	-	-	-	-	-	-	-	-
	D. crested cormorant	-	-	-	-	-	-	-	-	-	-
	Horned grebe	-	-	-	-	-	-	-	-	-	-
	Red-necked grebe	-	-	-	-	-	-	-	-	-	-
	Red-throated loon	-	-	-	-	-	-	-	-	-	-
Gull/Tern	G. black-backed gull	-	-	-	-	-	-	-	-	-	-
	Herring gull	-	-	-	-	-	-	-	-	-	-
	Ring-billed gull	-	-	-	-	-	-	-	-	-	-
Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

Monthly Presence											
	J	F	M	A	M	J	J	A	S	O	N
Sublement	Species										
Bivalve	Northern quahog	-	-	-	-	-	-	-	-	-	-
	Crab	-	-	-	-	-	-	-	-	-	-
	Blue crab	-	-	-	-	-	-	-	-	-	-
	Jonah crab	-	-	-	-	-	-	-	-	-	-
Echinoderm	Green urchin	-	-	-	-	-	-	-	-	-	-
	Lobster	-	-	-	-	-	-	-	-	-	-

**MARINE MAMMALS**

Monthly Presence											
	J	F	M	A	M	J	J	A	S	O	N
Sublement	Species										
Pinniped	Harbor seal	-	-	-	-	-	-	-	-	-	-

**TERRESTRIAL MAMMALS**

Monthly Presence											
	J	F	M	A	M	J	J	A	S	O	N
Sublement	Species										
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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10B	Freshwater Marshes
	10C	Swamps
	9B	Vegetated Low Banks
	8A	Sheltered, Impermeable, Rocky Shores
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Riprap
	5	Mixed Sand and Gravel Beaches

	Length (Meters)	Length (Miles)	% of ESI Shoreline
	961.23	0.60	3%
	84.17	0.05	< 1%
	24,890.05	15.47	77%
	2,217.71	1.38	7%
	1,495.83	0.93	5%
	275.97	0.17	1%
	2,381.20	1.48	7%
Total ESI Shoreline:	32,306.16	Total ESI Shoreline:	20.07
Total Shoreline:	27,818.65	Total Shoreline:	17.29

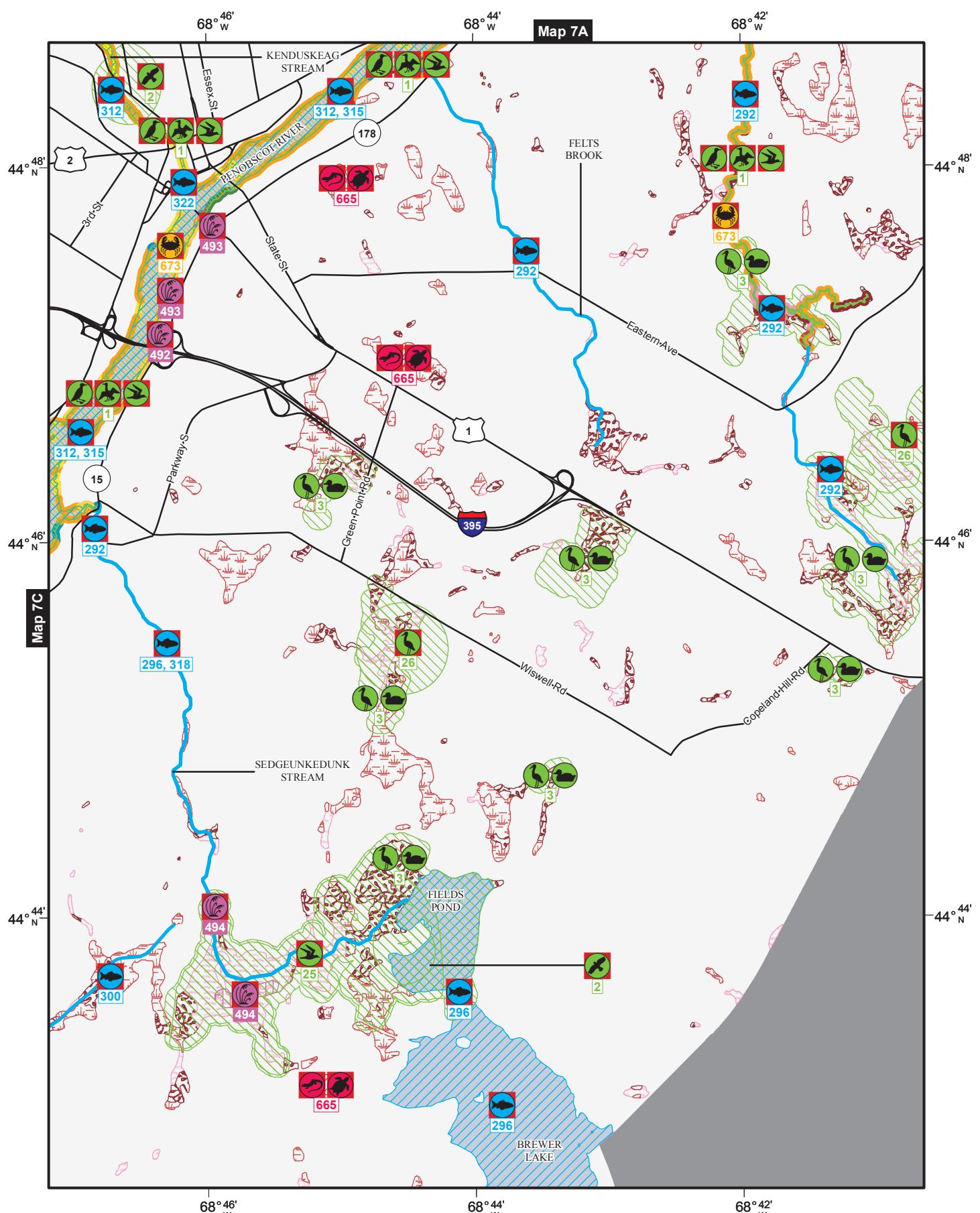
Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%

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





Map 7A



## Map 7B Midcoast Maine

### 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	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	Gull/Tern	Black tern	Vulnerable Occurrence	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles
292	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
296	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
312	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
315	Diadromous	Atlantic sturgeon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
318	Diadromous	Atlantic salmon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
322	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### FISH (continued)

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

### HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
492	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Plant	Estuary pipewort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
493	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Plant	Water pygmyweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
494	Plant	Sessilefruit arrowhead	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

### REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec		
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec		
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	May-Jul	-	May-Sep	Jan-Dec	Jan-Dec	Jan-Dec		
	Amphibian	Spotted salamander	Concentration Area	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-May	Apr-Jun	-	May-Sep	Mar-Jun	Mar-Jun	Mar-Jun		
	Amphibian	Wood Frog	Concentration Area	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep	Mar-Sep	Mar-Sep		
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec		
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov	Jan-Nov	Jan-Nov		

### INVERTEBRATES

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

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

		Monthly Presence																
		J F M A M J J A S O N D												Mig.(S)		Mig.(F)		
Subelement	Species	Black guillemot	Common eider	Common loon	Common murres	Common scoter	Glaucous gull	Horned grebe	Red-necked grebe	Red-throated loon	Rough-legged hawk	Sabine's gull	Spoonbill	Thick-billed murre	White-tailed kite	Yellow-bellied sandpiper		
Alcid	Black guillemot	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
Dovekie	Dovekie	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
Thick-billed murre	Thick-billed murre	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
D.	D. crested cormorant	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
Diving	Horned grebe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
	Red-necked grebe	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
	Red-throated loon	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
Gull/Tern	G. black-backed gull	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
	Herring gull	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
	Ring-billed gull	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-
Pelagic	Northern gannet	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-

**INVERTEBRATES**

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

**MARINE MAMMALS**

		Monthly Presence														Mating		Calving	
		J F M A M J J A S O N D												May-Oct		Jun-Aug		Apr-Jul	
Subelement	Species	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Pinniped	Harbor seal	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-	-	-

**TERRESTRIAL MAMMALS**

		Monthly Presence														Mating		Calving	
		J F M A M J J A S O N D												May-Oct		Jun-Aug		Apr-Jul	
Subelement	Species	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Small Mammal	Beaver	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Muskat	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-	-	-
	Northern river otter	■	■	■	■	■	■	■	■	■	■	■	■	■	■	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.noaa.gov](http://response.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES	
ESI Rank	Habitat Classification
10B	Freshwater Marshes
10C	Swamps
10D	Scrub and Shrub Wetlands



ESI SHORELINE HABITAT TYPES	
ESI Rank	Shoreline Habitat Classification
10B	Freshwater Marshes
10C	Swamps
10D	Scrub and Shrub Wetlands
9B	Vegetated Low Banks
8A	Sheltered, Impermeable, Rocky Shores
8B	Sheltered, Solid Man-Made Structures
8C	Sheltered Riprap
6B	Riprap
5	Mixed Sand and Gravel Beaches
4	Coarse Grained Sand Beaches

Area (Sq. Miles)

10B	404.69
10C	794.37
10D	615.51

Area (Acres)

10B	0.63
10C	1.24
10D	0.96

% of ESI Shoreline

10B	6%
10C	2%
10D	10%
9B	59%
8A	1%
8B	11%
8C	8%
6B	1%
5	1%
4	1%

Length (Meters)

2,353.43	1.46
834.68	0.52
3,779.37	2.35
22,447.59	13.95
506.73	0.31
4,276.81	2.66
2,951.08	1.83
477.71	0.30
396.94	0.25
271.50	0.17

% of ESI Shoreline



Total ESI Shoreline:	38,295.86
Total Shoreline:	32,186.88

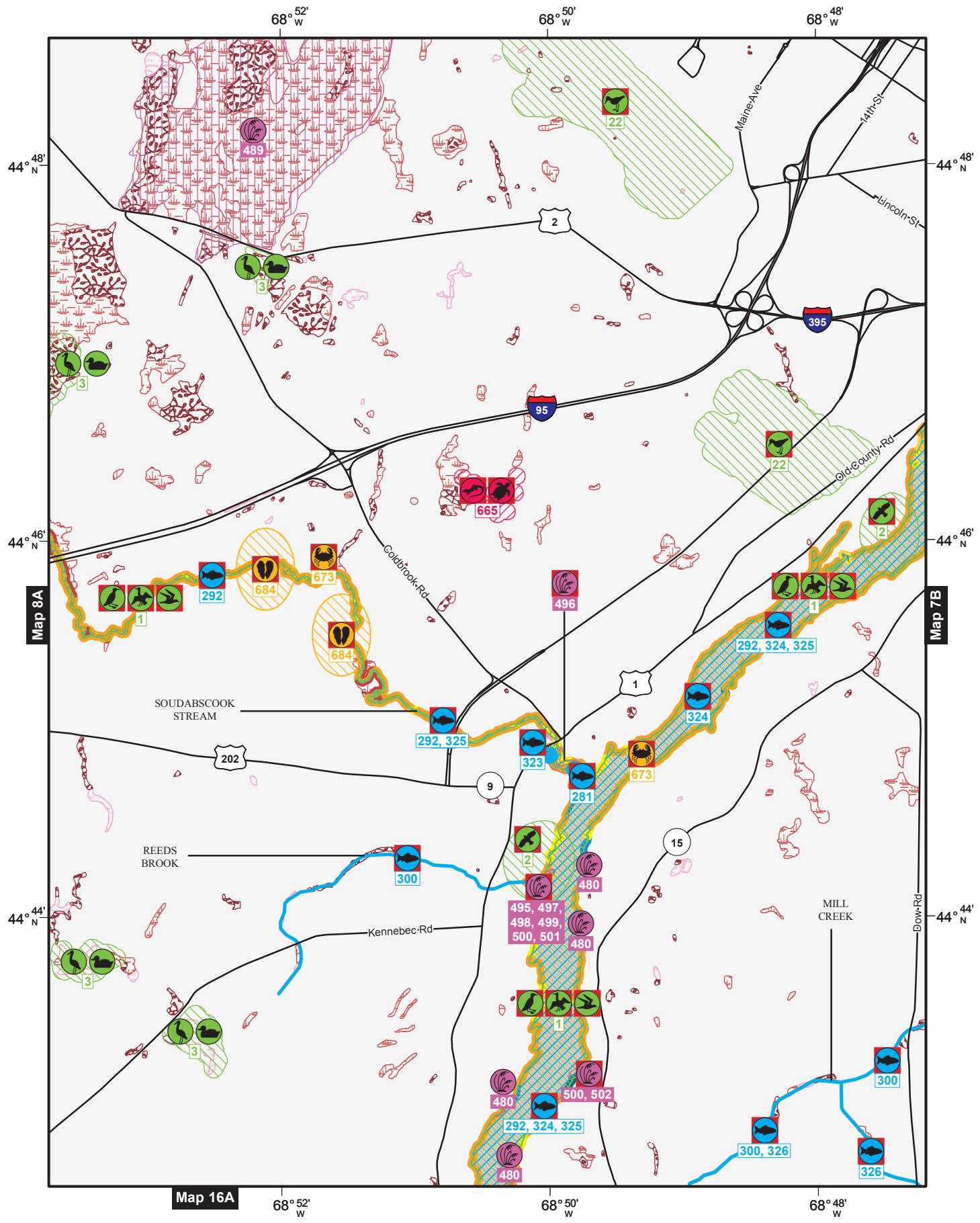
Length (Miles)

Total ESI Shoreline:	23.80
Total Shoreline:	20.00

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 7C Midcoast Maine

### 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	Monthly Presence														
				J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
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	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	Vulnerable Occurrence	T/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence															
				J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
281	Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
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
300	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
324	Diadromous	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Feb	-
	Marine Benthic	Atlantic tomcod	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
325	Diadromous	American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Feb	May-Jul
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
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

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence													
					S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
489	Wetland	Rare wetland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
495	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
496	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/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
497	Plant	Water pygmyweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
498	Plant	Estuary pipewort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
499	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	Plant	Seaside brookweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
501	Plant	Seaside brookweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
502	Plant	Horned pondweed	Vulnerable Occurrence	C/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence													
					S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	C/C	Apr-May	Apr-May	May-Jun	May-Jun	-	Jan-Dec	Jan-Dec	Apr-Jun	Apr-Jun	-	Jan-Dec
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Low	Common	C/C	Apr-Jun	Apr-Jun	May-Jul	May-Jul	-	Jan-Dec	Jan-Dec	Apr-Jun	Apr-Jun	-	Jan-Dec
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Concentration Area	Concentration Area	Common	Mar-May	Mar-May	Apr-Jun	Apr-Jun	-	May-Sep	May-Sep	Mar-Jun	Mar-Jun	-	Jan-Dec
	Amphibian	Spotted salamander	Vulnerable Occurrence	T/T	Very Low	Very Low	C/C	May-Jul	May-Jul	Aug-Oct	Aug-Oct	-	Jun-Sep	Jun-Sep	Jan-Dec	Jan-Dec	-	Jan-Dec
	Amphibian	Wood Frog	Vulnerable Occurrence	T/T	Very Low	Very Low	C/C	May-Jul	May-Jul	Aug-Oct	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Nov	Jan-Nov	-	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low	Very Low	C/C	May-Jul	May-Jul	Aug-Oct	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Nov	Jan-Nov	-	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	T/T	Very Low	Very Low	C/C	May-Jul	May-Jul	Aug-Oct	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Nov	Jan-Nov	-	Jan-Dec

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence													
					S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
673	Crab	Horseshoe crab	General Distribution	-C	Low	C/C	General Distribution	May-Jul	May-Jul	Jun-Aug	Jun-Aug	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	-	Jan-Dec
684	Bivalve	Squawfoot	Vulnerable Occurrence	C/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

Subelement	Species	Monthly Presence												Molt
		J	F	M	A	M	J	J	A	S	O	N	D	
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-
	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-
	Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-	-
	Red-necked grebe	-	-	-	-	-	-	-	-	-	-	-	-	-
	Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-	-
	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

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

**MARINE MAMMALS**

Subelement	Species	Monthly Presence												Molt
		J	F	M	A	M	J	J	A	S	O	N	D	
Pinniped	Harbor seal	-	-	-	-	-	-	-	-	-	-	-	-	-
Small Mammal	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**TERRESTRIAL MAMMALS**

Subelement	Species	Monthly Presence												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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10B	Freshwater Marshes	107.31
10C	Swamps	1,136.83
10D	Scrub and Shrub Wetlands	496.38
9A	Sheltered Tidal Flats	2.66

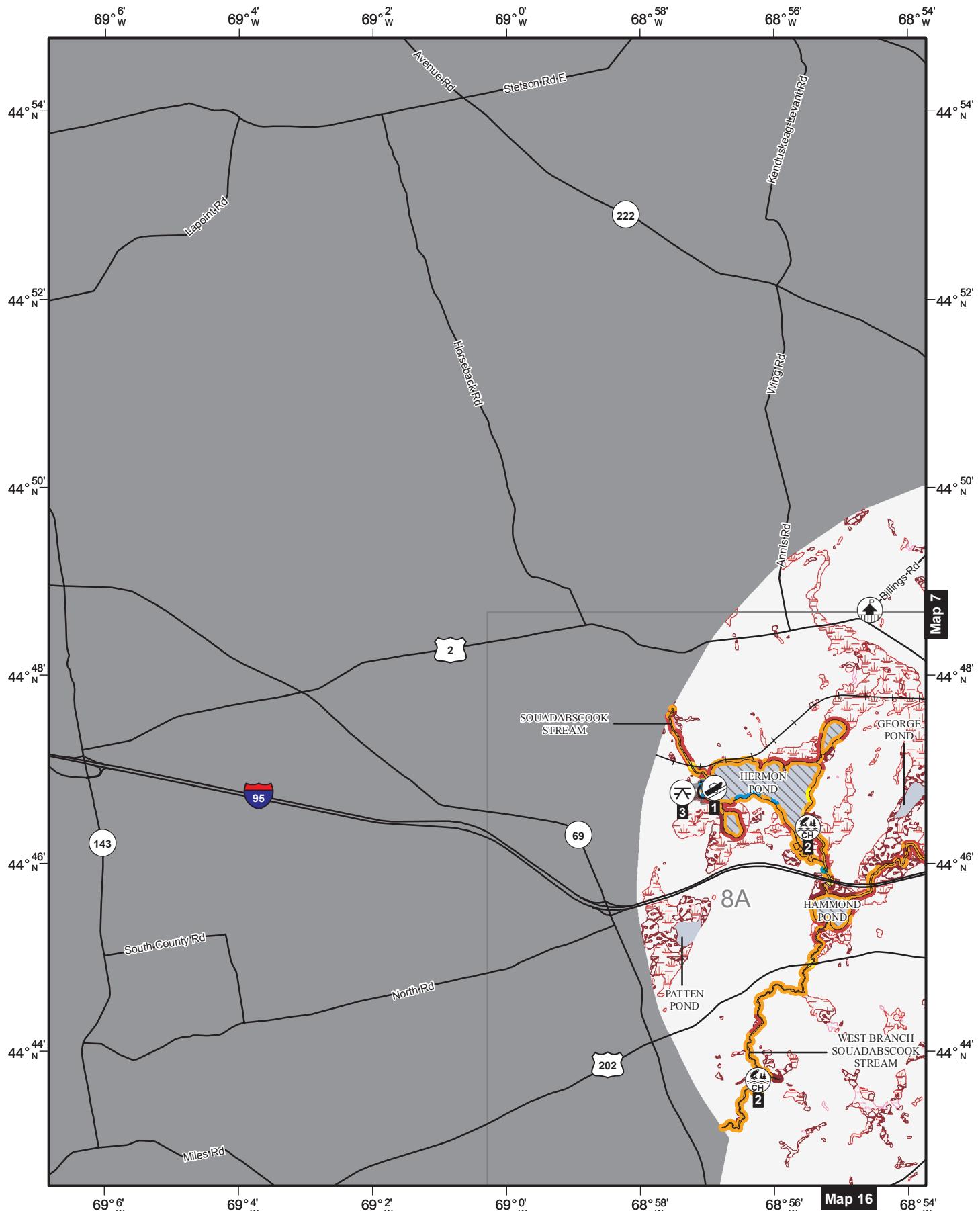
ESI SHORELINE HABITAT TYPES				
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10B	Freshwater Marshes	264.57	0.16	1%
10C	Swamps	2,845.18	1.77	6%
9A	Sheltered Tidal Flats	583.48	0.36	1%
9B	Vegetated Low Banks	36,593.99	22.74	76%
8A	Sheltered, Impermeable, Rocky Shores	5,046.83	3.14	11%
8B	Sheltered, Solid Man-Made Structures	353.53	0.22	1%
8C	Sheltered Riprap	364.88	0.23	1%
8D	Sheltered, Rocky, Rubble Shores	479.79	0.30	1%
6A	Gravel Beaches	354.11	0.22	1%
4	Coarse Grained Sand Beaches	1,126.48	0.70	2%
Total ESI Shoreline:		48,012.85	Total ESI Shoreline:	29.83
Total Shoreline:		41,436.51	Total Shoreline:	25.75

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](http://response.restoration.noaa.gov)







**Map 8**  
Midcoast Maine



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 8 Midcoast Maine

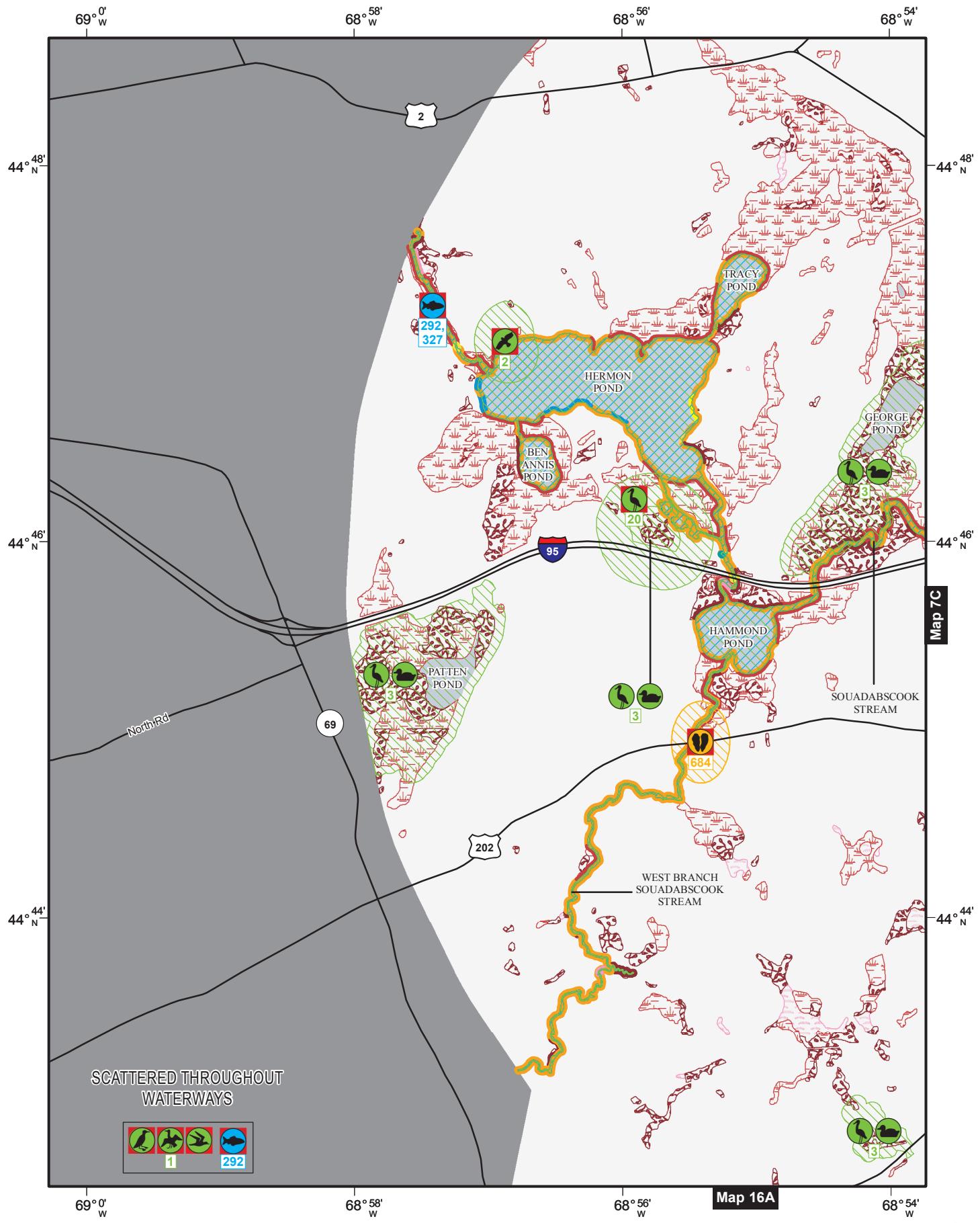
### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			Name	Contact	Phone
Map ID	Type				
1	BOAT RAMP		HERMON POND BOAT RAMP	HERMON	
DISPLAYED ON MAP (POLYGONS)			Name	Contact	Phone
Map ID	Type				
2	CRITICAL HABITAT		ATLANTIC SALMON CRITICAL HABITAT		
3	PARK		HERMON POND PARK	TOWN OF HERMON	
JURISDICTIONS					
COUNTY:					
COAST GUARD:					
USACE:					
SHORELINE RESOURCES					
ESI POLYGON HABITAT TYPES					
ESI Rank	Habitat Classification		Area (Acres)	Area (Sq. Miles)	% of ESI Shoreline
10B	Freshwater Marshes		75.64	0.12	1%
10C	Swamps		1,707.49	2.67	24%
10D	Scrub and Shrub Wetlands		796.56	1.24	8%
ESI SHORELINE HABITAT TYPES					
ESI Rank	Shoreline Habitat Classification		Length (Meters)	Length (Miles)	% of ESI Shoreline
10B	Freshwater Marshes		537.23	0.33	1%
10C	Swamps		16,383.08	10.18	24%
10D	Scrub and Shrub Wetlands		5,224.88	3.25	8%
9B	Vegetated Low Banks		43,180.64	26.83	64%
8A	Sheltered, Impermeable, Rocky Shores		355.38	0.22	1%
8B	Sheltered, Solid Man-Made Structures		351.51	0.22	1%
8C	Sheltered Riprap		56.01	0.03	< 1%
8D	Sheltered, Rocky, Rubble Shores		140.81	0.09	< 1%
5	Mixed Sand and Gravel Beaches		11.64	0.01	< 1%
4	Coarse Grained Sand Beaches		941.84	0.59	1%
Total ESI Shoreline:	67,183.02		Total ESI Shoreline:	41.75	
Total Shoreline:	44,368.63		Total Shoreline:	27.57	

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](http://response.restoration.noaa.gov)





## Map 8A Midcoast Maine

### 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	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Wading	Least bittern	Vulnerable Occurrence	E/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles
292	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
327	Diadromous	American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles
684	Bivalve	Squawfoot	Vulnerable Occurrence	C/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

	<b>Sublement</b>	<b>Species</b>	Monthly Presence										<i>Mig.(F)</i>	<i>Molt</i>	
			J	F	M	A	M	J	J	A	S	O	N		
	Alcid	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												-	-

**MARINE MAMMALS**

	<b>Sublement</b>	<b>Species</b>	Monthly Presence										<i>Mating</i>	<i>Calving</i>	<i>Pupping</i>	<i>Molt</i>	
			J	F	M	A	M	J	J	A	S	O	N				
	Pinniped	Harbor seal												-	-	-	-

**TERRESTRIAL MAMMALS**

	<b>Sublement</b>	<b>Species</b>	Monthly Presence										<i>Mating</i>	<i>Calving</i>	<i>Pupping</i>	<i>Molt</i>	
			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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9B	Vegetated Low Banks
	8A	Sheltered, Impermeable, Rocky Shores
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Riprap
	8D	Sheltered, Rocky, Rubble Shores
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
		Total ESI Shoreline:
		67,182.89
		Total Shoreline:
		44,368.57

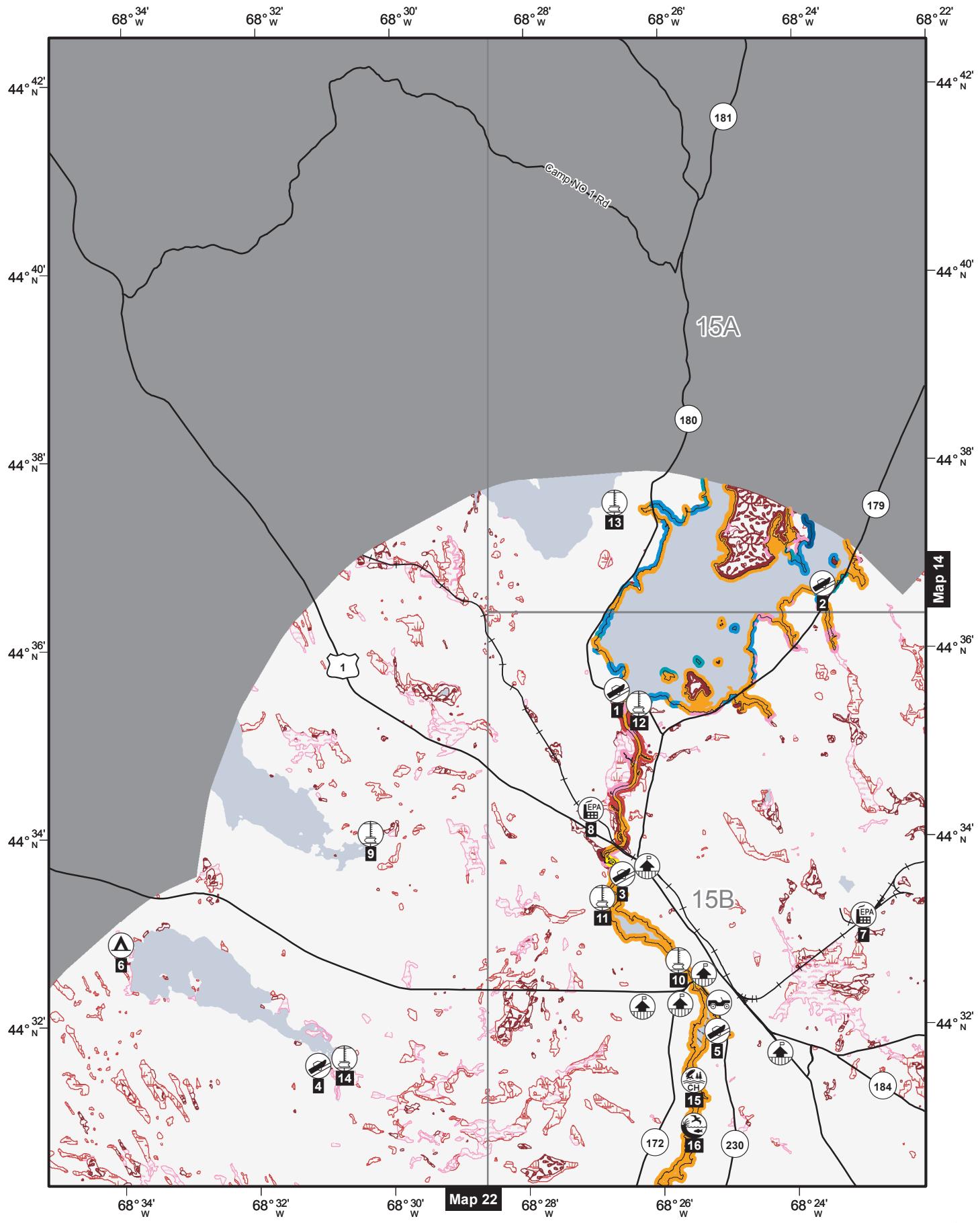
Length (Meters)      % of ESI Shoreline  
 537.23      1%  
 16,383.01      24%  
 5,224.88      8%  
 43,180.58      64%  
 355.38      1%  
 351.51      1%  
 0.22      <1%  
 56.01      <1%  
 140.81      <1%  
 11.64      <1%  
 941.84      1%

Total ESI Shoreline: 67,182.89      Total ESI Shoreline: 41.75  
 Total Shoreline: 44,368.57      Total Shoreline: 27.57

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](http://response.restoration.noaa.gov)





**Map 15**  
Downeast Maine



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 15 Downeast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	BOAT RAMP	GRAHAM LAKE BOAT RAMP 1
2	BOAT RAMP	GRAHAM LAKE BOAT RAMP 2
3	BOAT RAMP	LEONARD LAKE BOAT RAMP
4	BOAT RAMP	LOWER PATTEN POND BOAT RAMP
5	BOAT RAMP	UNION RIVER BOAT RAMP
6	CAMPGROUND	PATTEN POND RV RESORT AND CAMPGROUND
7	EPA FACILITY	HANCOCK FOODS, INC.
8	EPA FACILITY	MAINE PROPANE DISTRIBUTORS ELLSWORTH PLANT
9	LOCK AND DAM	BRANCH LAKE DAM
10	LOCK AND DAM	ELLSWORTH DAM
11	LOCK AND DAM	ELLSWORTH WATER CO DAM
12	LOCK AND DAM	GRAHAM LAKE DAM
13	LOCK AND DAM	GREEN LAKE DAM
14	LOCK AND DAM	LOWER PATTEN POND DAM

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
15	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT
16	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA

JURISDICTIONS		
County:	FEMA:	Region
COAST GUARD:	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	REGION 1
USACE:	EPA:	REGION 1

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES			Area (Acres)	Area (Sq. Miles)
ESI Rank	Habitat Classification			
10B	Freshwater Marshes		1,349.70	2.11
10C	Swamps		1,916.17	2.99
10D	Scrub and Shrub Wetlands		1,190.67	1.86
9A	Sheltered Tidal Flats		224.63	0.35

ESI SHORELINE HABITAT TYPES			Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank	Shoreline Habitat Classification				
10B	Freshwater Marshes		8,927.35	5.55	7%
10C	Swamps		5,830.27	3.62	5%
10D	Scrub and Shrub Wetlands		12,681.64	7.88	11%
9A	Sheltered Tidal Flats		25,848.83	16.06	22%
9B	Vegetated Low Banks		51,294.18	31.87	43%
8A	Sheltered, Impermeable, Rocky Shores		445.33	0.28	<1%
8B	Sheltered, Solid Man-Made Structures		958.69	0.60	1%
8C	Sheltered Riprap		369.13	0.23	<1%
5	Mixed Sand and Gravel Beaches		2,806.47	1.74	2%
4	Coarse Grained Sand Beaches		10,194.45	6.33	8%
3A	Fine to Medium Grained Sand Beaches		730.92	0.45	1%

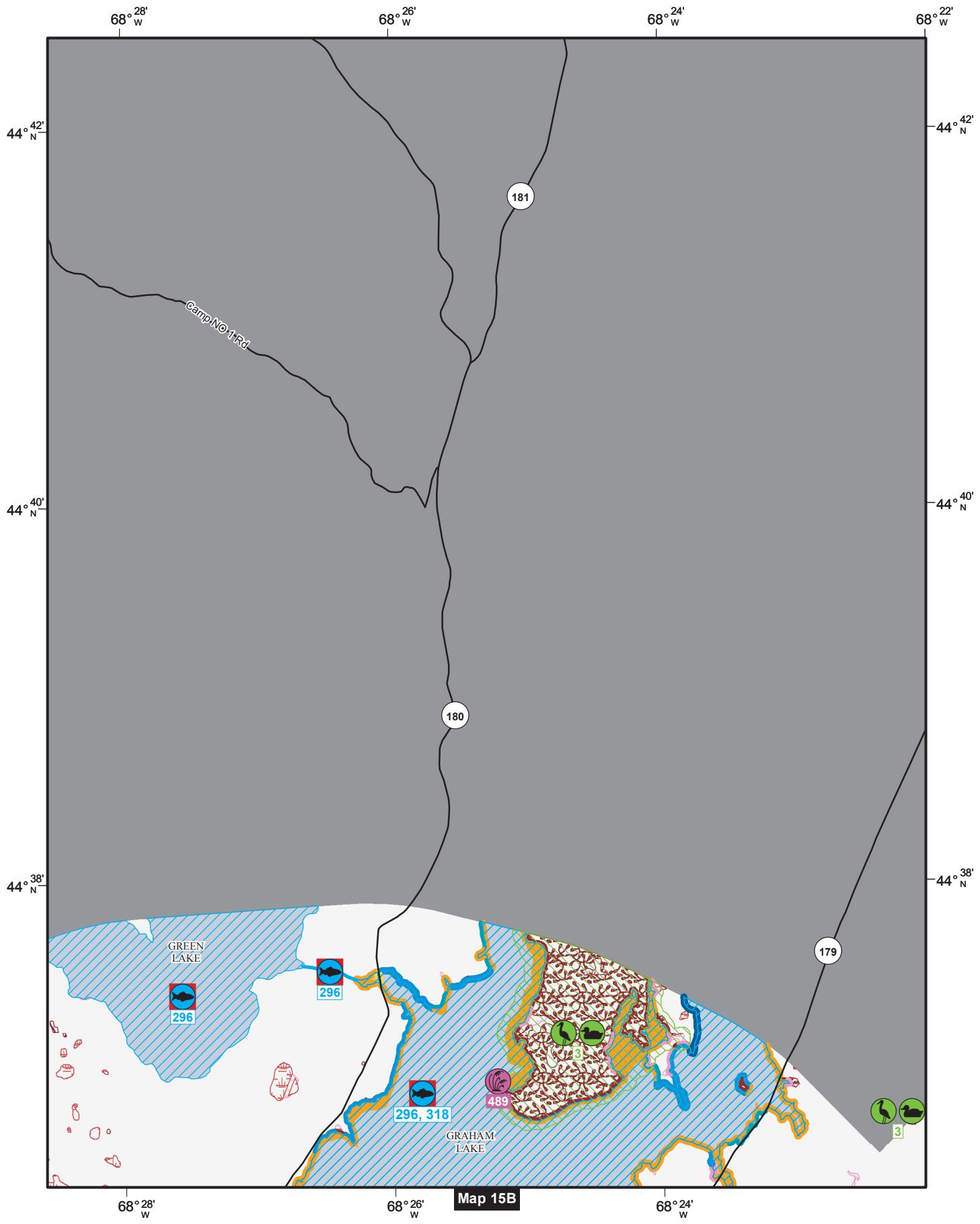
Total ESI Shoreline: 120,087.26      Total ESI Shoreline: 74,051.18  
Total Shoreline: 74,051.18      Total Shoreline: 46.01

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](http://response.restoration.noaa.gov)







**Map 15A**  
Downeast Maine



**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 15A Downeast Maine

### 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	S	F	Concentration	Monthly Presence							
							J	F	M	A	M	J	J	A
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-								
	Waterfowl	Waterfowl	Vulnerable Occurrence	-	-	-								

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							
							J	F	M	A	M	J	J	A
296	Diadromous	Alewife	Migration	-C	-	-								
	Diadromous	American eel	Migration	-C	-	-								
318	Diadromous	Atlantic salmon	Migration	-C	E	-								
	Diadromous	Sea lamprey	Migration	-C	-	-								

#### HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							
							J	F	M	A	M	J	J	A
489	Wetland	Rare wetland community	High Ecological Value	-	-	-								

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

#### 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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10B		Freshwater Marshes	19.04	0.03
10C		Swamps	40.34	0.06
10D		Scrub and Shrub Wetlands	373.91	0.58
9A		Sheltered Tidal Flats	142.39	0.22

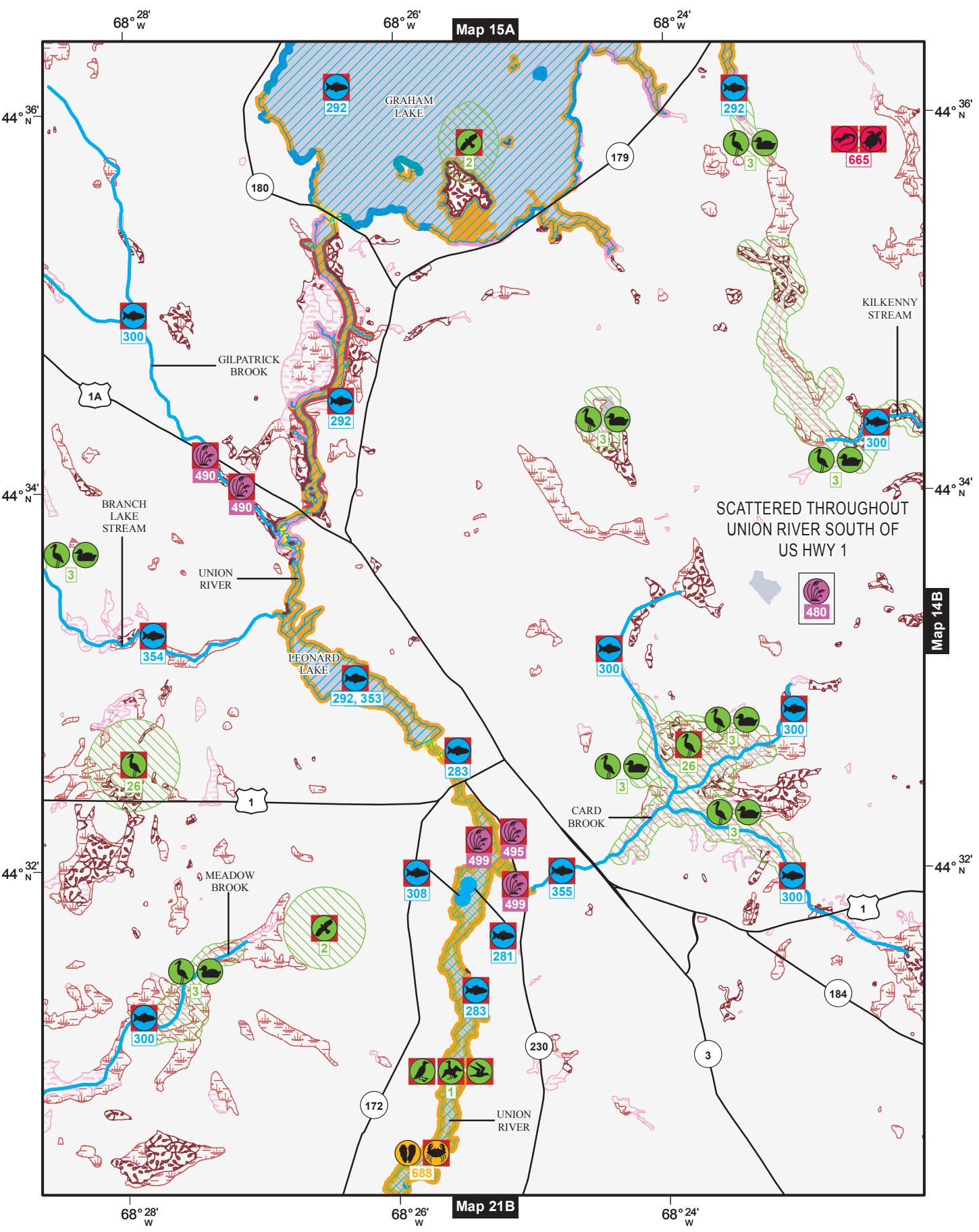
ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10B		Freshwater Marshes	2,070.27	1.29	5%
10D		Scrub and Shrub Wetlands	7,299.43	4.54	17%
9A		Sheltered Tidal Flats	13,616.81	8.46	31%
9B		Vegetated Low Banks	12,629.67	7.85	29%
8B		Sheltered, Solid Man-Made Structures	205.75	0.13	<1%
8C		Sheltered Riprap	205.75	0.13	<1%
5		Mixed Sand and Gravel Beaches	1,751.97	1.09	4%
4		Coarse Grained Sand Beaches	5,501.13	3.42	12%
3A		Fine to Medium Grained Sand Beaches	730.92	0.45	2%
		Total ESI Shoreline:	44,011.70	Total ESI Shoreline:	27.35
		Total Shoreline:	22,261.62	Total Shoreline:	13.83

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](http://response.restoration.noaa.gov)







**Map 15B**  
Downeast Maine



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



## Map 15B Downeast Maine

### 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	Monthly Presence															
				J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
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												-	-	-	-
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T												-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-												-	-	-	-
	Watertowl	Watertowl	Vulnerable Occurrence	-												-	-	-	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-												-	-	-	-

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence															
				J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
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												-	-	Jan-Dec	May-Mar
	Diadromous	Atlantic sturgeon	Migration	-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												-	-	Jan-Dec	Jan-Dec
	Diadromous	Striped bass	Migration	-												-	-	Jan-Dec	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-												-	-	Jan-Dec	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration	-												-	-	Jan-Dec	Jan-Dec
292	Diadromous	Alewife	Migration	-C												-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C												-	-	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-C												-	-	Jan-Dec	May-Mar
	Diadromous	Sea lamprey	Migration	-C												-	-	Apr-Dec	Apr-Jul
	Diadromous	Brook trout (sea run)	Migration	C/-												-	-	Jan-May	Jan-May
300	Diadromous	Alewife	Migration	-C												-	-	Apr-Dec	Apr-Jul
308	Diadromous	American eel	Migration	-C												-	-	Mar-Oct	Mar-Oct
	Diadromous	American shad	Migration	-C												-	-	May-Feb	May-Jul
	Diadromous	Atlantic salmon	Migration	-C												-	-	Jan-Dec	May-Mar
	Freshwater	Rainbow smelt	Migration	-C												-	-	Jan-Dec	Oct-Apr

### FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
353	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			
354	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul			
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct			
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May			
355	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May			
	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												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
490	Plant	Nantucket serviceberry	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
495	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
499	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Jan-Dec	Apr-Jun	Apr-Jun		
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Jan-Dec	Apr-Jun	Apr-Jun		
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	Apr-Jun	-	May-Sep	May-Sep	Mar-Jun	Mar-Jun		
	Amphibian	Spotted salamander	Concentration Area	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Apr	Apr-Jun	-	Jun-Sep	Jun-Sep	Mar-Sep	Mar-Sep		
	Amphibian	Wood Frog	Concentration Area	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	Aug-Oct	Aug-Oct		
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	Aug-Oct	Aug-Oct		
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	Aug-Oct	Aug-Oct		

### INVERTEBRATES

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

**BIRDS**

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

**INVERTEBRATES**

		Subelement	Species	Monthly Presence												Molt
				J	F	M	A	M	J	J	A	S	O	N	D	
		Crab	Atlantic rock crab	-	-	-	-	-	-	-	-	-	-	-	-	-
			Blue crab	-	-	-	-	-	-	-	-	-	-	-	-	-
		Echinoderm	Jonah crab	-	-	-	-	-	-	-	-	-	-	-	-	-
		Lobster	Green urchin	-	-	-	-	-	-	-	-	-	-	-	-	-
			American lobster	-	-	-	-	-	-	-	-	-	-	-	-	-

**MARINE MAMMALS**

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

**TERRESTRIAL MAMMALS**

		Subelement	Species	Monthly Presence												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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10B		Freshwater Marshes	660.31	1.03
10C		Swamps	1,044.92	1.63
10D		Scrub and Shrub Wetlands	566.12	0.88
9A		Sheltered Tidal Flats	82.24	0.13

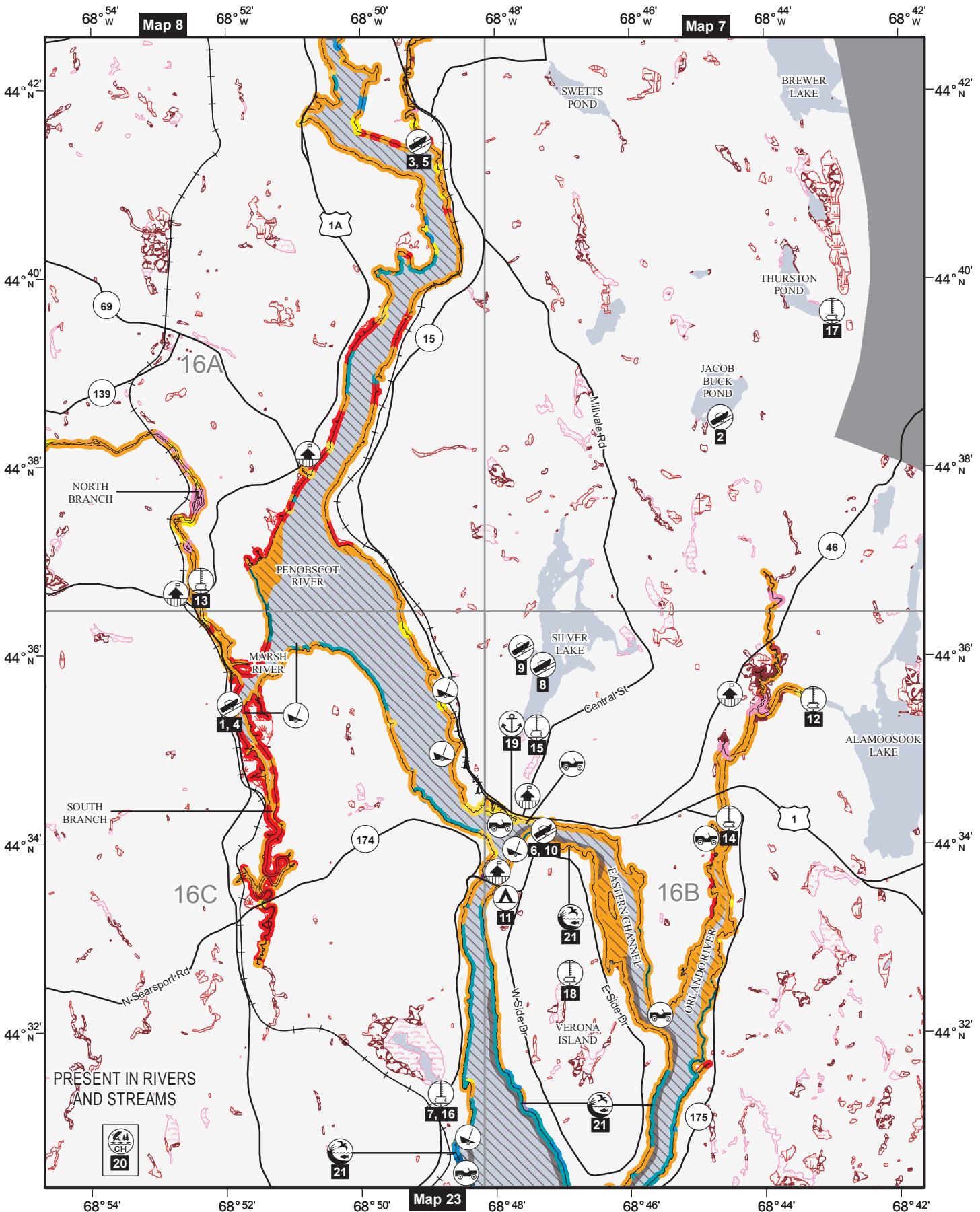
ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10B		Freshwater Marshes	6,857.08	4.26	9%
10C		Swamps	5,830.27	3.62	8%
10D		Scrub and Shrub Wetlands	5,382.21	3.34	7%
9A		Sheltered Tidal Flats	12,232.02	7.60	16%
9B		Vegetated Low Banks	38,664.53	24.03	51%
8A		Sheltered, Impermeable, Rocky Shores	445.33	0.28	1%
8B		Sheltered, Solid Man-Made Structures	752.94	0.47	1%
8C		Sheltered Riprap	163.38	0.10	<1%
5		Mixed Sand and Gravel Beaches	1,054.50	0.66	1%
4		Coarse Grained Sand Beaches	4,693.32	2.92	6%
Total ESI Shoreline:		76,075.57	Total ESI Shoreline:	47.27	
Total Shoreline:		51,789.57	Total Shoreline:	32.18	

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](http://response.restoration.noaa.gov)







**Map 16**  
Midcoast Maine



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

## Map 16 Midcoast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	BOAT RAMP	FRANKFORT TOWN LANDING
2	BOAT RAMP	JACOB BUCK POND BOAT RAMP
3	BOAT RAMP	ORRINGTON BOAT LANDING
4	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 5
5	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 7
6	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 9
7	BOAT RAMP	SANDY POINT FLOWAGE BOAT RAMP
8	BOAT RAMP	SILVER LAKE BOAT RAMP 1
9	BOAT RAMP	SILVER LAKE BOAT RAMP 2
10	BOAT RAMP	VERONA ISLAND TOWN LANDING
11	CAMPGROUND	UNKNOWN
12	LOCK AND DAM	ALAMOOSOK DAM
13	LOCK AND DAM	MARSH RIVER DAM
14	LOCK AND DAM	ORLAND VILLAGE DAM
15	LOCK AND DAM	SILVER LAKE DAM
16	LOCK AND DAM	STOWERS MEADOW DAM
17	LOCK AND DAM	THURSTON POND DAM
18	LOCK AND DAM	ULNER BROOK DAM
19	MARINA	BUCKSPORT MUNICIPAL MARINA

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
20	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT
21	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA

ALSO PRESENT IN MAPPED AREA (POLYGONS)		
Type	Name	Contact
STATE PROTECTED AREA	HOWARD MENDALL WMA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)
STATE PROTECTED AREA	SANDY POINT WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE

JURISDICTIONS		
County:	Coast Guard:	FEMA:
DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT	REGION 1
USACE:		REGION 1

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10A	Salt and Brackish Water Marshes	440.69
10B	Freshwater Marshes	1,146.19
Swamps		1,184.79
10C	Scrub and Shrub Wetlands	1,092.90
10D	Sheltered Tidal Flats	775.84
9A	Mixed Sand and Gravel Beaches	97.55
5		0.15

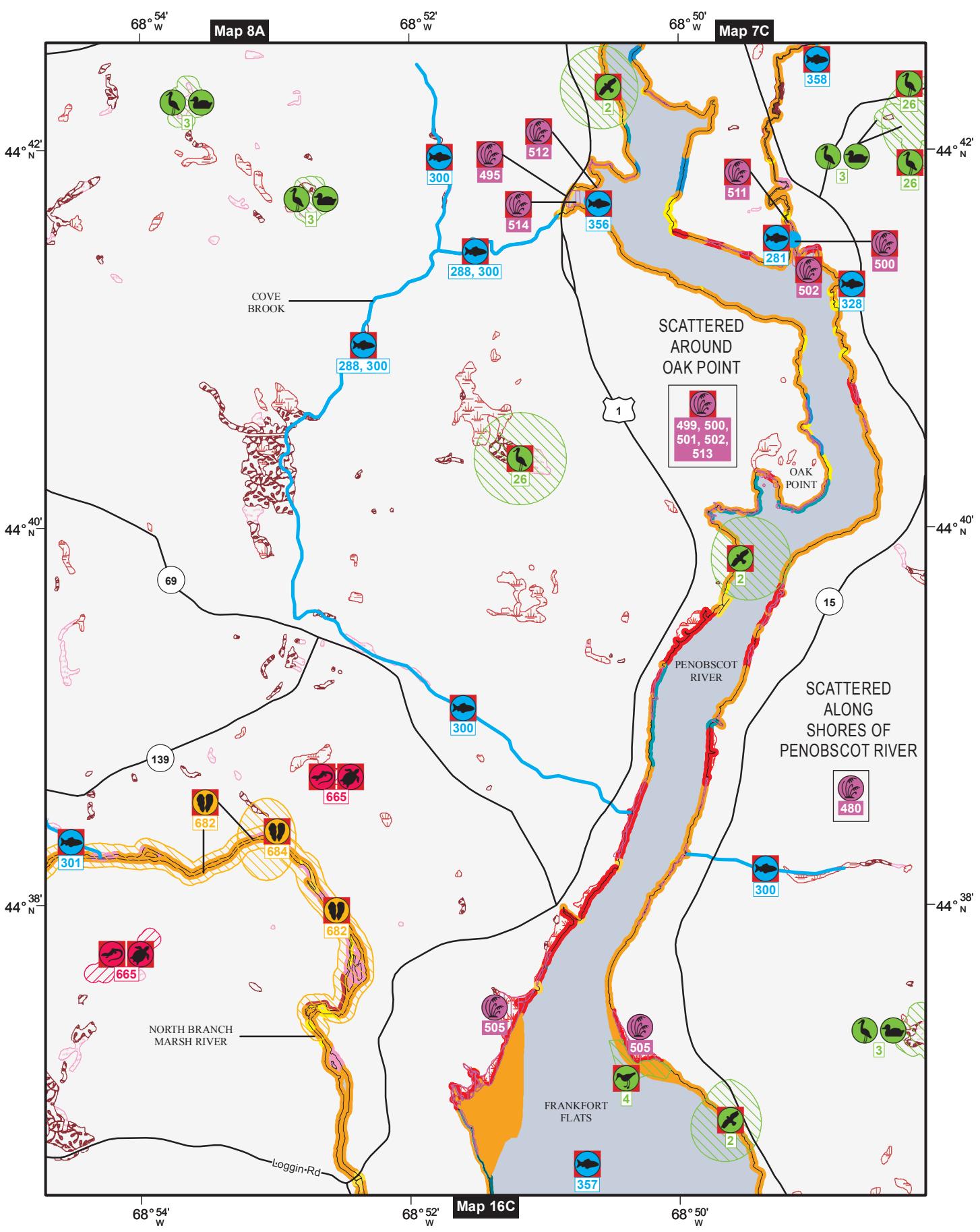
ESI SHORELINE HABITAT TYPES			
ESI Rank	Shoreline Habitat Classification	Length (Meters)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	35,023.92	13%
10B	Freshwater Marshes	8,165.74	3%
Swamps		2,291.09	1%
10C	Scrub and Shrub Wetlands	5,758.46	2%
10D	Sheltered Tidal Flats	39,262.72	15%
9A	Vegetated Low Banks	123,936.04	47%
9B	Sheltered, Impermeable, Rocky Shores	5,526.86	2%
8A	Sheltered, Solid Man-Made Structures	3,484.70	1%
8B	Sheltered, Solid Man-Made Structures	4,638.36	2%
8C	Sheltered Ripprap	1,353.16	1%
8D	Sheltered, Rocky, Rubble Shores	0.84	< 1%
6A	Gravel Beaches	635.56	11%
5	Mixed Sand and Gravel Beaches	28,258.19	1%
4	Coarse Grained Sand Beaches	2,847.77	< 1%
3A	Fine to Medium Grained Sand Beaches	949.78	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	307.64	< 1%
1B	Exposed, Solid Man-Made Structures	146.23	< 1%
Total ESI Shoreline:		262,586.24	Total ESI Shoreline: 163.16
Total Shoreline:		180,585.79	Total Shoreline: 112.21

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.noaa.gov](http://response.noaa.gov)







**Map 16A**  
Midcoast Maine



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



## Map 16A Midcoast Maine

### 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	Monthly Presence																		
				ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
2	Raptor	Bald eagle	Vulnerable Occurrence	-																Mar-May	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-																Apr-Nov	Apr-Jun	Jul-Nov
4	Shorebird	American golden-plover	Concentration Area	-																Apr-Nov	Apr-Jun	Jul-Nov
	Shorebird	American oystercatcher	Concentration Area	C/-																Aug	Oct	-
	Shorebird	Baird's sandpiper	Concentration Area	Foraging	-															May-Jun	May	Sep
	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	Foraging	-															-	May-Jun	Jul-Oct
	Shorebird	Pectoral sandpiper	Concentration Area	Foraging	-															-	May-Jun	Jul-Oct
	Shorebird	Red Knot	Concentration Area	Foraging	-															-	May-Jun	Jul-Oct
	Shorebird	Ruddy turnstone	Concentration Area	Foraging	-															-	May-Jun	Jul-Oct
	Shorebird	Sanderling	Concentration Area	Foraging	-															-	Apr-May	-
	Shorebird	Semipalmented plover	Concentration Area	Foraging	-															-	May-Jun	Jul-Oct
	Shorebird	Semipalmented sandpiper	Concentration Area	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	Foraging	-															-	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Concentration Area	Foraging	-															-	May-Jun	Jul-Oct
	Shorebird	Willet	Concentration Area	Foraging	-															-	May-Aug	Jul-Sep
26	Wading	Great blue heron	Vulnerable Occurrence	C/-	-															-	-	-
<b>FISH</b>																						
Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae
281	Diadromous	American eel	Harvest Area	-C	-													-	-	Mar-Oct	Mar-Oct	
288	Diadromous	Alewife	Migration	-C	-													-	-	Apr-Dec	Apr-Jul	
	Diadromous	Atlantic salmon	Migration	-C	E	-												-	-	Jan-Dec	May-Mar	
	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	

Midcoast Maine: Map 16A

## FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults
				J	F	M	A	M	J	J	A	S	O	N	D	
328	Freshwater	Rainbow smelt	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
356	Diadromous	Atlantic salmon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr
	Diadromous	Brown trout (sea run)	Migration	-	-	-	-	-	-	-	-	-	-	-	-	May-Mar
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Oct-Dec
357	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
	Diadromous	American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Atlantic sturgeon	Migration	-T	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
358	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr
	Diadromous	American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	May-Jul
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults
				J	F	M	A	M	J	J	A	S	O	N	D	
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-
495	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
511	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
512	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
513	Plant	Horned pondweed	Vulnerable Occurrence	C/E	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
514	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Seaside brookweed	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Plant	Welsh mudwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults	
				J	F	M	A	M	J	J	A	S	O	N	D	Hatch	
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C												May-Jun	Jan-Dec
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C												May-Jun	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C												May-Jul	Jan-Dec
	Amphibian	Spotted salamander	Concentration Area	Common												May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area	Common												Jun-Sep	Mar-Sep
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T												Aug-Oct	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C												Aug-Oct	Jan-Dec
																May-Jul	Jan-Nov

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults			
				J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
682	Bivalve	Brook floater	Vulnerable Occurrence	T/E												Jun-Aug	-	Jan-Dec	Jan-Dec
684	Bivalve	Squawfoot	Vulnerable Occurrence	C/C												Jun-Aug	-	Jan-Dec	Jan-Dec

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )

## BIRDS

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

## INVERTEBRATES

Subelement	Species	Mapping Qualifier	MENH												Monthly Presence												
			General Distribution	-C	Low										May-Jul	May-Jul									Jan-Dec	Jan-Dec	
Crab	Horseshoe crab																										

**ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)**

## BIRDS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot	■	■	■	■	■	■	■	■	■	■	■	■
	Dovekie												
	Thick-billed murre												
	D. crested cormorant												
	Horned grebe												
	Red-necked grebe												
	Red-throated loon												
	G. black-backed gull												
	Herring gull												
	Ring-billed gull												
	Pelagic												
	Northern gannet												

## INVERTEBRATES

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Bivalve	Northern quahog	■											
Crab	Atlantic rock crab												
	Blue crab												
	Jonah crab												
	Echinoderm												
	Green urchin												
	American lobster												

## MARINE MAMMALS

Subelement	Species	Monthly Presence											
		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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		Area (Acres)		Area (Sq. Miles)	
ESI Rank	Habitat Classification				
10A	Salt and Brackish Water Marshes	105.32	0.16		
10B	Freshwater Marshes	133.91	0.21		
10C	Swamps	204.59	0.32		
10D	Scrub and Shrub Wetlands	249.50	0.39		
9A	Sheltered Tidal Flats	151.88	0.24		
5	Mixed Sand and Gravel Beaches	4.81	0.01		

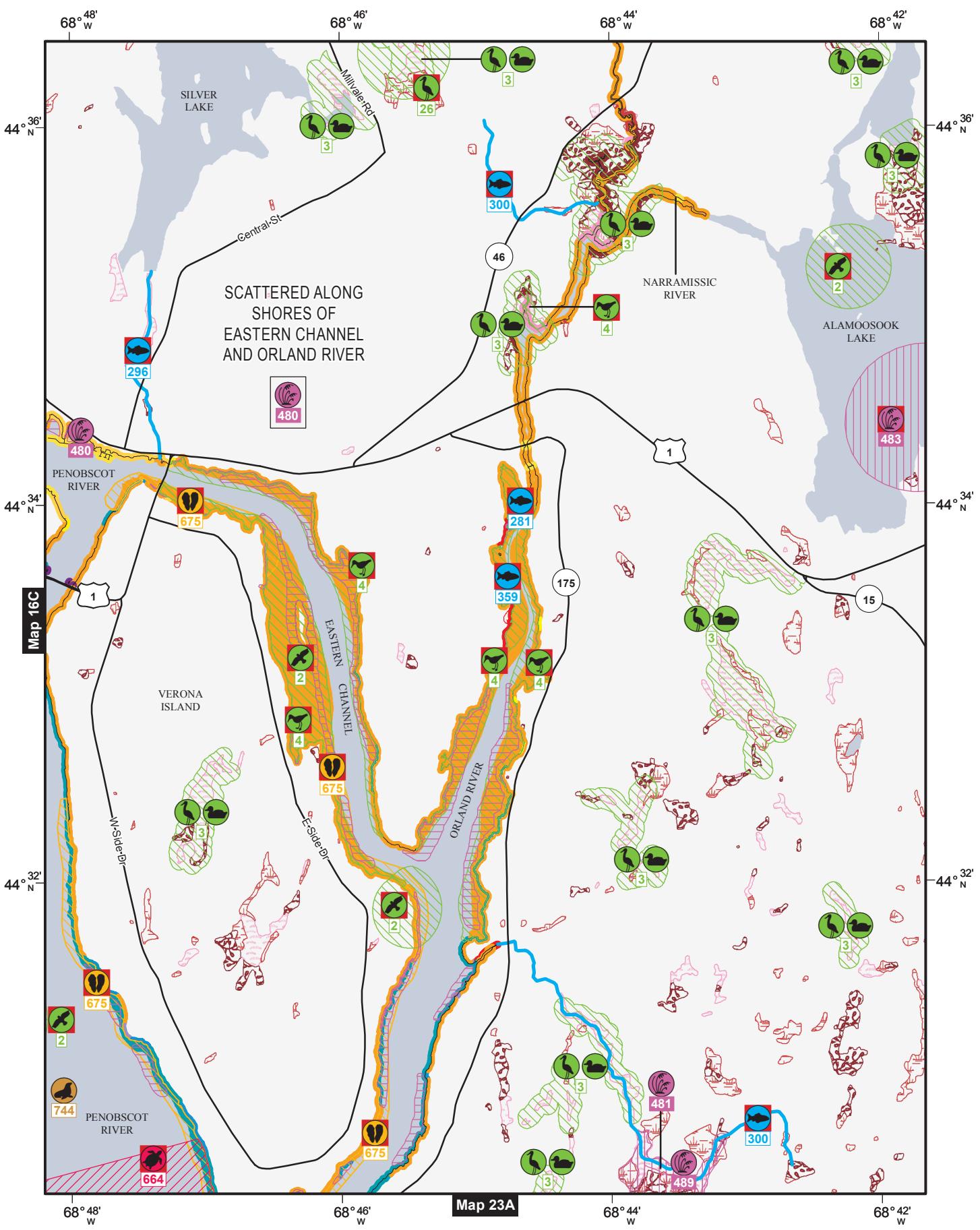
  

ESI SHORELINE HABITAT TYPES		Length (Meters)		% of ESI Shoreline	
ESI Rank	Shoreline Habitat Classification				
10A	Salt and Brackish Water Marshes	10,178.07	6.32	13%	
10B	Freshwater Marshes	4,781.27	2.97	6%	
10C	Swamps	1,201.16	0.75	2%	
10D	Scrub and Shrub Wetlands	795.22	0.49	1%	
9A	Sheltered Tidal Flats	4,884.78	3.04	6%	
9B	Vegetated Low Banks	43,582.65	27.08	56%	
8A	Sheltered, Impermeable, Rocky Shores	4,523.29	2.81	6%	
8B	Sheltered, Solid Man-Made Structures	677.09	0.42	1%	
8C	Sheltered Riprap	929.39	0.58	1%	
8D	Sheltered, Rocky, Rubble Shores	1,018.50	0.63	1%	
6A	Gravel Beaches	180.47	0.11	<1%	
5	Mixed Sand and Gravel Beaches	3,876.85	2.41	5%	
4	Coarse Grained Sand Beaches	1,210.99	0.75	2%	
		Total ESI Shoreline:	77,839.72	Total ESI Shoreline:	48.37
		Total Shoreline:	61,590.66	Total Shoreline:	38.27

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.noaa.gov](http://response.noaa.gov)





## Map 16B Midcoast Maine

### 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	S	F	Concentration	Monthly Presence								
						J	F	M	A	M	J	J	A	
<b>BIRDS</b>														
Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A
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	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	T	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	C/-	Foraging	Foraging	-	-	-	-	-	-	-	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
281	Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
296	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
300	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
359	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
		Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
		American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
		American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul
		Brown trout (sea run)	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	Oct-Dec
		Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
		Freshwater		-	-	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-	-	-	-	-	-	-	-	-	-	-	-	-
489	Wetland	Rare wetland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				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
	Turtle	K. ridley sea turtle	General Distribution	E/-	E	Rare	-	-	-	-	-	-	-	-	-	-	Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T	Low	-	-	-	-	-	-	-	-	-	-	Jun-Nov

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
				-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

## MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				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**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>												<b>Monthly Presence</b>											
		S	F	Concentration	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**

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

**INVERTEBRATES**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>												<b>Monthly Presence</b>											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Low	May-Jul	May-Aug	Jun-Sep	Adults				
Crab	Horseshoe crab	General Distribution	-C	-													-	-	-	-	Jan-Dec	Jan-Dec			

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

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

### BIRDS (continued)

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Pelagic	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-
	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

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

### MARINE MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Dolphin	Harbor porpoise	-	-	-	-	-	-	-	-	-	-	-	-
Pinniped	Gray seal	-	-	-	-	-	-	-	-	-	-	-	-

### TERRESTRIAL MAMMALS

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

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

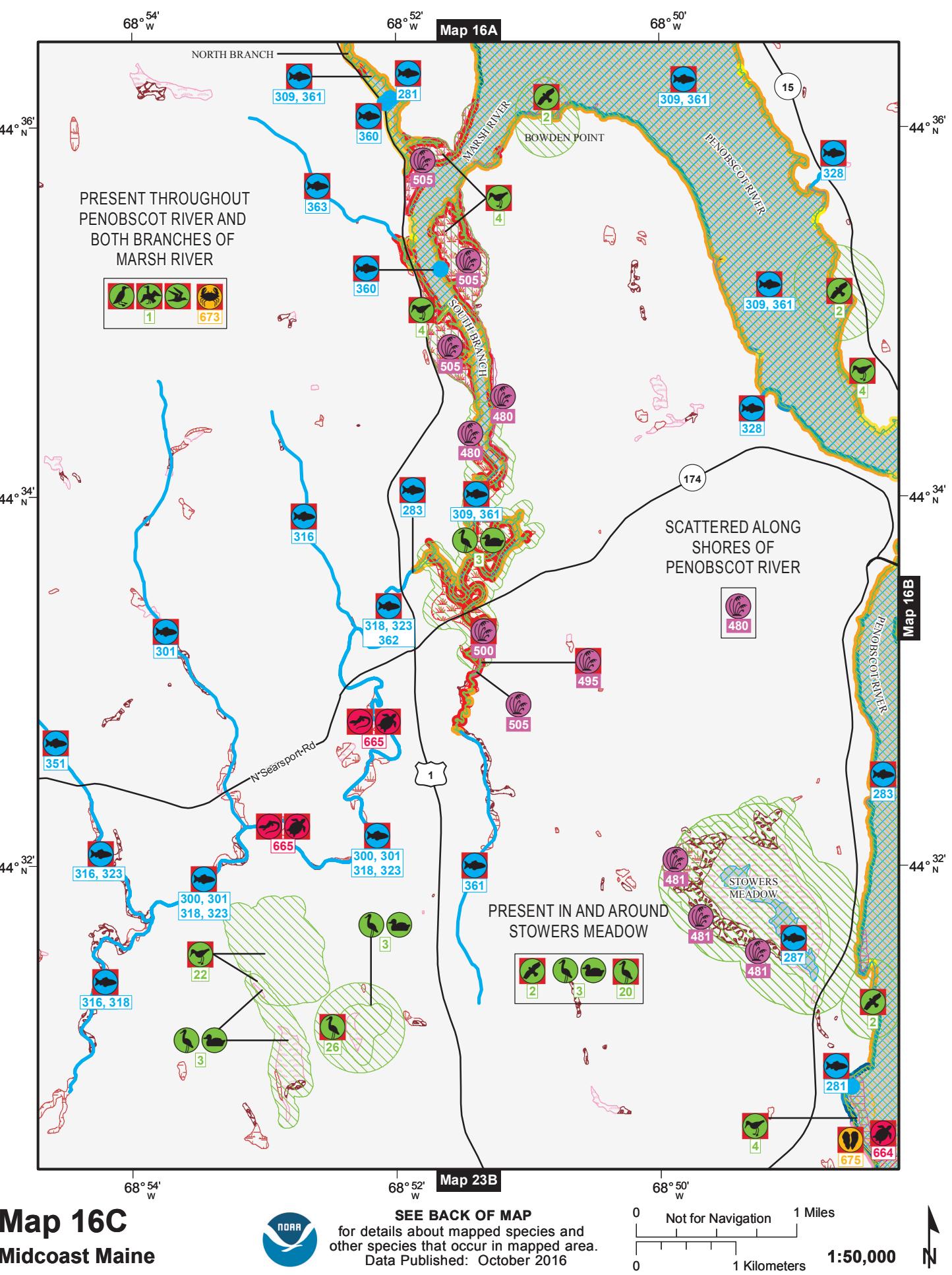
ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10A	Salt and Brackish Water Marshes	8.90
10B	Freshwater Marshes	417.26
10C	Swamps	392.57
10D	Scrub and Shrub Wetlands	350.56
9A	Sheltered Tidal Flats	604.47
5	Mixed Sand and Gravel Beaches	78.72

ESI SHORELINE HABITAT TYPES		
ESI Rank	Shoreline Habitat Classification	Length (Meters)
10A	Salt and Brackish Water Marshes	2,022.69
10B	Freshwater Marshes	2,018.72
10C	Swamps	1,089.94
10D	Scrub and Shrub Wetlands	4,342.56
9A	Sheltered Tidal Flats	28,102.71
9B	Vegetated Low Banks	51,802.71
8A	Sheltered, Impermeable, Rocky Shores	479.60
8B	Sheltered, Solid Man-Made Structures	1,642.60
8C	Sheltered Riprap	2,120.88
5	Mixed Sand and Gravel Beaches	14,888.75
4	Coarse Grained Sand Beaches	1,223.91
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	307.64
1B	Exposed, Solid Man-Made Structures	146.23
Total ESI Shoreline:		110,188.94
Total Shoreline:		62,737.38
Total ESI Shoreline:		68.47
Total Shoreline:		38.98

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](http://response.restoration.noaa.gov)





## Map 16C Midcoast Maine

### 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	S	F	Concentration	High	Monthly Presence								
							J	F	M	A	M	J	J	A	
<b>BIRDS</b>															
Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S
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	-	-	-	-	-	-	-	-	-	-
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	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-

### BIRDSS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
20	Wading	Least bittern	Vulnerable Occurrence	E/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct	-
22	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct	-

### FISH

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

## FISH (continued)

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

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence												
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults	Jun-Nov	Jun-Nov	Jun-Nov	Jun-Nov	Jun-Nov
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
495	Plant	Estuary beggarticks	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
500	Plant	Hooded arrowhead	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
505	Wetland	Brackish marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

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

**ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)**

## BIRDS

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

## INVERTEBRATES

<b>Subelement</b>	<b>Species</b>	<b>Monthly Presence</b>															
		J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
Bivalve	Northern quahog													Jun-Aug	-	-	-
	Atlantic rock crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Blue crab													Jun-Aug	Jun-Aug	Jan-Aug	Jan-Dec
Echinoderm	Jonah crab													May-Oct	May-Oct	Jan-Dec	Jan-Dec
	Green urchin													Mar-Jun	Mar-Jun	Apr-Jul	Jan-Dec
Lobster	American lobster													Jun-Oct	-	Jan-Dec	Jan-Dec

## MARINE MAMMALS

<b>Subelement</b>	<b>Species</b>	<b>Monthly Presence</b>															
		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

<b>Subelement</b>	<b>Species</b>	<b>Monthly Presence</b>															
		J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molt
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](http://response.restoration.noaa.gov)

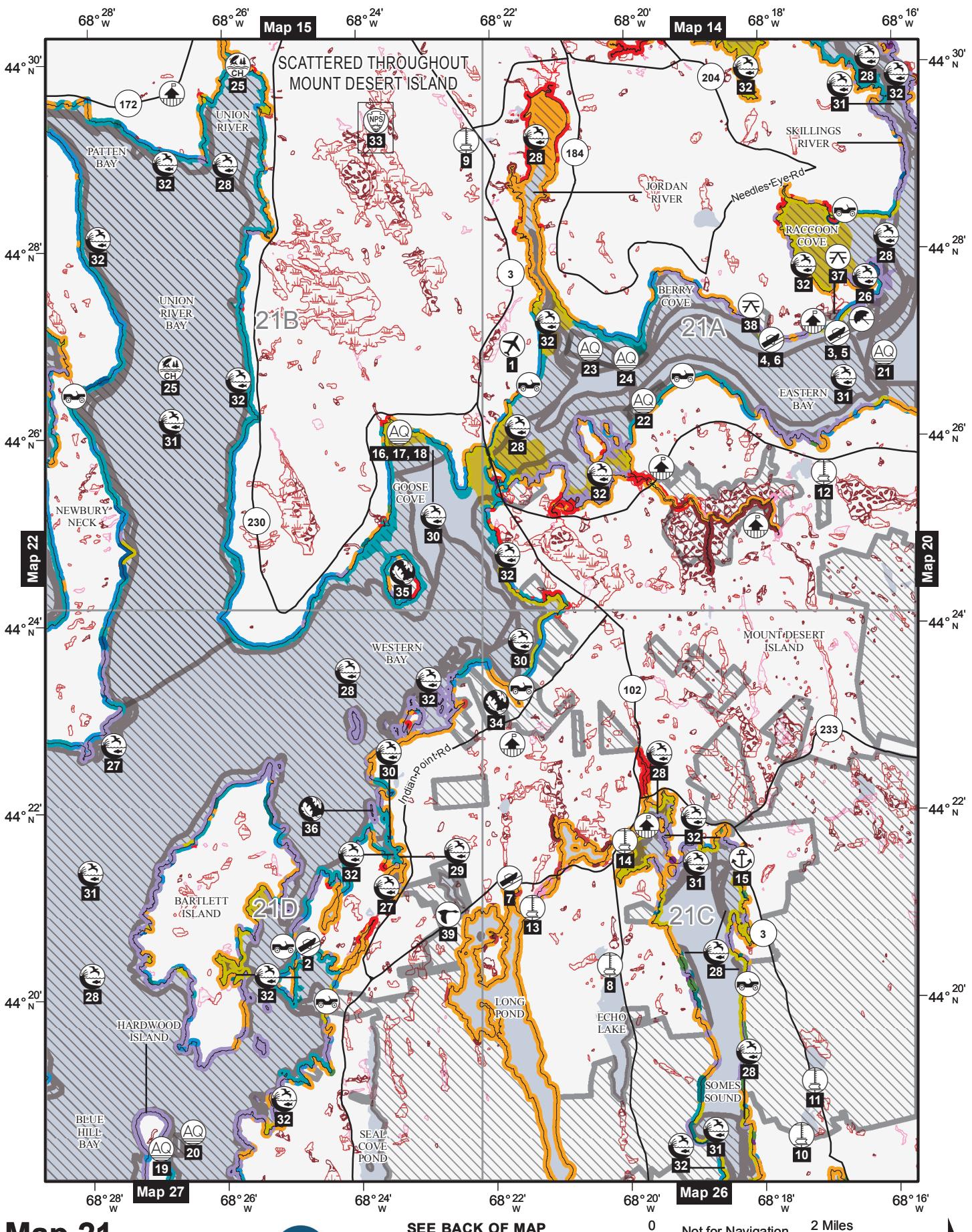
ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	326.47	0.51
10B		Freshwater Marshes	293.86	0.46
10C		Swamps	164.73	0.26
10D		Scrub and Shrub Wetlands	224.44	0.35
9A		Sheltered Tidal Flats	19.49	0.03
5		Mixed Sand and Gravel Beaches	13.83	0.02

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10A		Salt and Brackish Water Marshes	22,823.16	14.18	32%
10B		Freshwater Marshes	525.77	0.33	1%
10D		Scrub and Shrub Wetlands	12.28	0.01	< 1%
9A		Sheltered Tidal Flats	6,275.23	3.90	9%
9B		Vegetated Low Banks	26,817.43	16.66	38%
8A		Sheltered, Impermeable, Rocky Shores	523.98	0.33	1%
8B		Sheltered, Solid Man-Made Structures	1,165.01	0.72	2%
8C		Sheltered Riprap	1,588.09	0.99	2%
8D		Sheltered, Rocky, Rubble Shores	334.66	0.21	< 1%
6A		Gravel Beaches	455.09	0.28	1%
5		Mixed Sand and Gravel Beaches	9,468.02	5.88	13%
4		Coarse Grained Sand Beaches	407.28	0.25	1%
3A		Fine to Medium Grained Sand Beaches	949.78	0.59	1%
		Total ESI Shoreline:	71,345.78	Total ESI Shoreline:	44.33
		Total Shoreline:	53,669.99	Total Shoreline:	33.35

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](http://response.restoration.noaa.gov)





**Map 21**  
**Downeast Maine**



## Map 21 Downeast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	AIRPORT	HANCOCK COUNTY - BAR HARBOR AIRPORT
2	BOAT RAMP	BARTLETT NARROWS BOAT RAMP
3	BOAT RAMP	FRENCHMAN BAY BOAT RAMP 2
4	BOAT RAMP	FRENCHMAN BAY BOAT RAMP 3
5	BOAT RAMP	LAMOINE BEACH
6	BOAT RAMP	LAMOINE STATE PARK
7	BOAT RAMP	LONG POND BOAT RAMP
8	LOCK AND DAM	ECHO LAKE DAM
9	LOCK AND DAM	FOSTERS POND DAM
10	LOCK AND DAM	HADLOCK LOWER DAM
11	LOCK AND DAM	HADLOCK UPPER DAM
12	LOCK AND DAM	HAMILTON POND DAM
13	LOCK AND DAM	LONG POND DAM 1
14	LOCK AND DAM	SOMES POND OUTLET DAM
15	MARINA	HENRY R. ABEL YACHT YARD

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
16	AQUACULTURE	BHB GC1 - GOOSE COVE, BLUE HILL BAY
17	AQUACULTURE	BHB GC2 - GOOSE COVE, BLUE HILL BAY
18	AQUACULTURE	BHB GC3 - GOOSE COVE, BLUE HILL BAY
19	AQUACULTURE	BHB HI - EAST OF HARDWOOD ISLAND, BLUE HILL BAY
20	AQUACULTURE	BHB HI2 - EAST OF HARDWOOD ISLAND, BLUE HILL BAY
21	AQUACULTURE	EAST GL - EAST OF GOOGINS LEDGE, EASTERN BAY
22	AQUACULTURE	EAST HP - HADLEY POINT, MOUNT DESERT NARROWS
23	AQUACULTURE	EAST OP - OLD POINT, JORDAN RIVER
24	AQUACULTURE	EAST OP2 - MOUNT DESERT NARROWS, EASTERN BAY
25	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT

**DISPLAYED ON MAP (POLYGONS) (continued)**

<b>Map ID</b>	<b>Type</b>	<b>Name</b>	<b>Contact</b>	<b>Phone</b>
26	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
27	MANAGEMENT AREA	ATLANTIC SURFCLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
28	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
29	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
30	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
31	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
32	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
33	NATIONAL PARK	ACADIA NATIONAL PARK		
34	NATURE CONSERVANCY	INDIAN POINT-BLAGDEN PRESERVE	THE NATURE CONSERVANCY	207-729-5181
35	NATURE CONSERVANCY	IPB - ALLEY ISLAND PRESERVE	THE NATURE CONSERVANCY	207-729-5181
36	NATURE CONSERVANCY	NEWBOLD PRESERVE (AKA SQUID ISLAND)	THE NATURE CONSERVANCY	207-729-5181
37	PARK	LAMOINE BEACH STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-667-4778
38	PARK	LAMOINE STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-667-4778
39	WILDLIFE REFUGE	FRED MORSE WILDLIFE MANAGEMENT AREA	NATIONAL PARK SERVICE	

**JURISDICTIONS**

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

FEMA: REGION 1  
EPA: REGION 1

ESI POLYGON HABITAT TYPES			
ESI Rank	Habitat Classification		
10A	Salt and Brackish Water Marshes		
10B	Freshwater Marshes		
10C	Swamps		
10D	Scrub and Shrub Wetlands		
9A	Sheltered Tidal Flats		
7	Exposed Tidal Flats		
5	Mixed Sand and Gravel Beaches		
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		

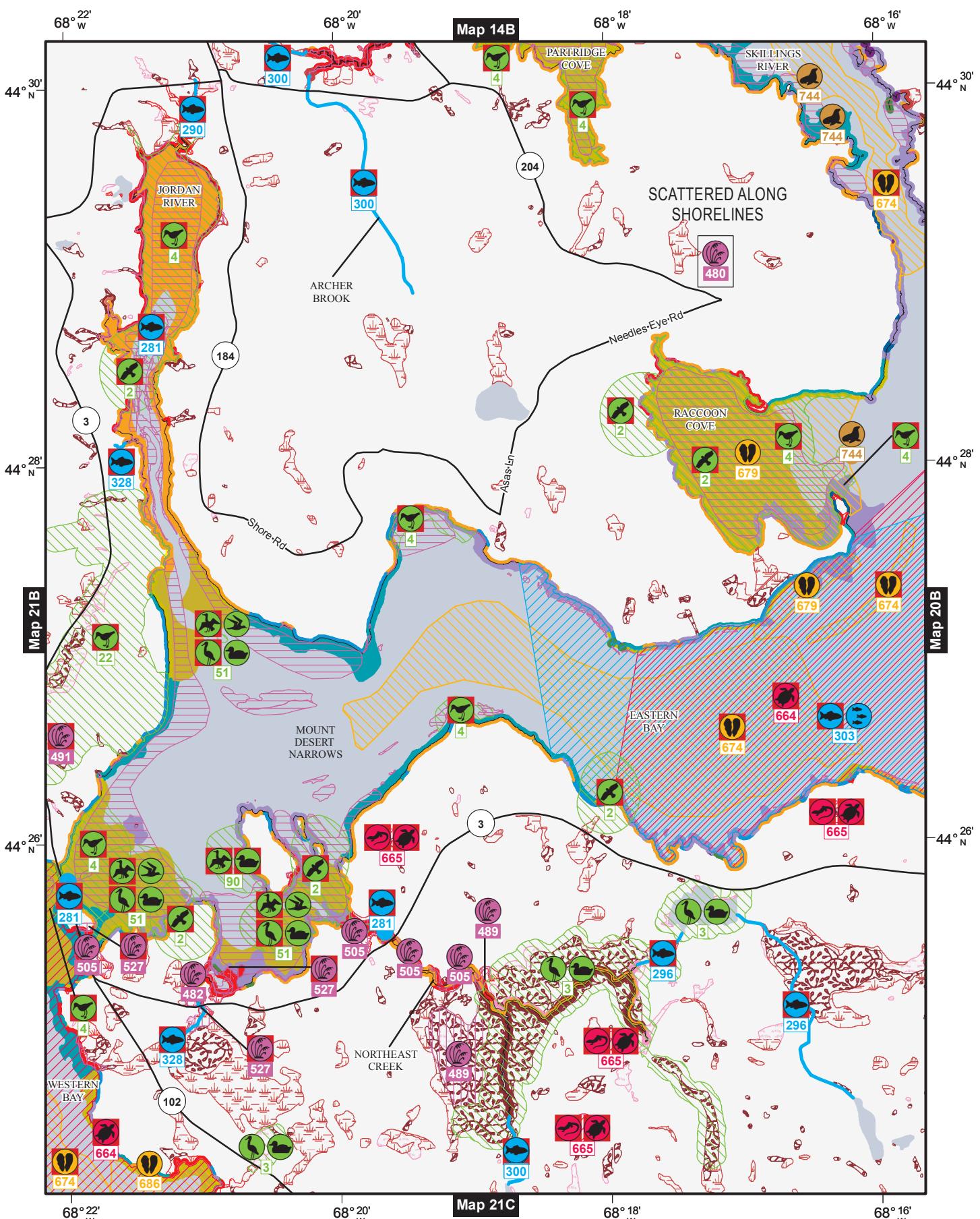


ESI SHORELINE HABITAT TYPES			
ESI Rank	Shoreline Habitat Classification		
10A	Salt and Brackish Water Marshes		
10B	Freshwater Marshes		
10C	Swamps		
10D	Scrub and Shrub Wetlands		
9A	Sheltered Tidal Flats		
9B	Vegetated Low Banks		
8A	Sheltered, Impermeable, Rocky Shores		
8B	Sheltered, Solid Man-Made Structures		
7	Exposed Tidal Flats		
6A	Gravel Beaches		
6B	Riprap		
5	Mixed Sand and Gravel Beaches		
4	Coarse Grained Sand Beaches		
3A	Fine to Medium Grained Sand Beaches		
3B	Scarps and Steep Slopes (Sand)		
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		
1B	Exposed, Solid Man-Made Structures		
		Total ESI Shoreline:	490,584.14
		Total Shoreline:	307,146.77
		Total ESI Shoreline:	304.83
		Total Shoreline:	190.85

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](http://response.restoration.noaa.gov)





## Map 21A Downeast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

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

#### BIRDS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>	J	F	M	A	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt	
			Vulnerable Occurrence	C/T	-	-	Mar-May	Apr-May	Apr-Jun	Apr-May	Apr-May	Apr-May	-										
2	Raptor	Bald eagle	Vulnerable Occurrence																				
3	Wading	Wading birds	Vulnerable Occurrence																				
	Waterfowl	Waterfowl	Vulnerable Occurrence																				
4	Shorebird	American golden-plover	Concentration Area	C/-																			
	Shorebird	American oystercatcher	Concentration Area	C/-																			
	Shorebird	Baird's sandpiper	Concentration Area	C/-																			
	Shorebird	BB sandpiper	Concentration Area	C/-																			
	Shorebird	Black-bellied plover	Concentration Area	C/-																			
	Shorebird	Dunlin	Concentration Area	C/-																			
	Shorebird	Greater yellowlegs	Concentration Area	C/-																			
	Shorebird	Hudsonian godwit	Concentration Area	C/-																			
	Shorebird	Least sandpiper	Concentration Area	C/-																			
	Shorebird	Lesser yellowlegs	Concentration Area	C/-																			
	Shorebird	Pectoral sandpiper	Concentration Area	C/-																			
	Shorebird	Red Knot	Concentration Area	C/-	T																		
	Shorebird	Ruddy turnstone	Concentration Area	C/-																			
	Shorebird	Sanderling	Concentration Area	C/-																			
	Shorebird	Semipalmated plover	Concentration Area	C/-																			
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-																			
	Shorebird	Short-billed dowitcher	Concentration Area	C/-																			
	Shorebird	Solitary sandpiper	Concentration Area	C/-																			
	Shorebird	Stilt sandpiper	Concentration Area	C/-																			
	Shorebird	Western sandpiper	Concentration Area	C/-																			
	Shorebird	Whimbrel	Concentration Area	C/-																			
	Shorebird	White-rumped sandpiper	Concentration Area	C/-																			
	Shorebird	Willet	Concentration Area	C/-																			
22	Shorebird	Upland sandpiper	Vulnerable Occurrence	T/E																			
51	Diving	Common Loon	Rafting																				

### BIRDSS (continued)

Map ID	Subelement	Species	ME/NH												Monthly Presence												
			Mapping Qualifier			S	F	Concentration			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt	
	Diving	D. crested cormorant	Rafting			-																					
	Gull/Tern	G. black-backed gull	Rafting			-																					
	Gull/Tern	Herring gull	Rafting			-																					
	Wading	Great blue heron	Vulnerable Occurrence	C/-		-																					
	Watertowl	Goldeneye	Rafting			-																					
	Watertowl	Green-winged teal	Rafting			-																					
	Watertowl	Scaup	Vulnerable Occurrence	-																							
	Watertowl	Scoters	Rafting			-																					
90	Diving	Common Loon	Rafting			-T																					
	Watertowl	Brant	Rafting			-T																					
	Watertowl	Goldeneye	Rafting			-																					
	Watertowl	Green-winged teal	Rafting			-																					
	Watertowl	Harlequin duck	Vulnerable Occurrence	T/-		-																					
	Watertowl	Scoters	Rafting			-																					

### FISH

Map ID	Subelement	Species	ME/NH												Monthly Presence												
			Mapping Qualifier			S	F	Concentration			J	F	M	A	M	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles	Adults	
281	Diadromous	American eel	Harvest Area	-C		-																					
290	Diadromous	Atlantic sturgeon	Migration	-T	T	-																					
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-																					
	Diadromous	Striped bass	Migration	-																							
	Freshwater	Rainbow smelt	Migration	-C		-																					
	Marine Benthic	Atlantic tomcod	Migration	-																							
296	Diadromous	Alewife	Migration	-C		-																					
	Diadromous	American eel	Migration	-C		-																					
300	Diadromous	Brook trout (sea run)	Migration	C/-		-																					
303	Diadromous	Atlantic sturgeon	General Distribution	-T	T	Rare																					
	Diadromous	Shortnose sturgeon	Concentration Area	E/E	E	Rare																					
	Diadromous	Striped bass	Concentration Area	-		High																					
	Estuarine Nursery	Black Seabass	Concentration Area	-		Low																					
320	Marine Benthic	Atlantic tomcod	Migration	-																							
328	Freshwater	Rainbow smelt	Migration	-C		-																					

### HABITATS & RARE PLANTS

Map ID	Subelement	Species	ME/NH												Monthly Presence												
			Mapping Qualifier			S	F	Concentration			J	F	M	A	M	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles	Adults	
480	Wetland	Tidal Marsh	High Ecological Value	-		-																					
482	Wetland	SM cordgrass/wiregrass	High Ecological Value	-		-																					
489	Wetland	Rare wetland community	Vulnerable Occurrence	-		-																					
491	Plant	Threatened plant	High Ecological Value	T/T	-	-																					
505	Wetland	Brackish marsh	Vulnerable Occurrence	T/-	-	-																					
527	Plant	Pursh seepweed	Vulnerable Occurrence	-		-																					

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults
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
665	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		Common													Mar-May	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area	Common		Common													Mar-Apr	Apr-Jun	-	Jun-Sep	Mar-Sep
	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	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
674	Bivalve	Sea scallop	Harvest Area	-C		-												Jul-Oct	-	-	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

## MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				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			-												-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

## BIRDS

Subelement	Species	Mapping Qualifier	Monthly Presence																		
			S	F	Concentration	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		-												-	-	-	-	-
Gull/Tern	Great cormorant	General Distribution	T/C		-												May-Oct	May-Aug	-	-	-
	Arctic tern	General Distribution	C/T		-												-	-	-	-	-
	Common tern	General Distribution	E/E		-												-	-	-	-	-
	Roseate tern	General Distribution	Rafting		-												Apr-Aug	-	-	-	-
Waterfowl	American black duck	General Distribution	Rafting		-												-	-	-	-	-
	Black Scoter	General Distribution	Rafting		-												-	-	-	-	-
	Bufflehead	General Distribution	Rafting		-												-	-	-	-	-
	Common eider	General Distribution	Rafting		-												-	-	-	-	-
	Common goldeneye	General Distribution	Rafting		-												-	-	-	-	-
	Common merganser	General Distribution	Rafting		-												-	-	-	-	-
	Harlequin duck	General Distribution	Rafting		-												-	-	-	-	-
	Long-tailed duck	General Distribution	Rafting		-												-	-	-	-	-
	Mallard	General Distribution	Rafting		-												Apr-Aug	-	-	-	-

### BIRDS (continued)

Map ID	Subelement	Species	MENH			Monthly Presence															
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
		Red-breasted merganser	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Ruddy duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Scaup	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Surf scooter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		White-winged scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### FISH

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

### INVERTEBRATES

Subelement	Species	MENH			Monthly Presence																
		Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
Bivalve	Blue mussel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Crab	Horseshoe crab	General Distribution	-C	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

### BIRDS

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

## FISH

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

## INVERTEBRATES

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

## MARINE MAMMALS

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

## TERRESTRIAL MAMMALS

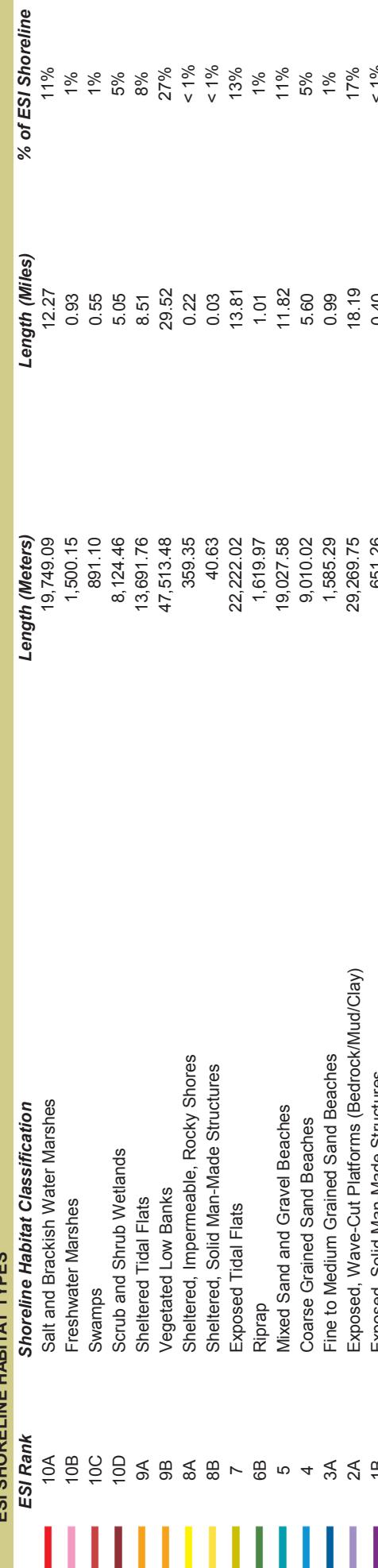
Subelement	Species	Monthly Presence						
		J	F	M	A	M	J	J A S O N D
Small Mammal	Beaver	-	-	-	-	-	-	-
	Muskrat	-	-	-	-	-	-	-
	Northern river otter	-	-	-	-	-	-	-

## SHORELINE RESOURCES

### ESI POLYGON HABITAT TYPES



### ESI SHORELINE HABITAT TYPES



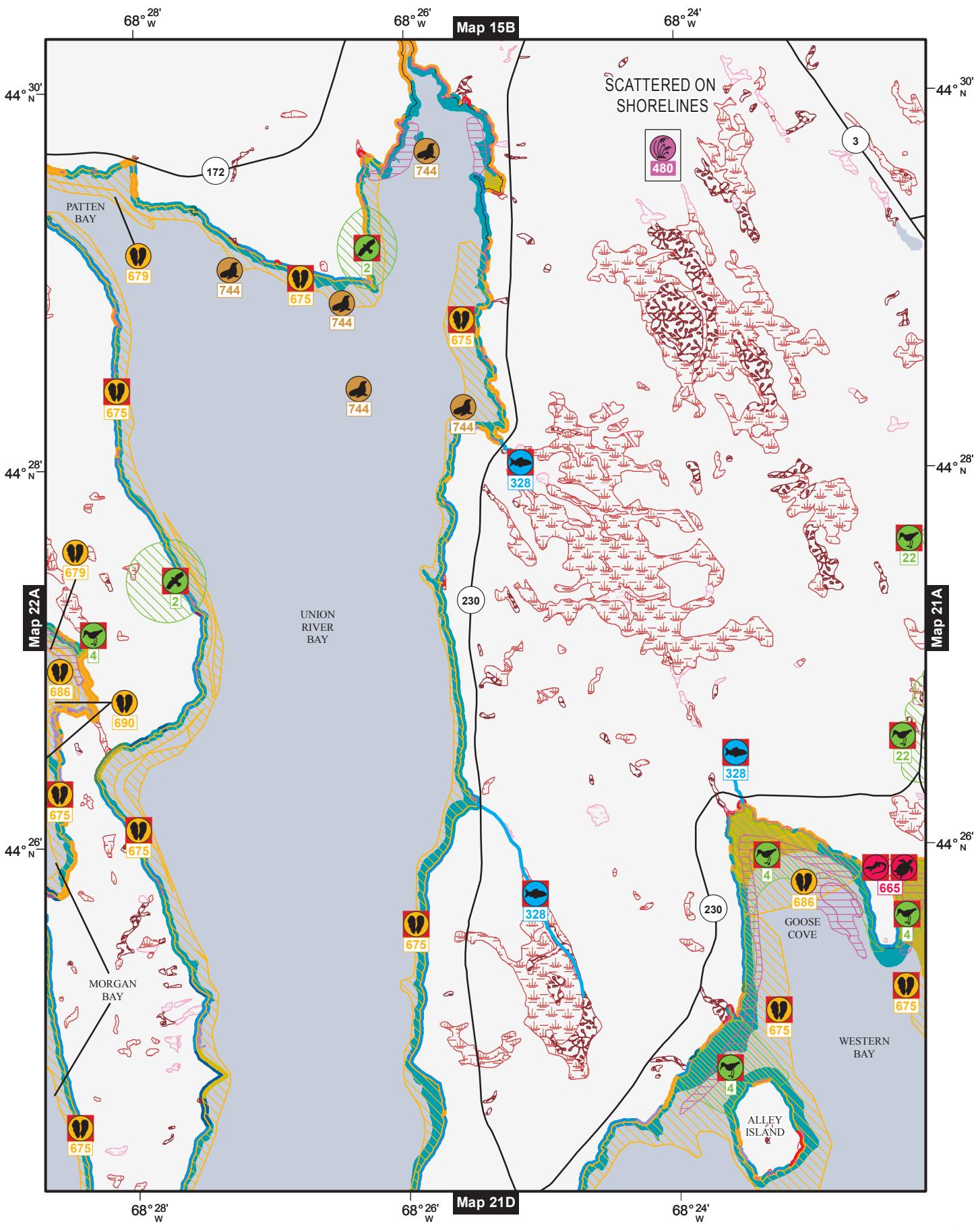
For additional information about species locations and extent, reference the underlying GIS data available from response.restoration.noaa.gov



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





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 21B Downeast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

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

## FISH

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	Monthly Presence																			
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults	
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr

## HABITATS & RARE PLANTS

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

## REPTILES & AMPHIBIANS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	Monthly Presence																			
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D						
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Amphibian	Spotted salamander	Vulnerable Occurrence	T/T	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Amphibian	Wood Frog	Vulnerable Occurrence	C/C	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Turtle	Spotted turtle	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Turtle	Wood turtle	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## INVERTEBRATES

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	Monthly Presence																			
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D						
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
679	Bivalve	Atl. jackknife clam	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
686	Bivalve	Northern quahog	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
690	Bivalve	Atlantic surfclam	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## MARINE MAMMALS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	Monthly Presence																			
				S	F	Concentration	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

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

## REPTILES & AMPHIBIANS

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

## INVERTEBRATES

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	Adults
	Sea scallop	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Crab	Horseshoe crab	General Distribution	-C	Low	-	-	-	-	-	-	-	-	Jan-Dec

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	Adults
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
Diving	Thick-billed murres	-	-	-	-	-	-	-	-	-	-	-	-	May-Feb
	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-	May-Mar
	Red-necked grebe	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Gull/Tern	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence											
		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											
		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](http://response.restoration.noaa.gov)

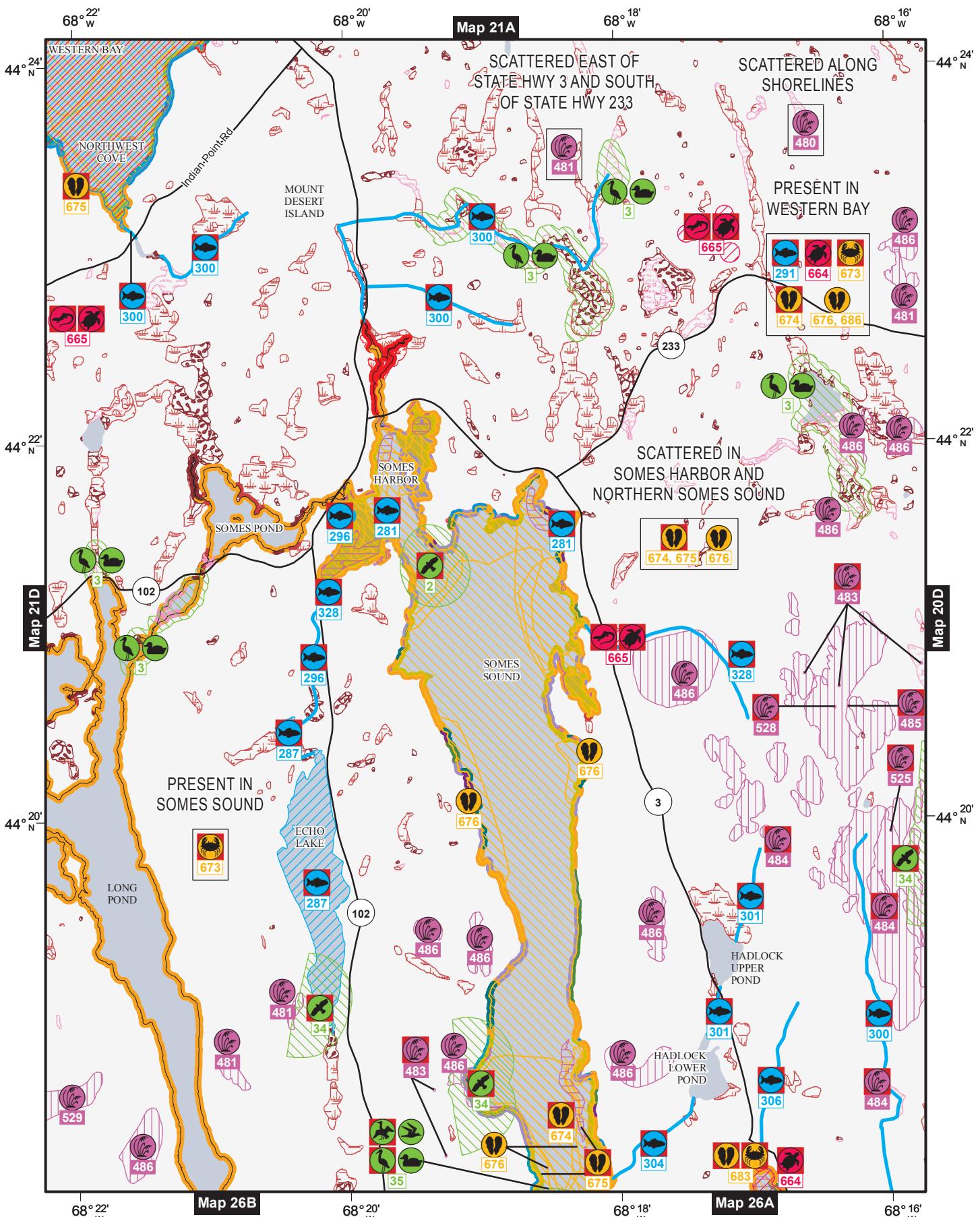
ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	7	Exposed Tidal Flats
	5	Mixed Sand and Gravel Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9B	Vegetated Low Banks
	7	Exposed Tidal Flats
	6A	Gravel Beaches
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	3A	Fine to Medium Grained Sand Beaches
	3B	Scarp and Steep Slopes (Sand)
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1B	Exposed, Solid Man-Made Structures
		Total ESI Shoreline:
		93,858.34
		Total Shoreline:
		54,146.99
		Total ESI Shoreline:
		58.32
		Total Shoreline:
		33.65

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.noaa.gov](http://response.noaa.gov)





## Map 21C Downeast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-
34	Raptor	Peregrine falcon	Vulnerable Occurrence	E/T	-	-	-	-	-	-	-	-	-	-	-	-	-
35	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
281	Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
287	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
291	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
		American shad	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-

## FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
	Diadromous	Atlantic salmon	Migration	-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Blueback herring	Migration	-C	E	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
296	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
300	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
301	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
304	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
306	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-
480	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-
481	Plant	Rare plant	Vulnerable Occurrence	C/C	-	-	-	-	-	-	-	-	-	-	-
483	Plant	Endangered plant	Vulnerable Occurrence	E/E	-	-	-	-	-	-	-	-	-	-	-
484	Plant	Northern blueberry	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-
485	Plant	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Appalachian stitchwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-
525	Plant	Appalachian stitchwort	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-
528	Plant	Rare plant	Vulnerable Occurrence	C/C	-	-	-	-	-	-	-	-	-	-	-
529	Upland	SP-hard. mes flatwood	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
	Turtle	Green sea turtle	General Distribution	-/-	T	Rare	-	-	-	-	-	-	-	-	-
664	Turtle	K. ridley sea turtle	General Distribution	E/-	E	Rare	-	-	-	-	-	-	-	-	-
	Turtle	Leatherback sea turtle	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T	Low	-	-	-	-	-	-	-	-	-
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	Apr-May	May-Jun	-	-	-	-	-	-	-
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Low	Common	Apr-May	May-Jun	-	-	-	-	-	-	-
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Common	Concentration Area	Mar-Apr	Apr-Jun	-	-	-	-	-	-	-
	Amphibian	Spotted salamander	Concentration Area	Common	Common	Concentration Area	May-Jul	Aug-Oct	-	-	-	-	-	-	-
	Amphibian	Wood Frog	Vulnerable Occurrence	T/T	Very Low	Very Low	Jun-Sep	Mar-Sep	-	-	-	-	-	-	-
	Turtle	Spotted turtle	Vulnerable Occurrence	C/C	Very Low	Very Low	May-Jul	Aug-Oct	-	-	-	-	-	-	-
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	May-Jul	May-Jul	May-Jul	May-Jul	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
673	Crab	Horseshoe crab	General Distribution	-C	-	-	-	-	-	-	-	-	-	-	-
674	Bivalve	Sea scallop	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-
676	Bivalve	Blue mussel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-
683	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-
686	Crab	Horseshoe crab	General Distribution	-C	-	-	-	-	-	-	-	-	-	-	-
	Bivalve	Northern quahog	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )

## BIRDS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			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/-	-	-	-	-	-	-	-	-	-	-	-
	Arctic tern	General Distribution	T/C	-	-	-	-	-	-	-	-	-	-	-
	Common tern	General Distribution	C/T	-	-	-	-	-	-	-	-	-	-	-
	Roseate tern	General Distribution	E/E	-	-	-	-	-	-	-	-	-	-	-

## FISH

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-
	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	-C	-	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-
	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-
	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-
	Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-
	Red-necked grebe	-	-	-	-	-	-	-	-	-	-	-	-
	Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-
	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-

### BIRDS (continued)

Subelement	Species	Monthly Presence												Molt
		J	F	M	A	M	J	J	A	S	O	N	D	
	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

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

### MARINE MAMMALS

Subelement	Species	Monthly Presence												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												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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

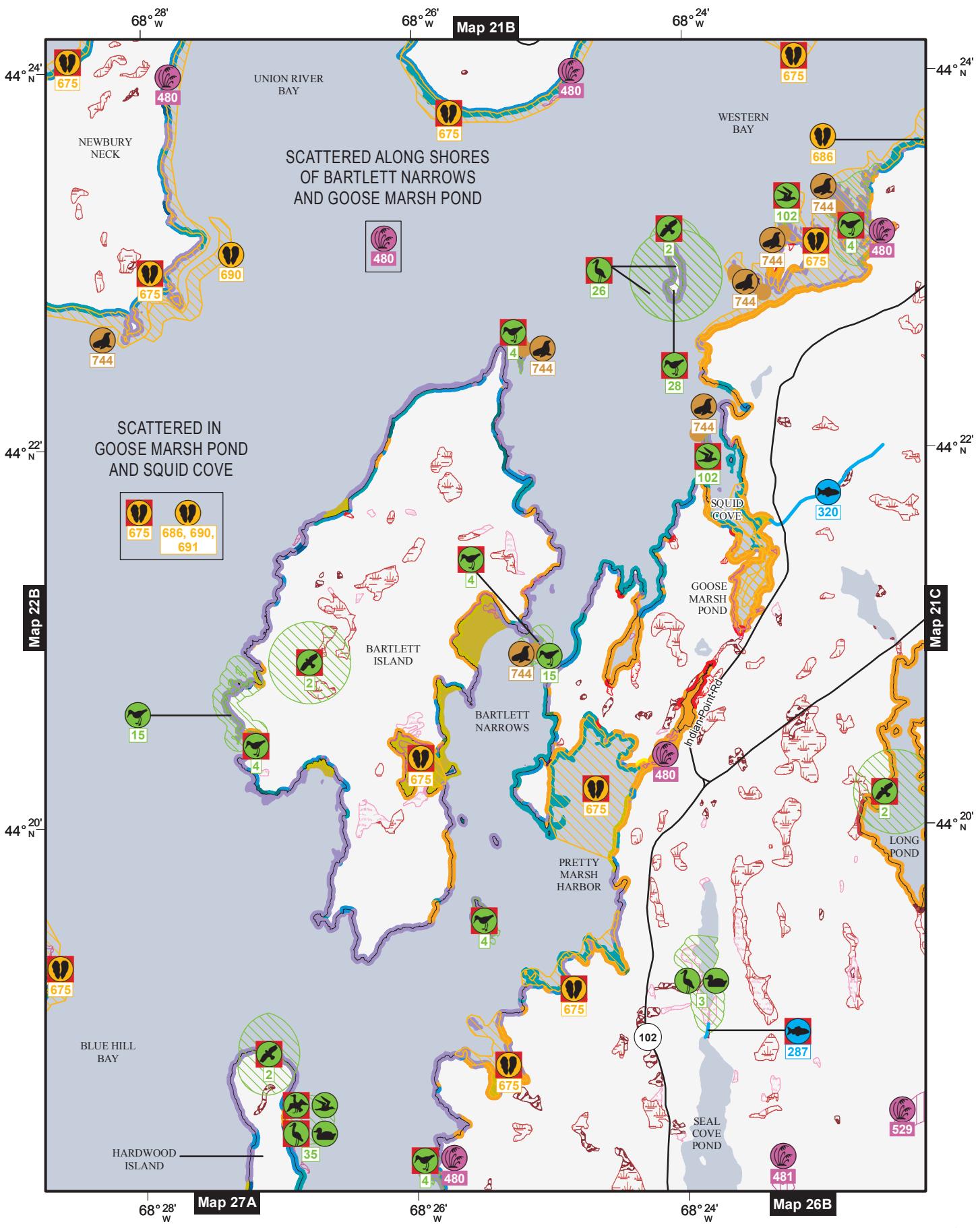
ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes		24.42	0.04
10B	Freshwater Marshes		234.96	0.37
10C	Swamps		1,052.74	1.64
10D	Scrub and Shrub Wetlands		355.26	0.56
7	Exposed Tidal Flats		220.43	0.34
5	Mixed Sand and Gravel Beaches		2.74	0.00
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		16.66	0.03

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes		2,596.05	1.61	3%
10B	Freshwater Marshes		1,032.47	0.64	1%
10C	Swamps		1,826.56	1.13	2%
10D	Scrub and Shrub Wetlands		2,590.45	1.61	3%
9B	Vegetated Low Banks		46,557.05	28.93	48%
8B	Sheltered, Solid Man-Made Structures		26.60	0.02	< 1%
7	Exposed Tidal Flats		18,791.52	11.68	19%
6A	Gravel Beaches		2,769.89	1.72	3%
6B	Riprap		3,509.83	2.18	4%
5	Mixed Sand and Gravel Beaches		2,000.93	1.24	2%
4	Coarse Grained Sand Beaches		2,744.11	1.71	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		11,513.28	7.15	12%
1B	Exposed, Solid Man-Made Structures		1,070.73	0.67	1%
Total ESI Shoreline:		97,029.46	Total ESI Shoreline:	60.29	
Total Shoreline:		67,229.68	Total Shoreline:	41.77	

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](http://response.restoration.noaa.gov)





**Map 21D**  
**Downeast Maine**



## Map 21D Downeast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence															
				S	F	Concentration	J	F	M	A	M	J	J	A	S	Nest	Mig.(S)	Mig.(F)	Molt
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	Mar-May	-	-	
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	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Aug	Oct	-
	Shorebird	American oystercatcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
	Shorebird	Dunlin	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-	-
	Shorebird	Red Knot	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Sanderling	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Jun	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Jul	Sep	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Willet	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Oct	-	-
26	Wading	Great blue heron	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-	-	-

**BIRDSS (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	Sep	-	-
	Shorebird	Baird's sandpiper	Roosting	-															-	Aug	Oct	-
	Shorebird	BB sandpiper	Roosting	-															May	Jul-Oct	-	-
	Shorebird	Black-bellied plover	Roosting	-															-	May	Aug-Oct	-
	Shorebird	Dunlin	Roosting	-															May	Jul-Oct	-	-
	Shorebird	Greater yellowlegs	Roosting	-															-	May-Jun	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting	-															-	May-Jun	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting	C/-															-	Apr-May	Sep-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	-															-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting	C/-	T														-	May	Aug-Oct	-
	Shorebird	Red Knot	Roosting	-															-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Roosting	-															-	Apr-May	-	-
	Shorebird	Sanderling	Roosting	-															-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting	C/-															-	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	C/-															-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting	-															-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	-															-	May-Jun	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting	-															-	May-Aug	May-Jun	Jul-Sep
	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	-															-	May-Aug	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-															-	May-Sep	-	-
	Watfowl	American black duck	Rafting	-															-	Apr-Aug	-	-
	Watfowl	Black Scoter	Rafting	-															-	-	-	-
	Watfowl	Bufflehead	Rafting	-															-	May-Aug	-	-
	Watfowl	Common eider	Rafting	-															-	May-Aug	-	-
	Watfowl	Goldeneye	Rafting	-															-	May-Aug	-	-
	Watfowl	Green-winged teal	Rafting	-															-	May-Aug	-	-
	Watfowl	Long-tailed duck	Rafting	-															-	May	Sep	-
	Watfowl	Mallard	Rafting	-															-	Apr-Aug	-	-
	Watfowl	Scaup	Vulnerable Occurrence	-															-	Dec-Jan	-	-
	Watfowl	Scoters	Rafting	-															-	-	-	-
	Watfowl	Surf scoter	Rafting	-															-	-	-	-
102	Gull/Tern	Common tern	Roosting	C/T															-	May-Aug	-	-

## FISH

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>M/E/NH</b>	<b>Monthly Presence</b>		
				S	F	Concentration	J F M A M J J A S O N D
287	Diadromous	Alewife	Migration	-/C	-	-	-
320	Marine Benthic	Atlantic tomcod	Migration	-	-	-	Apr-Dec

## HABITATS & RARE PLANTS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>M/E/NH</b>	<b>Monthly Presence</b>		
				S	F	Concentration	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	-	-	-	-
529	Upland	SP-hard. mes flatwood	High Ecological Value	-	-	-	-

## INVERTEBRATES

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>M/E/NH</b>	<b>Monthly Presence</b>		
				S	F	Concentration	J F M A M J J A S O N D
675	Bivalve	Softshell clam	Harvest Area	-/C	-	-	May-Oct
686	Bivalve	Northern quahog	Harvest Area	-	-	-	Jun-Aug
690	Bivalve	Atlantic surfclam	Harvest Area	-	-	-	Jun-Aug
691	Bivalve	European flat oyster	Harvest Area	-	-	-	Aug-Sep

## MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETRES )

## BIRDS

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>M/E/NH</b>	<b>Monthly Presence</b>		
			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	-	-	-
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	-	-	-

## FISH

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>M/E/NH</b>	<b>Monthly Presence</b>		
			S	F	Concentration	J F M A M J J A S O N D
Diadromous	Alewife	Migration	-/C	-	-	-
	American eel	Migration	-/C	-	-	-
	American shad	Migration	-/C	-	-	-
	Atlantic salmon	Migration	-/C	E	-	-
	Atlantic sturgeon	Migration	-T	T	-	-
	Blueback herring	Migration	-/C	-	-	-

### FISH (continued)

Subelement	Species	Mapping Qualifier	Monthly Presence												Juveniles	Adults		
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May
	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul	Apr-Dec
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr	Oct-Dec
	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

Subelement	Species	Mapping Qualifier	Monthly Presence												Juveniles	Adults		
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	
	Bivalve	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Blue mussel	Harvest Area	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Sea scallop	General Distribution	-/C	-	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Crab	Horseshoe crab	-/C	-	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

### BIRDS

Subelement	Species	Mapping Qualifier	Monthly Presence												Juveniles	Adults			
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D		
	Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Red-necked grebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pelagic	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pelagic	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## **INVERTEBRATES**

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

## **MARINE MAMMALS**

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

## **TERRESTRIAL MAMMALS**

Monthly Presence													
	J	F	M	A	M	J	J	A	S	O	N	D	
Subelement	Species												
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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	22.02	0.03
10B		Freshwater Marshes	100.02	0.16
10C		Swamps	419.74	0.66
10D		Scrub and Shrub Wetlands	95.71	0.15
9A		Sheltered Tidal Flats	22.60	0.04
7		Exposed Tidal Flats	130.63	0.20
5		Mixed Sand and Gravel Beaches	165.14	0.26
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	218.24	0.34

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	% of ESI Shoreline
ESI Rank				
10A		Salt and Brackish Water Marshes	1,981.64	2%
10B		Freshwater Marshes	123.44	< 1%
10C		Swamps	520.30	< 1%
10D		Scrub and Shrub Wetlands	266.65	< 1%
9A		Sheltered Tidal Flats	3,069.59	2%
9B		Vegetated Low Banks	32,087.66	26%
8A		Sheltered, Impermeable, Rocky Shores	154.98	< 1%
8B		Sheltered, Solid Man-Made Structures	32.41	< 1%
7		Exposed Tidal Flats	7,991.58	4.97
6A		Gravel Beaches	1,828.87	1.14
6B		Riprap	321.47	0.20
5		Mixed Sand and Gravel Beaches	21,397.75	13.30
4		Coarse Grained Sand Beaches	10,715.68	6.66
3A		Fine to Medium Grained Sand Beaches	653.05	0.41
3B		Scarps and Steep Slopes (Sand)	153.38	0.10
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	43,053.11	26.75
1B		Exposed, Solid Man-Made Structures	76.71	0.05

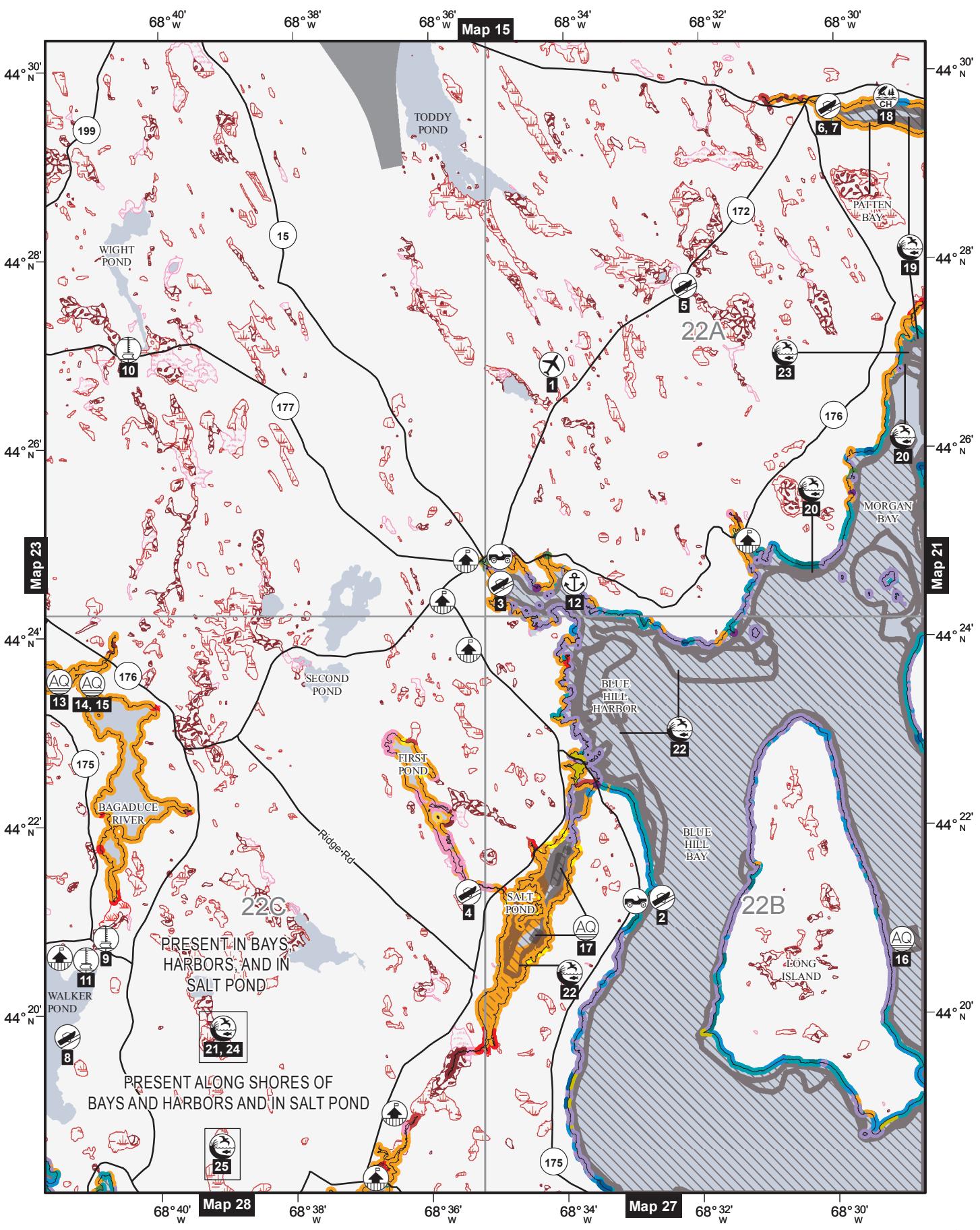
Total ESI Shoreline: 124,428.26  
 Total Shoreline: 87,921.45  
 Total ESI Shoreline: 77.32  
 Total Shoreline: 54.63

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 22**  
**Downeast Maine**



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

## Map 22 Downeast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	AIRPORT	BLUE HILL AIRPORT
2	BOAT RAMP	BLUE HILL BAY BOAT RAMP
3	BOAT RAMP	BUEHILL HBR BOAT RAMP
4	BOAT RAMP	FIRST POND BOAT RAMP
5	BOAT RAMP	MCHEARD BROOK BOAT RAMP
6	BOAT RAMP	PATTEN BAY BOAT RAMP
7	BOAT RAMP	SURRY TOWN LANDING
8	BOAT RAMP	WALKER POND BOAT RAMP
9	LOCK AND DAM	BROOKSVILLE DAM
10	LOCK AND DAM	UNKNOWN
11	LOCK AND DAM	WALKER POND DAM
12	MARINA	KOLLEGEWIDGWOK YACHT CLUB

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
13	AQUACULTURE	BAG BH - NORTH OF BEAR HEAD, BAGADUCE RIVER
14	AQUACULTURE	BAG BH2 - OFF BEAR HEAD, BAGADUCE RIVER
15	AQUACULTURE	BAG BH3 - OFF BEAR HEAD, BAGADUCE RIVER
16	AQUACULTURE	BHB L13 - EAST OF LONG ISLAND, BLUE HILL BAY
17	AQUACULTURE	BHB SP - BLUE HILL SALT POND, BLUE HILL BAY
18	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT
19	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA
20	MANAGEMENT AREA	ATLANTIC SURFCALM - SHELLFISH MA
21	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA
22	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA
23	MANAGEMENT AREA	NORTHERN QUAHOG - SHELLFISH MA
24	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA
25	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA

JURISDICTIONS		
COUNTY:	HANCOCK	REGION I
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	REGION 1
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT	

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES			Area (Acres)	Area (Sq. Miles)
ESI Rank	Habitat Classification			
10A	Salt and Brackish Water Marshes		76.60	0.12
10B	Freshwater Marshes		899.01	1.40
10C	Swamps		4,243.12	6.63
10D	Scrub and Shrub Wetlands		2,054.01	3.21
9A	Sheltered Tidal Flats		434.82	0.68
7	Exposed Tidal Flats		25.53	0.04
5	Mixed Sand and Gravel Beaches		127.94	0.20
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		212.43	0.33

ESI SHORELINE HABITAT TYPES			Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank	Shoreline Habitat Classification				
10A	Salt and Brackish Water Marshes		5,547.85	3.45	3%
10B	Freshwater Marshes		5,787.30	3.60	3%
10C	Swamps		3,372.26	2.10	2%
10D	Scrub and Shrub Wetlands		5,104.67	3.17	2%
9A	Sheltered Tidal Flats		17,228.86	10.71	8%
9B	Vegetated Low Banks		75,780.29	47.09	36%
8A	Sheltered, Impermeable, Rocky Shores		4,173.71	2.59	2%
8B	Sheltered, Solid Man-Made Structures		229.21	0.14	< 1%
8C	Sheltered Riprap		144.97	0.09	< 1%
8D	Sheltered, Rocky, Rubble Shores		603.27	0.37	< 1%
7	Exposed Tidal Flats		4,333.75	2.69	2%
6A	Gravel Beaches		2,776.04	1.72	1%
6B	Riprap		2,160.44	1.34	1%
5	Mixed Sand and Gravel Beaches		21,558.93	13.40	10%
4	Coarse Grained Sand Beaches		13,402.28	8.33	6%
3A	Fine to Medium Grained Sand Beaches		1,275.97	0.79	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		46,815.60	29.09	22%
1B	Exposed, Solid Man-Made Structures		1,785.27	1.11	1%

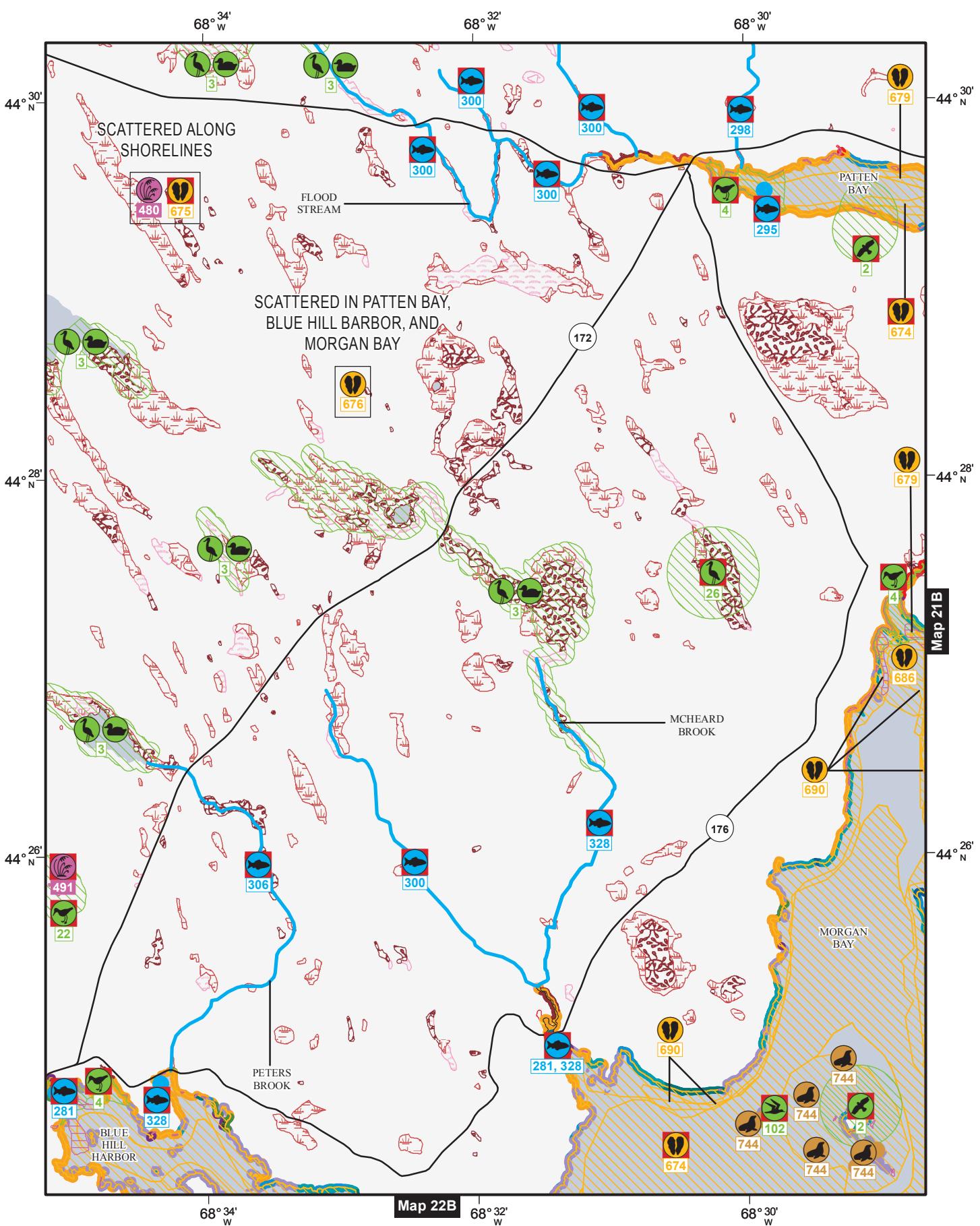
Total ESI Shoreline: 212,080.68 Total ESI Shoreline: 131.78  
 Total Shoreline: 158,560.84 Total Shoreline: 98.53

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 ES shoreline values will sum to greater than 100%.

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







## Map 22A Downeast Maine

### 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
	Worm bed	Harvest Area	J F M A M J J A S O N D	- - - - -
	Eelgrass	High Ecological Value	High	- - - - -
Softbottom				
SAV				

#### BIRDS

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

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults						
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
281	Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct	Mar-Oct	Mar-Oct
295	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
298	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct	Mar-Oct	Mar-Oct
	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	May-Mar	Jan-May	Jan-May
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul	Apr-Dec	Apr-Jul
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr	Jan-May	Jan-May
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May	Jan-May	Jan-May
300	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May	Jan-May	Jan-May
306	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May	Jan-May	Jan-May
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr	Jan-Dec	Oct-Apr
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr	Jan-Dec	Oct-Apr

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults						
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
491	Plant	Threatened plant	Vulnerable Occurrence	T/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

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

## MARINE MAMMALS

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

## WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

### BIRDS

Subelement	Species	MENH												Monthly Presence											
		S	F	Concentration	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	MENH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	American shad	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Atlantic salmon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Striped bass	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### REPTILES & AMPHIBIANS

Subelement	Species	MENH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Interrest	Juveniles	Adults				
Turtle	Green sea turtle	General Distribution	-/-	T	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	K. ridley sea turtle	General Distribution	E/-	E	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Leatherback sea turtle	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Loggerhead sea turtle	General Distribution	E/-	T	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### INVERTEBRATES

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

**BIRDS**

	<b>Subelement</b>	<b>Species</b>	Monthly Presence												<b>Molt</b>
			J	F	M	A	M	J	J	A	S	O	N	D	
	Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-
		Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-	-
		Red-necked grebe	-	-	-	-	-	-	-	-	-	-	-	-	-
		Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
		Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-
		Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

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

**MARINE MAMMALS**

	<b>Subelement</b>	<b>Species</b>	Monthly Presence												<b>Molt</b>
			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**

	<b>Subelement</b>	<b>Species</b>	Monthly Presence												<b>Molt</b>
			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.noaa.gov](http://response.noaa.gov)

ESI POLYGON HABITAT TYPES		
	<i>ESI Rank</i>	<i>Habitat Classification</i>
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	5	Mixed Sand and Gravel Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES		
	<i>ESI Rank</i>	<i>Shoreline Habitat Classification</i>
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9B	Vegetated Low Banks
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Riprap
	8D	Sheltered, Rocky, Rubble Shores
	6A	Gravel Beaches
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	3A	Fine to Medium Grained Sand Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1B	Exposed, Solid Man-Made Structures

Total ESI Shoreline: 44,213.40 Total ESI Shoreline: 27.47  
 Total Shoreline: 37,742.02 Total Shoreline: 23.45

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](http://response.restoration.noaa.gov)

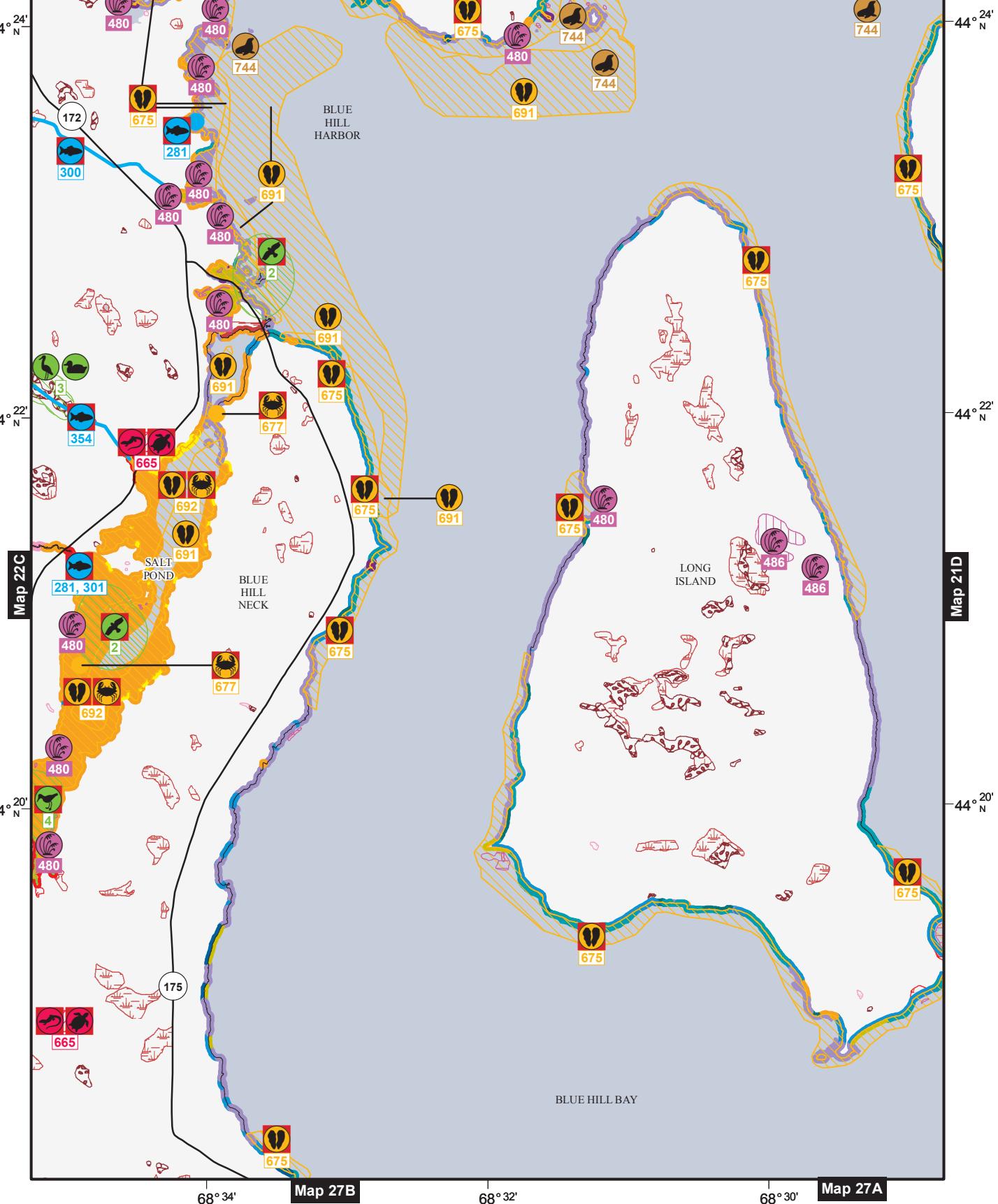


Map 22A

68° 32' W

68° 30' W

68° 34' W



**Map 22B**  
Downeast Maine



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 22B Downeast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

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

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
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
354	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul
	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults
665	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-Apr	Apr-Jun	-	May-Sep	Mar-Jun
	Amphibian	Wood Frog	Concentration Area		Common														Apr-Jun	May-Jul	-	Jun-Sep	Mar-Sep
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low														Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Dec
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low														Aug-Oct	-	Jan-Dec	Jan-Nov	Jan-Dec

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles
675	Bivalve	Softshell clam	Harvest Area	-/C	-	-												May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-/C	Common													Aug-Sep	-	-	Jan-Dec	Jan-Dec
691	Bivalve	European flat oyster	Harvest Area	-	-													May-Oct	May-Oct	May-Oct	Jan-Dec	Jan-Dec
692	Bivalve	Softshell clam	Harvest Area	-/C	-													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec
	Crab	Horseshoe crab	Spawning Area	-/C	-													May-Jul	May-Jul	-	Jan-Dec	Jan-Dec

## MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles
744	Pinniped	Harbor seal	Haul Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)**

**BIRDS**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American shad	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic salmon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Striped bass	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater smelt	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**REPTILES & AMPHIBIANS**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turtle	Green sea turtle	General Distribution	I/-	T	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K. ridley sea turtle	General Distribution	E/-	E	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leatherback sea turtle	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Loggerhead sea turtle	General Distribution	E/-	T	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bivalve	Blue mussel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sea scallop	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crab	Horseshoe crab	General Distribution	-C	Low	May-Jul	May-Jul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

	<b>Subelement</b>	<b>Species</b>	Monthly Presence												<b>Molt</b>
			J	F	M	A	M	J	J	A	S	O	N	D	
	Alcid	Black guillemot Dovekie Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant Horned grebe Red-necked grebe Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull Herring gull Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

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

**MARINE MAMMALS**

	<b>Subelement</b>	<b>Species</b>	Monthly Presence												<b>Molt</b>
			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**

	<b>Subelement</b>	<b>Species</b>	Monthly Presence												<b>Molt</b>
			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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES	
	Habitat Classification
10A	Salt and Brackish Water Marshes
10B	Freshwater Marshes
10C	Swamps
10D	Scrub and Shrub Wetlands
9A	Sheltered Tidal Flats
7	Exposed Tidal Flats
5	Mixed Sand and Gravel Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

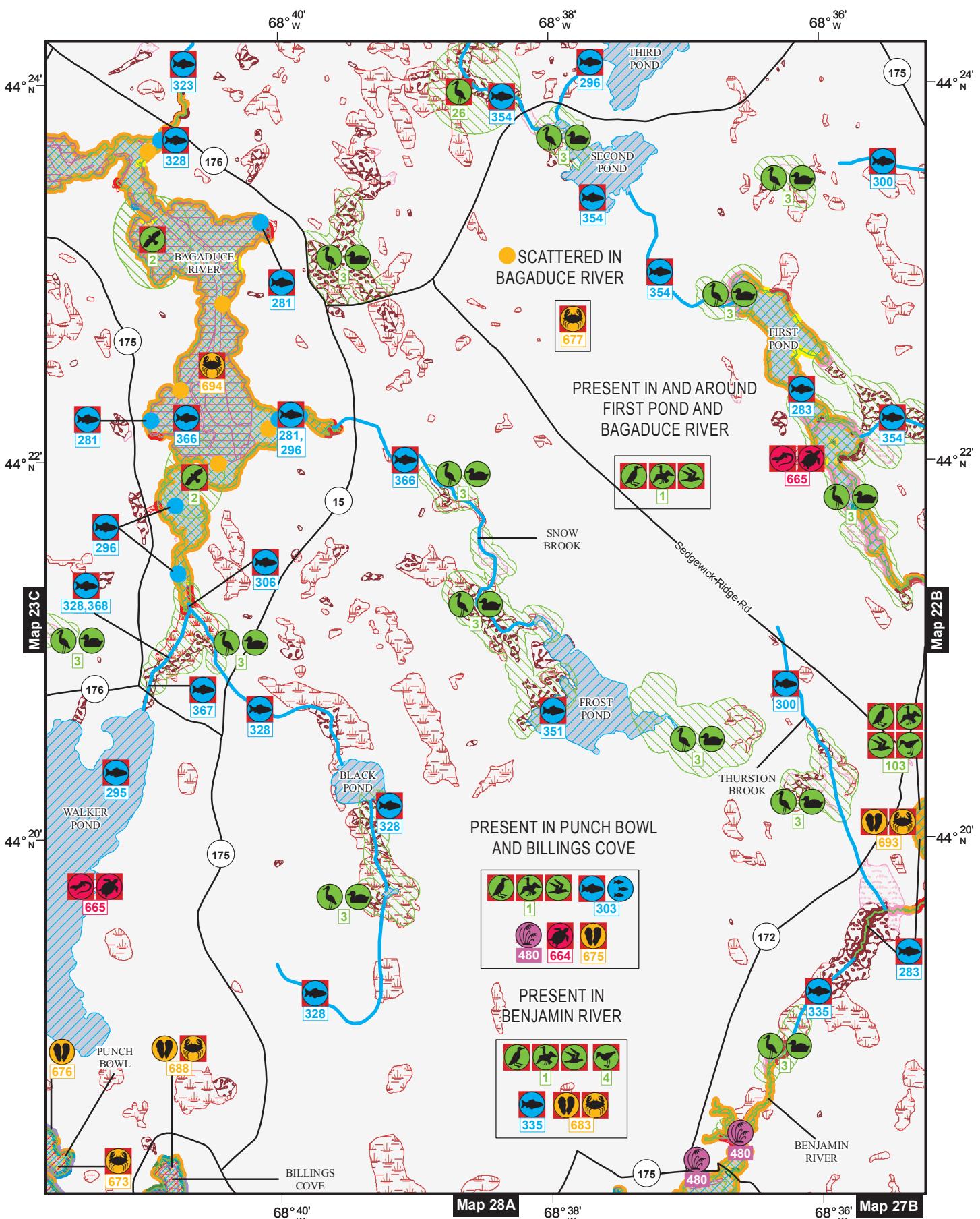
ESI SHORELINE HABITAT TYPES	
	Shoreline Habitat Classification
10A	Salt and Brackish Water Marshes
10B	Freshwater Marshes
10C	Swamps
9A	Sheltered Tidal Flats
9B	Vegetated Low Banks
8A	Sheltered, Impermeable, Rocky Shores
7	Exposed Tidal Flats
6A	Gravel Beaches
6B	Riprap
5	Mixed Sand and Gravel Beaches
4	Coarse Grained Sand Beaches
3A	Fine to Medium Grained Sand Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
1B	Exposed, Solid Man-Made Structures

Total ESI Shoreline: 112,742.27      Total ESI Shoreline: 70.05  
 Total Shoreline: 73,949.53      Total Shoreline: 45.95

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](http://response.restoration.noaa.gov)





## Map 22C Downeast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence														
				S	F	Concentration	J	F	M	A	M	J	J	A	S	Nest	Mig.(S)	Mig.(F)
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	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Watertowl	Concentration Area	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
4	Shorebird	American golden-plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Baird's sandpiper	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	BB sandpiper	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Black-bellied plover	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Dunlin	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Greater yellowlegs	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Hudsonian godwit	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Least sandpiper	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Lesser yellowlegs	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Pectoral sandpiper	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Red Knot	Concentration Area	C/-	T	Foraging												
	Shorebird	Ruddy turnstone	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Sanderling	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Semipalmated plover	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	-	Foraging												
	Shorebird	Short-billed dowitcher	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Solitary sandpiper	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area
	Shorebird	Stilt sandpiper	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area	Concentration Area

## BIRDs (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
Shorebird	Western sandpiper	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
Whimbrel	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	White-rumped sandpiper	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Willet	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
<b>26</b>	<b>Wading</b>	<b>Great blue heron</b>	<b>Vulnerable Occurrence</b>	<b>C/-</b>	-	-	-	-	-	-	-	-	-	-	-
<b>103</b>	<b>Acid</b>	<b>Razorbill</b>	<b>General Distribution</b>	<b>T/-</b>	-	-	-	-	-	-	-	-	-	-	-
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	E/E	E	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Roseate tern	General Distribution	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American golden-plover	Concentration Area	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	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	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	-J/C	Foraging	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Willet	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-
Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-
<b>281</b>	<b>Diadromous</b>	<b>American eel</b>	<b>Migration</b>	<b>-C</b>	-	-	-	-	-	-	-	-	-	-	-
<b>283</b>	<b>Diadromous</b>	<b>American shad</b>	<b>Migration</b>	<b>-C</b>	-	-	-	-	-	-	-	-	-	-	-
Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-
Diadromous	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-	-

**FISH (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Adults
				S	F	M/E/NH	J	A	M	J	J	A	S	O	D	
	Diadromous	Blueback herring	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
	Diadromous	Sea lamprey	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
<b>295</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
<b>296</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
<b>300</b>	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
<b>303</b>	Diadromous	Atlantic sturgeon	General Distribution	-/T	T	Rare	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Shortnose sturgeon	General Distribution	E/E	E	Rare	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Striped bass	Concentration Area	High	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Estuarine Nursery	Black Seabass	Concentration Area	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
<b>306</b>	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
<b>323</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
<b>328</b>	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
<b>335</b>	Diadromous	Atlantic sturgeon	Migration	-/T	T	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
<b>351</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr
<b>354</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
<b>366</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-/T	T	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Oct-Apr
<b>367</b>	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
	Diadromous	American eel	Migration	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct

## FISH (continued)

Map ID	Subelement	Species	Mapping Qualifier		S	F	Concentration	Monthly Presence					Adults	
			J	F				M	A	J	J	A	S	
	Diadromous	Atlantic sturgeon	Migration	-T	T	-								Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-								Jan-Dec
	Diadromous	Striped bass	Migration	-										Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C	-									Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration	-										Jan-Dec
368	Diadromous	Alewife	Migration	-C	-									Apr-Jul
	Diadromous	American eel	Migration	-C	-									Mar-Oct
	Diadromous	Atlantic sturgeon	Migration	-T	T	-								Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-								Jan-Dec
	Diadromous	Striped bass	Migration	-										Jan-Dec
	Marine Benthic	Atlantic tomcod	Migration	-										Jan-Dec

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier		S	F	Concentration	Monthly Presence					Adults
			J	F				M	A	M	J	J	
480	Wetland	Tidal Marsh	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier		S	F	Concentration	Monthly Presence					Adults
			J	F				M	A	M	J	J	
664	Turtle	Green sea turtle	General Distribution	-J	T	Rare							Jun-Nov
	Turtle	K. ridley sea turtle	General Distribution	E/-	E	Rare							Jun-Nov
	Turtle	Leatherback sea turtle	General Distribution	E/-	E	Low							Jun-Nov
	Turtle	Loggerhead sea turtle	General Distribution	E/-	T	Low							Jun-Nov
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	-	Very Low							Apr-May
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	-	Rare							Apr-May
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	-	Low							Apr-Jun
	Amphibian	Spotted salamander	Concentration Area	Common	-	Common							Mar-May
	Amphibian	Wood Frog	Concentration Area	Common	-	Common							Mar-Apr
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	-	Very Low							May-Jul
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	-	Very Low							Aug-Oct

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier		S	F	Concentration	Monthly Presence					Adults
			J	F				M	A	M	J	J	
673	Crab	Horseshoe crab	General Distribution	-C	-	Low							Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-C	-								Jan-Dec
676	Bivalve	Blue mussel	Spawning Area	-C	-	Common							Jan-Dec
677	Crab	Horseshoe crab	Harvest Area	-C	-								Jan-Dec
683	Bivalve	Softshell clam	General Distribution	-C	-	Low							Jan-Dec
	Crab	Horseshoe crab	Harvest Area	-C	-								Jan-Dec
688	Bivalve	Blue mussel	General Distribution	-C	-	Low							Jan-Dec
	Crab	Horseshoe crab	Harvest Area	-C	-	Low							Jan-Dec
693	Bivalve	Softshell clam	General Distribution	-C	-								Jan-Dec

### INVERTEBRATES (continued)

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

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

### BIRDS

Subelement	Species	Monthly Presence				Molt										
		J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Alcid	Black guillemot													-	-	-
	Dovekie													-	-	-
	Thick-billed murre													-	-	-
Diving	D. crested cormorant													-	-	-
	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				Eggs	Larvae	Juveniles	Adults
		J	F	M	A				
Estuarine Nursery	Atlantic herring					-	Oct-May	Jan-Dec	Apr-Dec
	Winter flounder					-	-	-	Jan-Dec
Marine Benthic	American plaice					-	Mar-Jun	Mar-Jul	Mar-Nov
	American sand lance					-	Dec-Jun	Jan-Dec	Mar-Nov
	Atlantic cod					-	Nov-Mar	Nov-Jun	Nov-Jul
	Atlantic Wolffish					-	Apr-Sep	Apr-Sep	Oct-Jul
	Cunner					-	Mar-Aug	Mar-Aug	Jan-Dec
	Haddock					-	Dec-Apr	Dec-Apr	Jan-Dec
	Longhorn sculpin					-	Mar-Jun	Mar-Jun	Mar-Jun
	Northern searobin					-	Nov-Feb	Nov-Mar	Jan-Dec
	Ocean pout					-	Jun-Oct	Jun-Oct	Mar-Nov
	Pollock					-	Dec-Mar	Dec-Apr	Jan-May
	Red hake					-	Jul-Oct	Jul-Oct	Jul-Oct
	Rock gurnel					-	Jan-May	Jan-May	Jan-Dec
	Shorthorn sculpin					-	-	-	Mar-Oct
	Silver hake					-	-	-	Apr-Nov
	Skates					-	-	-	Jan-Dec
	White hake					-	-	-	May-Nov
	Yellowtail flounder					-	Apr-Sep	Apr-Sep	Apr-Sep

## FISH (continued)

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
Marine Pelagic	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	May-Nov
	Butterfish	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct

## INVERTEBRATES

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

## MARINE MAMMALS

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

## TERRESTRIAL MAMMALS

Subelement	Species	Monthly Presence												Pupping
		J	F	M	A	M	J	J	A	S	O	N	D	
Small Mammal	Beaver	-	-	-	-	-	-	-	-	-	-	-	-	-
	Muskrat	-	-	-	-	-	-	-	-	-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.noaa.gov](http://response.noaa.gov)

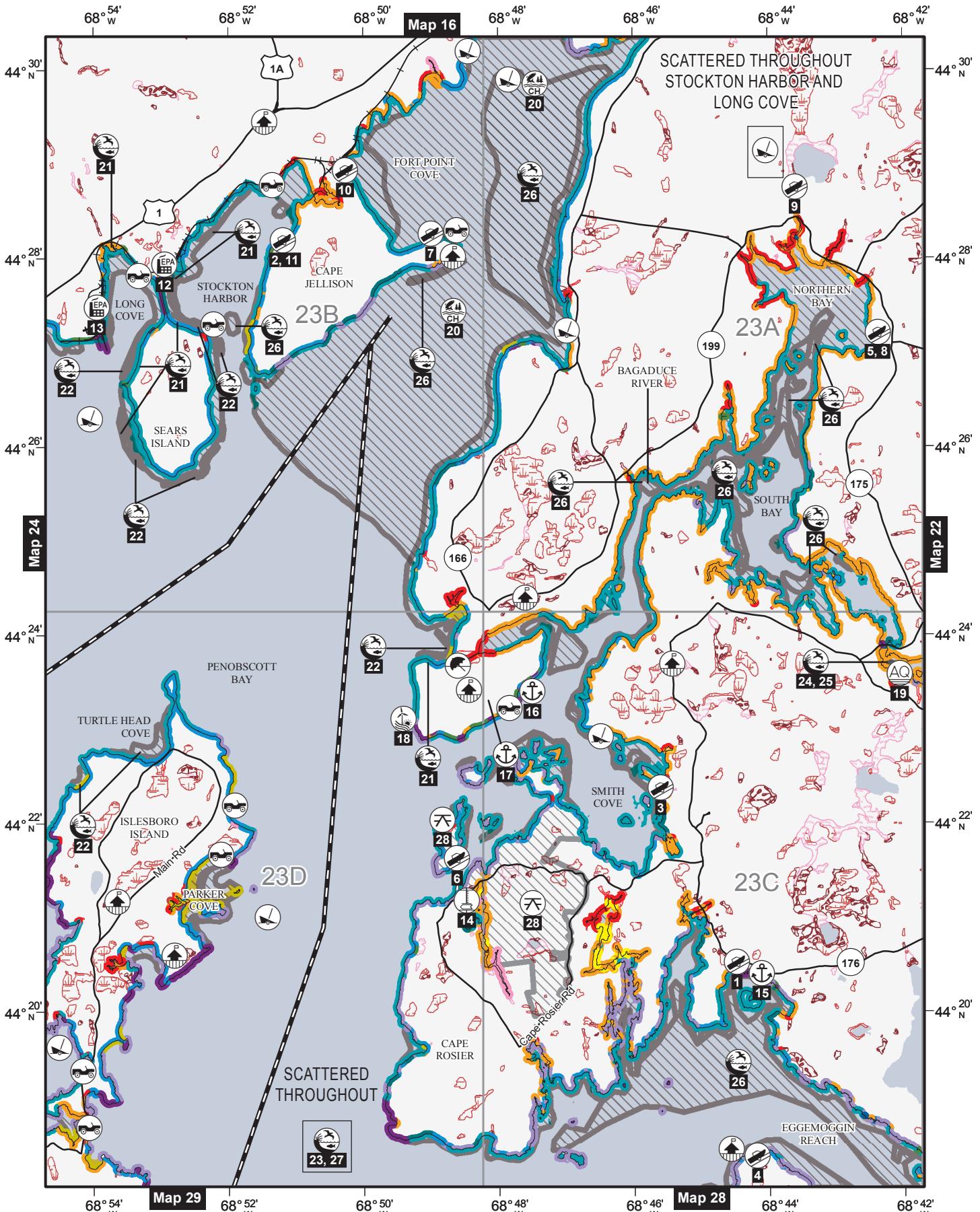
ESI POLYGON HABITAT TYPES		ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
	10A	Salt and Brackish Water Marshes		49.98	0.08
	10B	Freshwater Marshes		184.65	0.29
	10C	Swamps		1,311.44	2.05
	10D	Scrub and Shrub Wetlands		598.14	0.93
	9A	Sheltered Tidal Flats		11.00	0.02
	5	Mixed Sand and Gravel Beaches		10.26	0.02

ESI SHORELINE HABITAT TYPES		ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
	10A	Salt and Brackish Water Marshes		1,549.08	0.96	3%
	10B	Freshwater Marshes		5,461.42	3.39	10%
	10C	Swamps		1,798.15	1.12	3%
	10D	Scrub and Shrub Wetlands		3,479.85	2.16	6%
	9A	Sheltered Tidal Flats		814.66	0.51	1%
	9B	Vegetated Low Banks		36,412.30	22.63	66%
	8A	Sheltered, Impermeable, Rocky Shores		1,034.30	0.64	2%
	8B	Sheltered, Solid Man-Made Structures		124.79	0.08	< 1%
	8C	Sheltered Riprap		124.79	0.08	< 1%
	8D	Sheltered, Rocky, Rubble Shores		434.11	0.27	1%
	6B	Riprap		595.93	0.37	1%
	5	Mixed Sand and Gravel Beaches		1,904.61	1.18	3%
	4	Coarse Grained Sand Beaches		281.13	0.17	1%
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		817.09	0.51	1%
	1B	Exposed, Solid Man-Made Structures		151.03	0.09	< 1%
		Total ESI Shoreline:		54,983.24	Total ESI Shoreline:	34.17
		Total Shoreline:		46,730.19	Total Shoreline:	29.04

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.noaa.gov](http://response.noaa.gov)





**Map 23**  
Midcoast Maine



## Map 23 Midcoast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	BOAT RAMP	BETSY'S COVE TOWN LANDING
2	BOAT RAMP	CAPE DOCKS
3	BOAT RAMP	DODGE'S POINT TOWN LANDING
4	BOAT RAMP	EGGEMOGEN ROAD
5	BOAT RAMP	NORTHERN BAY BOAT RAMP
6	BOAT RAMP	PENOBSCOT BAY BOAT RAMP
7	BOAT RAMP	PENOBSCOT RIVER BOAT RAMP 8
8	BOAT RAMP	PENOBSCOT TOWN LANDING
9	BOAT RAMP	PIERCE POND BOAT RAMP
10	BOAT RAMP	SHUTE LAUNCH SITE
11	BOAT RAMP	STOCKTON HARBOR BOAT RAMP
12	EPA FACILITY	GAC CHEMICAL - NEW ENGLAND
13	EPA FACILITY	IRVING SEAPORT MARINE TERMINAL
14	LOCK AND DAM	GOOSE POND DAM
15	MARINA	BUCK'S HARBOR MARINE
16	MARINA	CASTINE YACHT CLUB
17	MARINA	MAINE MARITIME YACHT CLUB
18	RENEWABLE ENERGY	UNIVERSITY OF MAINE'S DEEPWATER OFFSHORE FLOATING
UNIVERSITY OF MAINE		

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
19	AQUACULTURE	BAG SB - WEST OF BEAR HEAD, BAGADUCE RIVER
20	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT
21	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA
22	MANAGEMENT AREA	ATLANTIC SURFCLEM - SHELLFISH MA
23	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA
24	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA
25	MANAGEMENT AREA	EUROPEAN FLAT OYSTER - SHELLFISH MA
26	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA
27	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA
28	PARK	HOLBROOK ISLAND SANCTUARY STATE PARK
MAINE DEPARTMENT OF CONSERVATION		

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

JURISDICTIONS		
County:	FEMA:	Region I
HANCOCK, WALDO		
DISTRICT 1, SECTOR NORTHERN NEW ENGLAND		
NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		
Coast Guard:	EPA:	Region 1
USACE:		

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES			Area (Acres)	Area (Sq. Miles)
ESI Rank	Habitat Classification			
10A	Salt and Brackish Water Marshes		157.06	0.25
10B	Freshwater Marshes		659.37	1.03
10C	Swamps		2,657.00	4.15
10D	Scrub and Shrub Wetlands		847.36	1.32
9A	Sheltered Tidal Flats		66.80	0.10
7	Exposed Tidal Flats		175.31	0.27
5	Mixed Sand and Gravel Beaches		1,610.66	2.52
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		213.44	0.33

ESI SHORELINE HABITAT TYPES			Length (Meters)	% of ESI Shoreline
ESI Rank	Shoreline Habitat Classification			
10A	Salt and Brackish Water Marshes		21,575.87	4%
10B	Freshwater Marshes		4,003.16	1%
10C	Swamps		718.17	< 1%
10D	Scrub and Shrub Wetlands		81.90	< 1%
9A	Sheltered Tidal Flats		11,779.87	2%
9B	Vegetated Low Banks		92,928.68	18%
8A	Sheltered, Impermeable, Rocky Shores		3,782.64	1%
8B	Sheltered, Solid Man-Made Structures		109.07	< 1%
8C	Riprap		38.74	< 1%
8D	Sheltered, Rocky, Rubble Shores		185.40	< 1%
7	Exposed Tidal Flats		12,920.60	3%
6A	Gravel Beaches		7,734.14	2%
6B	Riprap		6,085.06	1%
5	Mixed Sand and Gravel Beaches		184,843.58	36%
4	Coarse Grained Sand Beaches		63,108.11	12%
3A	Fine to Medium Grained Sand Beaches		174.91	< 1%
3B	Scars and Steep Slopes (Sand)		76.68	< 1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		80,110.32	16%
2B	Exposed Scars and Steep Slopes (Clay)		178.15	< 1%
1A	Exposed, Rocky Shores		10,550.27	2%
1B	Exposed, Solid Man-Made Structures		5,575.10	1%

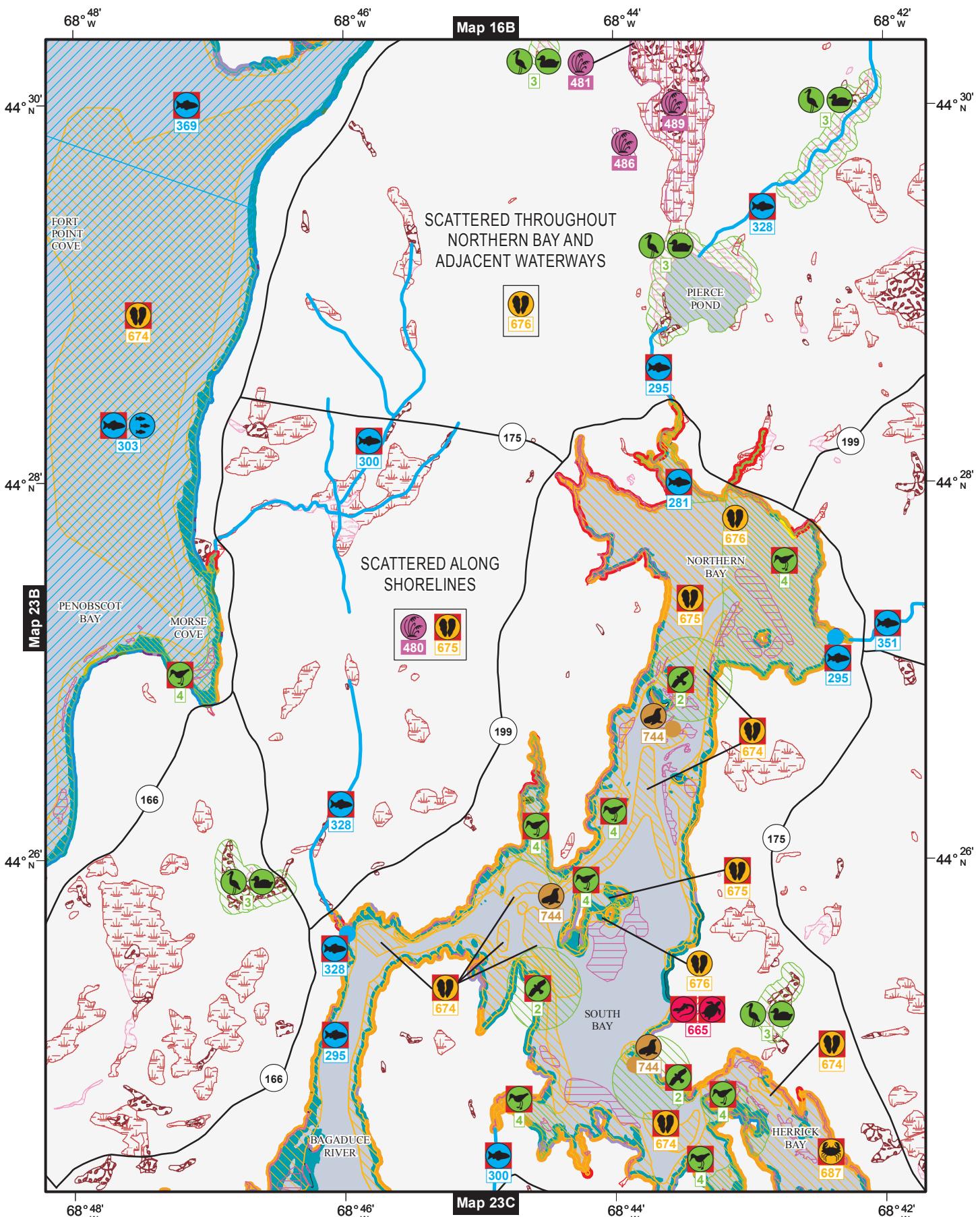
Total ESI Shoreline:	506,560.42	Total ESI Shoreline:	314.76
Total Shoreline:	303,888.60	Total Shoreline:	188.83

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](http://response.restoration.noaa.gov)







**Map 23A**  
**Midcoast Maine**



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



## Map 23A Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

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

#### BIRDS

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

## FISH

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

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
489	Wetland	Rare wetland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Jan-Dec
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	May-Jun	-	Jan-Dec	Jan-Dec
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-May	Apr-Jun	-	May-Sep	May-Sep
	Amphibian	Spotted salamander	Concentration Area	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Apr	Apr-Jun	-	Jun-Sep	Jun-Sep
	Amphibian	Wood Frog	Concentration Area	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov
	Turtle	Wood turtle	Vulnerable Occurrence	C/C	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Nov

## INVERTEBRATES

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

### MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETRES )

### BIRDS

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>MENH</b>	<b>S F</b>	<b>Concentration</b>	<b>J F M A M J J A S O N D</b>	<b>Nest</b>	<b>Mig.(S)</b>	<b>Mig.(F)</b>	<b>Molt</b>
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	-	-	-	-	-	-

### FISH

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>MENH</b>	<b>S F</b>	<b>Concentration</b>	<b>J F M A M J J A S O N D</b>	<b>Spawn</b>	<b>Eggs</b>	<b>Larvae</b>	<b>Juveniles</b>	<b>Adults</b>
Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	Apr-Dec	Apr-Jul
	American eel	Migration	-C	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	Jan-Dec	Jan-Dec
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	Jan-May	Jan-May
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	Jan-Dec	Jan-Dec
	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

### REPTILES & AMPHIBIANS

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>MENH</b>	<b>S F</b>	<b>Concentration</b>	<b>J F M A M J J A S O N D</b>	<b>Nest</b>	<b>Hatch</b>	<b>Interrest</b>	<b>Juveniles</b>	<b>Adults</b>
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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>MENH</b>	<b>S F</b>	<b>Concentration</b>	<b>J F M A M J J A S O N D</b>	<b>Spawn</b>	<b>Eggs</b>	<b>Larvae</b>	<b>Juveniles</b>	<b>Adults</b>
Crab	Horseshoe crab	General Distribution	-C	Low	-	May-Jul	May-Jul	-	-	Jan-Dec	Jan-Dec

**BIRDS**

Monthly Presence											
	J	F	M	A	M	J	J	A	S	O	N
Sublement	Species										
Alcid	Black guillemot										
Dovekie											
Thick-billed murre											
D. crested cormorant											
Horned grebe											
Red-necked grebe											
Red-throated loon											
G. black-backed gull											
Herring gull											
Ring-billed gull											
Northern gannet											

**FISH**

Monthly Presence											
	J	F	M	A	M	J	J	A	S	O	N
Sublement	Species										
Estuarine Nursery	Atlantic herring										
Winter flounder											
Marine Benthic	American plaice										
American sand lance											
Atlantic cod											
Atlantic Wolffish											
Cunner											
Haddock											
Longhorn sculpin											
Northern searobin											
Ocean pout											
Pollock											
Red hake											
Rock gunnel											
Shorthorn sculpin											
Silver hake											
Skates											
White hake											
Yellowtail flounder											
Marine Pelagic	Atlantic mackerel										
Butterfish											

## **INVERTEBRATES**

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

## **MARINE MAMMALS**

Subelement	Species	Monthly Presence												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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9A	Sheltered Tidal Flats
	5	Mixed Sand and Gravel Beaches

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	9A	Sheltered Tidal Flats
	9B	Vegetated Low Banks
	8A	Sheltered, Impermeable, Rocky Shores
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Riprap
	8D	Sheltered, Rocky, Rubble Shores
	7	Exposed Tidal Flats
	6A	Gravel Beaches
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	3B	Scarps and Steep Slopes (Sand)
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1B	Exposed, Solid Man-Made Structures

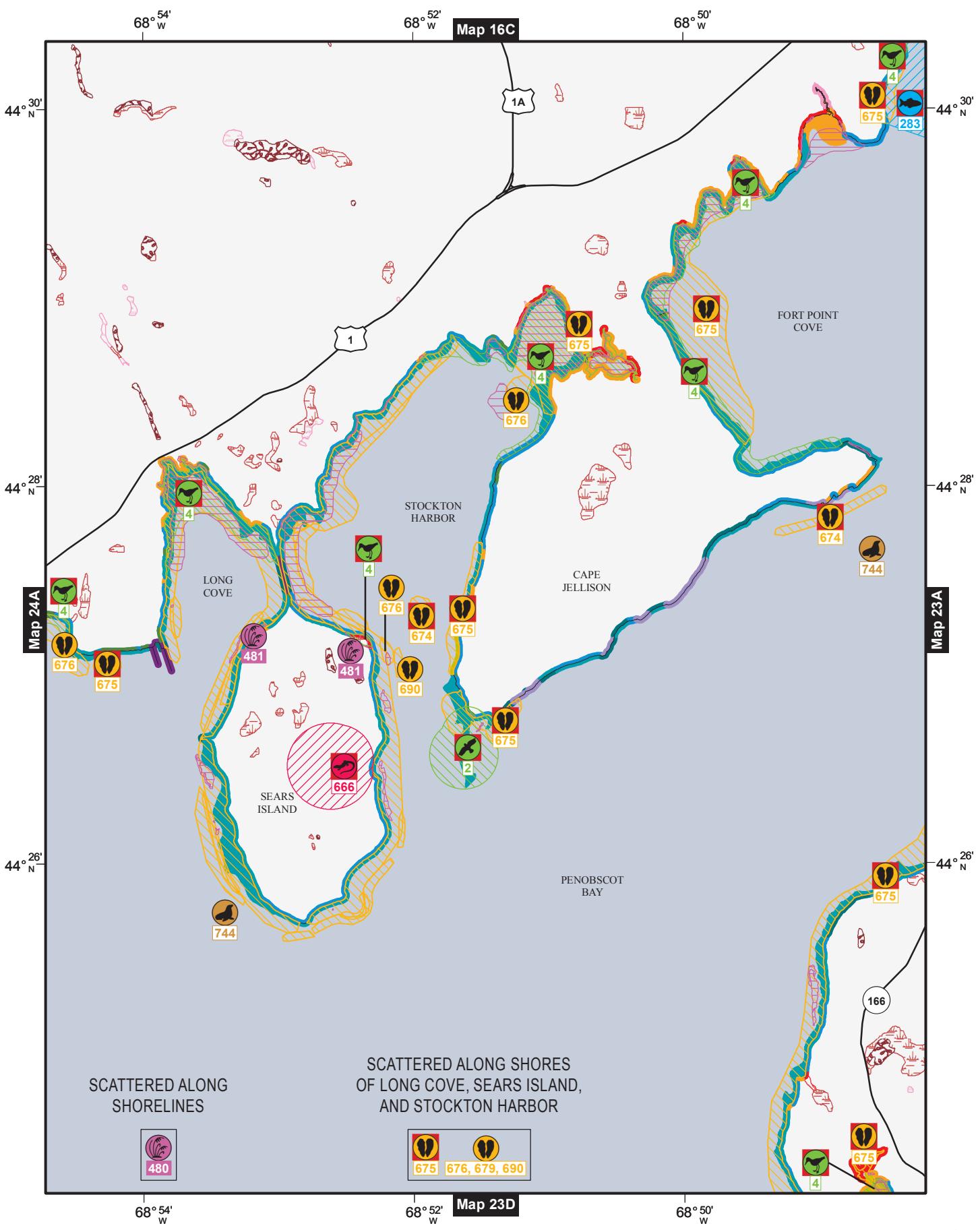
Total ESI Shoreline: 131,288.58      Total ESI Shoreline: 81.58  
 Total Shoreline: 73,193.80      Total Shoreline: 45.48

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 23B**  
Midcoast Maine



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



## Map 23B Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<i>Monthly Presence</i>											
		Harvest Area	High Ecological Value		High Ecological Value	J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed					-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass					-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass					-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass					-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass					-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

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

## FISH

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

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
666	Snake	Eastern ribbon snake	Vulnerable Occurrence	E/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Snake	Northern black racer	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

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

## MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

**BIRDS**

<b>Subelement</b>	<b>Species</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
		<b>Mapping Qualifier</b>	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	ME.(S)	Mig.(F)	Molt				
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**FISH**

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

**REPTILES & AMPHIBIANS**

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

**INVERTEBRATES**

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

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

<b>Subelement</b>	<b>Species</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
		<b>Mapping Qualifier</b>	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	ME.(S)	Mig.(F)	Molt				
Black guillemot	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dovekie	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Thick-billed murre	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
D. crested cormorant	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Horned grebe	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Red-necked grebe	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Red-throated loon	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
G. black-backed gull	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Herring gull	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## BIRDS (continued)

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Pelagic	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-
	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Estuarine Nursery	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-
Marine Benthic	American plaice	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-	-
Cunner	-	-	-	-	-	-	-	-	-	-	-	-	-
Haddock	-	-	-	-	-	-	-	-	-	-	-	-	-
Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-
Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	-
Ocean pout	-	-	-	-	-	-	-	-	-	-	-	-	-
Pollock	-	-	-	-	-	-	-	-	-	-	-	-	-
Red hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Rock gunnel	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorthorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Skates	-	-	-	-	-	-	-	-	-	-	-	-	-
White hake	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	-
Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-
Butterfish	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Bivalve	Northern quahog	-	-	-	-	-	-	-	-	-	-	-	-
Crab	Atlantic rock crab	-	-	-	-	-	-	-	-	-	-	-	-

## MARINE MAMMALS

Subelement	Species	Monthly Presence											
		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					
		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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

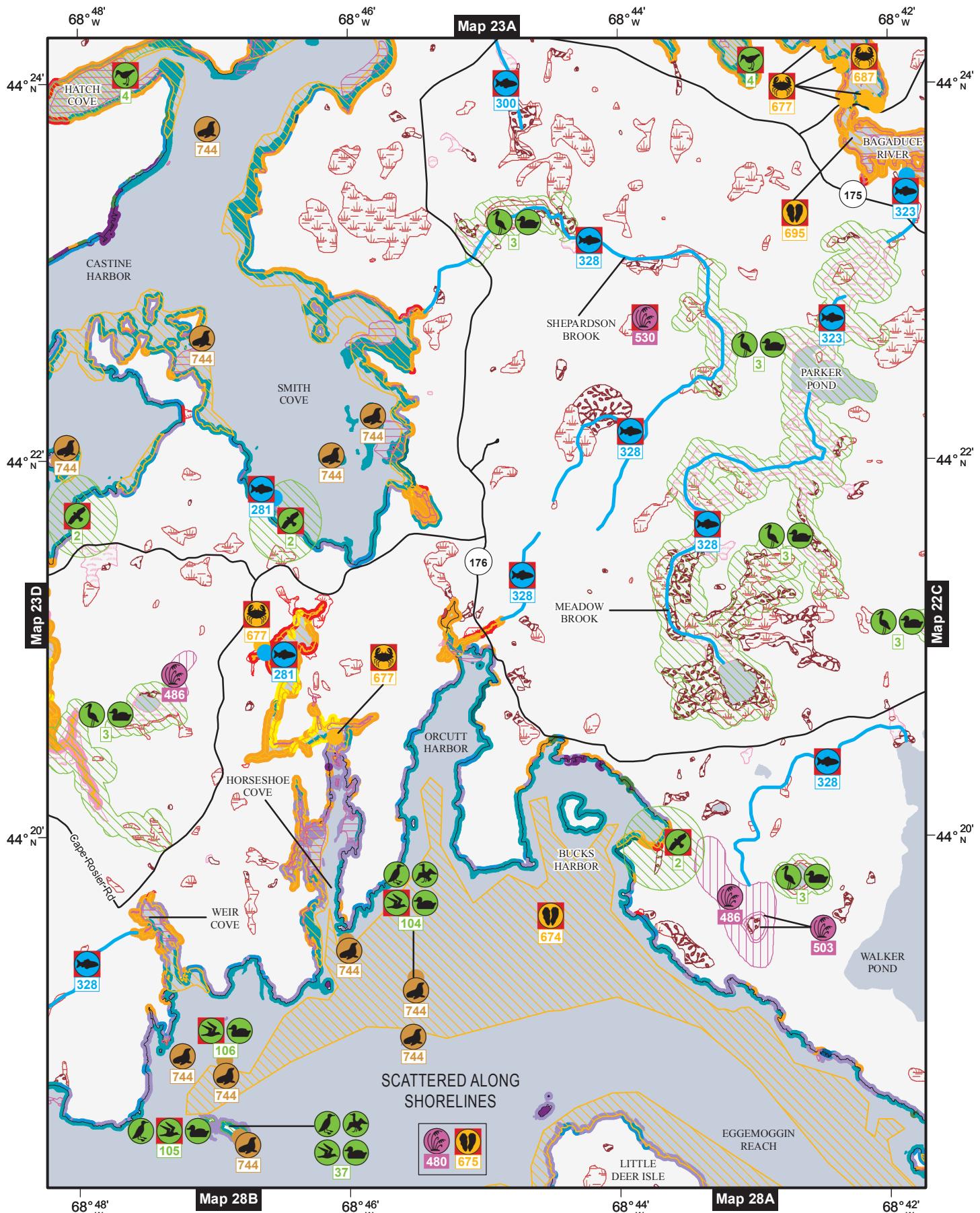
ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	17.62	0.03	
10B	Freshwater Marshes	20.35	0.03	
10C	Swamps	181.97	0.28	
10D	Scrub and Shrub Wetlands	73.92	0.12	
9A	Sheltered Tidal Flats	21.73	0.03	
7	Exposed Tidal Flats	7.51	0.01	
5	Mixed Sand and Gravel Beaches	433.41	0.68	

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	3,952,49	2.46	5%	
10B	Freshwater Marshes	643,20	0.40	1%	
9A	Sheltered Tidal Flats	1,460,71	0.91	2%	
9B	Vegetated Low Banks	10,020,11	6.23	12%	
7	Exposed Tidal Flats	1,414,12	0.88	2%	
6A	Gravel Beaches	2,987,49	1.86	4%	
6B	Riprap	3,101,10	1.93	4%	
5	Mixed Sand and Gravel Beaches	36,813,91	22.88	45%	
4	Coarse Grained Sand Beaches	17,427,08	10.83	21%	
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,605,32	1.00	2%	
2B	Exposed Scars and Steep Slopes (Clay)	178,15	0.11	< 1%	
1B	Exposed, Solid Man-Made Structures	1,926,96	1.20	2%	
		Total ESI Shoreline:	81,530.64	Total ESI Shoreline:	50.66
		Total Shoreline:	49,740.88	Total Shoreline:	30.91

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](http://response.restoration.noaa.gov)





## Map 23C Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

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

#### BIRDS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<i>Monthly Presence</i>												Molt
				C/T	-	-	J	F	M	A	M	J	J	A	S	O	N	D	
2	Raptor	Bald eagle	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Shorebird	American golden-plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
37	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### BIRDSS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence												
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt						
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
104	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
105	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
106	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-

### FISH

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence												
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults					
281	Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
300	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
323	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence												
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults					
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
503	Wetland	Forested wetland	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
530	Plant	Mountain laurel	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults						
674	Bivalve	Sea scallop	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
675	Bivalve	Softshell clam	Spawning Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
677	Crab	Horseshoe crab	Spawning Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
687	Crab	Horseshoe crab	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
695	Bivalve	Eastern oyster	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Bivalve	European flat oyster	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### MARINE MAMMALS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>						
		Harbor seal	Haul Out	S F	Concentration	J F M A M J J A S O N D	Mating	Calving	Pupping	Molt	
<b>WIDESPREAD IN MAPPED AREA (&gt; 10 SQUARE KILOMETERS)</b>											

### BIRDS

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>						
		T/-	S F	Concentration	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	-	-	-	-	-	-	-
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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>						
		T/-	S F	Concentration	J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	Apr-Dec
	American eel	Migration	-C	-	-	-	-	-	-	Mar-Oct
	Atlantic sturgeon	General Distribution	-T	T	Rare	-	-	-	-	Jan-Dec
	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	Jan-Dec
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	Jan-May
	Shortnose sturgeon	General Distribution	E/E	E	Rare	-	-	-	-	Jan-Dec
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	Jan-Dec
	Striped bass	Concentration Area	High	-	-	-	-	-	-	Jan-Dec
	Striped bass	Migration	-	-	-	-	-	-	-	Jan-Dec
	Black Seabass	Concentration Area	Low	-	-	-	-	-	-	Jan-Dec
	Rainbow smelt	Migration	-C	-	-	-	-	-	-	Jan-Dec
	Atlantic tomcod	Migration	-	-	-	Dec-Feb	-	-	-	Jan-Dec

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

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

**BIRDS**

		Subelement	Species	Monthly Presence												Molt
				J	F	M	A	M	J	J	A	S	O	N	D	
	Alcid	Black guillemot														-
		Dovekie														-
	Thick-billed murre															-
	Diving	D. crested cormorant														-
		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												Adults
				J	F	M	A	M	J	J	A	S	O	N	D	
	Estuarine Nursery	Atlantic herring														Apr-Dec
		Winter flounder														-
	Marine Benthic	American plaice														-
		American sand lance														-
		Atlantic cod														-
		Atlantic Wolffish														-
	Cunner															-
	Haddock															-
	Longhorn sculpin															-
	Northern searobin															-
	Ocean pout															-
	Pollock															-
	Red hake															-
	Rock gunnel															-
	Shorthorn sculpin															-
	Silver hake															-
	Skates															-
	White hake															-
	Yellowtail flounder															-
	Marine Pelagic	Atlantic mackerel														-
	Butterfish															-

## **INVERTEBRATES**

<b>Subelement</b>	<b>Species</b>	<i>Monthly Presence</i>												<b>Adults</b>
		J	F	M	A	M	J	J	A	S	O	N	D	
Bivalve	Northern quahog	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Crab	Atlantic rock crab	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Blue crab	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Jonah crab	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Echinoderm	Green urchin	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Lobster	American lobster	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

## **MARINE MAMMALS**

<b>Subelement</b>	<b>Species</b>	<i>Monthly Presence</i>												<b>Molt</b>
		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**

<b>Subelement</b>	<b>Species</b>	<i>Monthly Presence</i>												<b>Pupping</b>	<b>Molt</b>
		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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		<i>Habitat Classification</i>	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	43.03	0.07
10B		Freshwater Marshes	413.63	0.65
10C		Swamps	826.28	1.29
10D		Scrub and Shrub Wetlands	385.94	0.60
9A		Sheltered Tidal Flats	15.26	0.02
7		Exposed Tidal Flats	2.37	0.00
5		Mixed Sand and Gravel Beaches	485.40	0.76
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	72.36	0.11

ESI SHORELINE HABITAT TYPES		<i>Shoreline Habitat Classification</i>	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10A		Salt and Brackish Water Marshes	4,342.24	2.70	3%
10B		Freshwater Marshes	2,801.40	1.74	2%
10C		Swamps	88.94	0.06	<1%
10D		Scrub and Shrub Wetlands	24.57	0.02	<1%
9A		Sheltered Tidal Flats	1,338.98	0.83	1%
9B		Vegetated Low Banks	34,526.39	21.45	20%
8A		Sheltered, Impermeable, Rocky Shores	3,262.93	2.03	2%
8B		Sheltered, Solid Man-Made Structures	70.33	0.04	<1%
8D		Sheltered, Rocky, Rubble Shores	58.20	0.04	<1%
7		Exposed Tidal Flats	566.83	0.35	<1%
6A		Gravel Beaches	1,617.94	1.01	1%
6B		Riprap	1,224.34	0.76	1%
5		Mixed Sand and Gravel Beaches	65,095.98	40.45	38%
4		Coarse Grained Sand Beaches	11,667.37	7.25	7%
3A		Fine to Medium Grained Sand Beaches	174.91	0.11	<1%
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	41,078.24	25.52	24%
1A		Exposed, Rocky Shores	1,089.90	0.68	1%
1B		Exposed, Solid Man-Made Structures	2,441.03	1.52	1%
Total ESI Shoreline:		171,470.52	Total ESI Shoreline:	106.55	
Total Shoreline:		108,266.76	Total Shoreline:	67.27	

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.noaa.gov](http://response.noaa.gov)





68° 54' W

68° 52' W

Map 23B

68° 50' W

44° 24' N

44° 24' N

PENOBCOT BAY

TURTLE HEAD COVE

ISLESBORO ISLAND

Map 24C

Main Rd

SCATTERED ALONG SHORELINE  
OF WADSWORTH COVE AND  
ADJACENT WATERWAYS

HOLBROOK ISLAND

Map 23C

68° 50' W

Map 28B

1 Miles

0

Not for Navigation

0

1 Kilometers

1:50,000



SEAL HARBOR

ISLESBORO HARBOR

68° 54' W

Map 29A

68° 52' W

SEE BACK OF MAP

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

Map 23D  
Midcoast Maine

## Map 23D Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

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

#### BIRDS

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

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	Jan-Dec
366	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	Oct-Apr
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Diadromous	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	Mar-Oct
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	Jan-Dec
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	Oct-Apr
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-
530	Plant	Mountain laurel	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
677	Crab	Horseshoe crab	Spawning Area	-C	-	-	-	-	-	-	-	-	-	-	Jan-Dec
679	Bivalve	Atl. jackknife clam	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
690	Bivalve	Atlantic surfclam	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

## MARINE MAMMALS

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

## REPTILES & AMPHIBIANS

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

## INVERTEBRATES

Subelement	Species	Mapping Qualifier	Monthly Presence												Adults
			J	F	M	A	M	J	J	A	S	O	N	D	
Crab	Horseshoe crab	General Distribution	-C	C	Low										Jan-Dec
	Shrimp	General Distribution	-C	C	Low										Dec-Apr

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

Subelement	Species	Mapping Qualifier	Monthly Presence												Adults
			J	F	M	A	M	J	J	A	S	O	N	D	
Alcid	Black guillemot	-/-	T												-
	Dovekie	-/-													-
	Thick-billed murre	-/-													-
	D. crested cormorant	-/-													-
Diving	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	Monthly Presence												Adults
			J	F	M	A	M	J	J	A	S	O	N	D	
Diadromous	Striped bass	-/-	T												Jan-Dec
	Atlantic herring	-/-													Apr-Dec
	Black Seabass	-/-													Jan-Dec
	Winter flounder	-/-													-
	Winter flounder	-/-													Mar-Oct

## FISH (continued)

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Dolphin	Harbor porpoise	-	-	-	-	-	-	-	-	-	-	-	-
Pinniped	Gray seal	-	-	-	-	-	-	-	-	-	-	-	-
	Habor 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](http://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	47.29	0.07
10B	Freshwater Marshes	23.09	0.04
10C	Swamps	550.41	0.86
10D	Scrub and Shrub Wetlands	52.94	0.08
9A	Sheltered Tidal Flats	5.22	0.01
7	Exposed Tidal Flats	165.43	0.26
5	Mixed Sand and Gravel Beaches	175.81	0.27
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	141.07	0.22

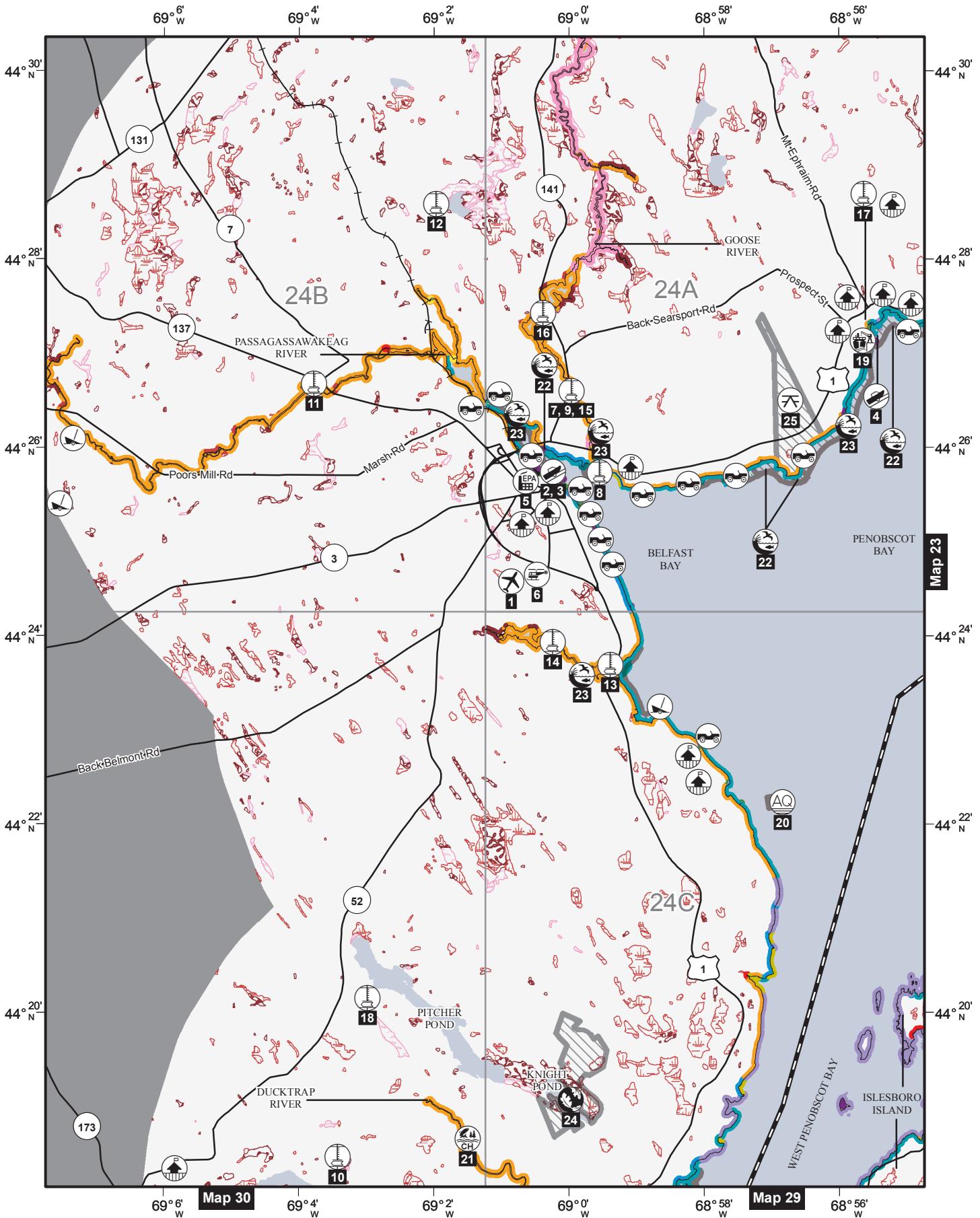
### ESI SHORELINE HABITAT TYPES

ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
	Total ESI Shoreline:	0.00	Total ESI Shoreline:	0.00
	Total Shoreline:	0.00	Total Shoreline:	0.00

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](http://response.restoration.noaa.gov)





**Map 24**  
Midcoast Maine



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

## Map 24 Midcoast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)				
Map ID	Type	Name	Contact	Phone
1	AIRPORT	BELFAST MUNICIPAL AIRPORT	JOSEPH SLOCUM	207-338-3370
2	BOAT RAMP	BELFAST BAY BOAT RAMP	BELFAST	
3	BOAT RAMP	PUBLIC LANDING 2	BELFAST	
4	BOAT RAMP	SEARSFORT HARBOR BOAT RAMP	SEARSFORT	
5	EPA FACILITY	PENOBSCOT MCCRUM, LLC	BENJAMIN L. MAGRO	207-338-4360
6	HELIPORT	VICTOR	SHERMAN + CO	207-785-4521
7	LOCK AND DAM	BEHIND THE MILL DAM	FREDERICK YOUNG	
8	LOCK AND DAM	BUD YOUNG'S DAM	SHERMAN + CO	
9	LOCK AND DAM	CENTRAL MAINE DAM	UNKNOWN	
10	LOCK AND DAM	COLEMAN POND DAM	JOSEPH JOHNSON	
11	LOCK AND DAM	HOLMES MILL DAM	UNKNOWN	
12	LOCK AND DAM	HURDS POND DAM	BELFAST/WATER DISTRICT	
13	LOCK AND DAM	LITTLE RIVER LOWER DAM	BELFAST/WATER DISTRICT	
14	LOCK AND DAM	LITTLE RIVER UPPER DAM	SHERMAN + CO	
15	LOCK AND DAM	MASON POND DAM	SHERMAN + CO	
16	LOCK AND DAM	MASONS DAM	TOWN OF SEARSFORT	
17	LOCK AND DAM	MILL BROOK DAM 1	PITCHER POND ASSN	
18	LOCK AND DAM	PITCHER POND DAM		
19	PORT	SEARSFORT, ME - C0112		
DISPLAYED ON MAP (POLYGONS)				
Map ID	Type	Name	Contact	Phone
20	AQUACULTURE	PEN BB - BELFAST BAY, PENOBCOT BAY	BAYSIDE MUSSEL FARM	207-563-8085
21	CRITICAL HABITAT	ATLANTIC SALMON CRITICAL HABITAT		
22	MANAGEMENT AREA	BLUE MUSSEL - 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	ST. CLAIR PRESERVE	THE NATURE CONSERVANCY	207-729-5181
25	PARK	MOOSE POINT STATE PARK	MAINE DEPARTMENT OF CONSERVATION	207-548-2882
ALSO PRESENT IN MAPPED AREA (POLYGONS)				
Type	Name	Contact	Phone	
STATE PROTECTED AREA	DUCKTRAP RIVER WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE	207-547-5300	
STATE PROTECTED AREA	FLAT ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE		
STATE PROTECTED AREA	HURDS POND WMA	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE		
STATE PROTECTED AREA	KNIGHT POND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE		
JURISDICTIONS				
COUNTY:	WALDO	REGION I		
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND			
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT			
FEMA:				
EPA:				

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10A	Salt and Brackish Water Marshes	4.13
10B	Freshwater Marshes	904.16
10C	Swamps	2,618.57
10D	Scrub and Shrub Wetlands	1,276.90
9A	Sheltered Tidal Flats	15.52
7	Exposed Tidal Flats	0.02
5	Mixed Sand and Gravel Beaches	5.63
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	282.00
		88.90

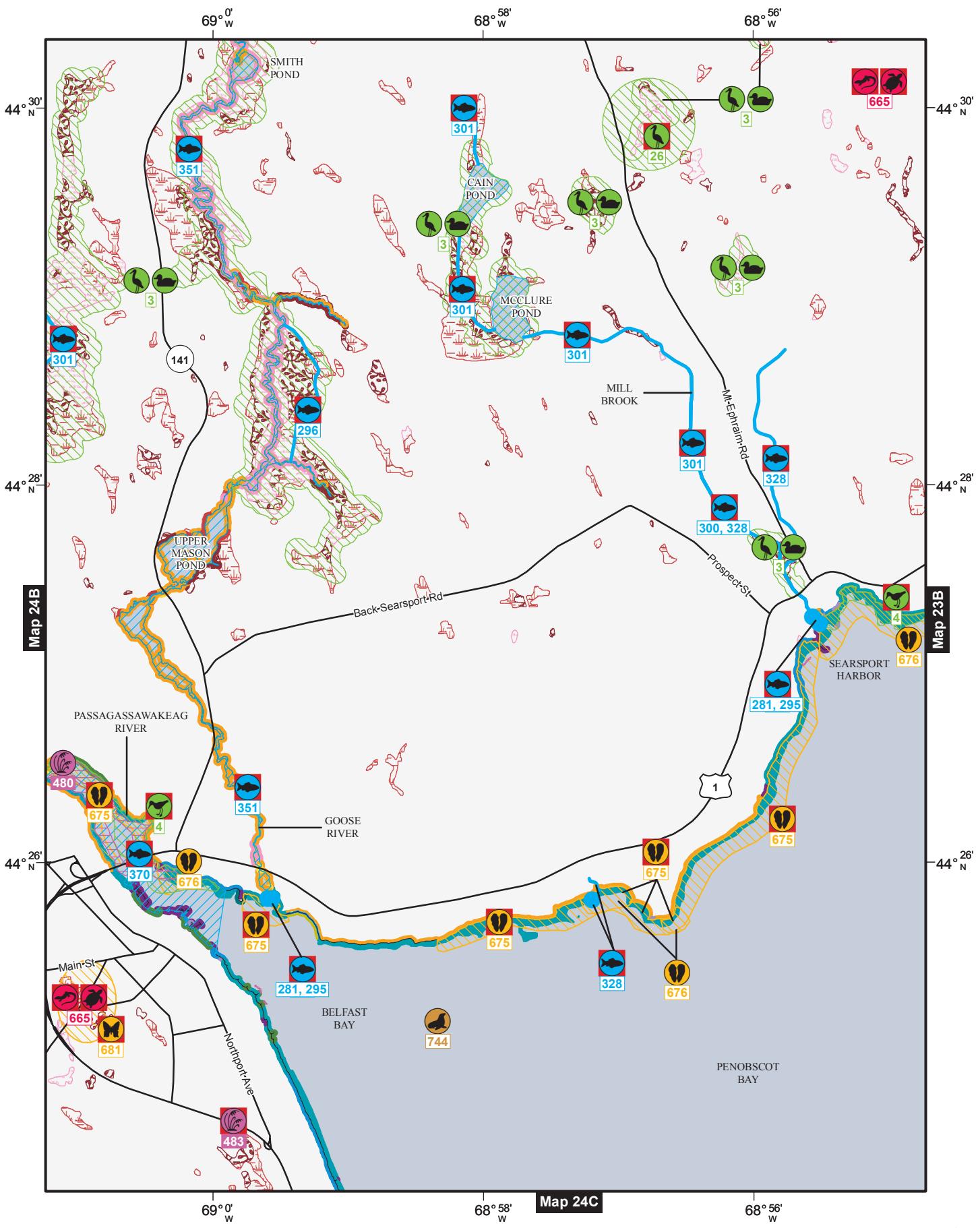
ESI SHORELINE HABITAT TYPES				
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	821.55	0.51	<1%
10B	Freshwater Marshes	14,385.21	8.94	8%
10C	Swamps	4,654.58	2.89	3%
10D	Scrub and Shrub Wetlands	8,167.65	5.08	4%
9A	Sheltered Tidal Flats	2,674.63	1.66	1%
9B	Vegetated Low Banks	89,711.33	55.74	49%
8B	Sheltered, Solid Man-Made Structures	771.35	0.48	<1%
8C	Riprap	245.16	0.15	<1%
7	Exposed Tidal Flats	3,215.97	2.00	2%
6B	Riprap	1,919.48	1.19	1%
5	Mixed Sand and Gravel Beaches	28,952.96	17.99	16%
4	Coarse Grained Sand Beaches	6,580.33	4.09	4%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	16,637.68	10.34	9%
1A	Exposed, Rocky Shores	739.68	0.46	<1%
1B	Exposed, Solid Man-Made Structures	2,749.08	1.71	2%
Total ESI Shoreline:	182,226.63	Total ESI Shoreline:	113.23	
Total Shoreline:	135,921.58	Total Shoreline:	84.46	

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](http://response.restoration.noaa.gov)







## Map 24A Midcoast Maine

### 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		S	F	Concentration	Monthly Presence											
		Harvest Area	High Ecological Value				J	F	M	A	M	J	J	A	S	O	N	D
Softbottom	Worm bed						-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass						-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier		S	F	Concentration	Monthly Presence											
			Vulnerable Occurrence	Vulnerable Occurrence				J	F	M	A	M	J	J	A	S	O	N	D
3	Wading	Wading birds					-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl					-	-	-	-	-	-	-	-	-	-	-	-	-
4	Shorebird	American golden-plover					Concentration Area	C/-	Foraging										
	Shorebird	American oystercatcher					Concentration Area	C/-	Foraging										
	Shorebird	Baird's sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	BB sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Black-bellied plover					Concentration Area	C/-	Foraging										
	Shorebird	Dunlin					Concentration Area	C/-	Foraging										
	Shorebird	Greater yellowlegs					Concentration Area	C/-	Foraging										
	Shorebird	Hudsonian godwit					Concentration Area	C/-	Foraging										
	Shorebird	Least sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Lesser yellowlegs					Concentration Area	C/-	Foraging										
	Shorebird	Pectoral sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Red Knot					Concentration Area	C/-	Foraging										
	Shorebird	Ruddy turnstone					Concentration Area	C/-	Foraging										
	Shorebird	Sanderling					Concentration Area	C/-	Foraging										
	Shorebird	Semipalmated plover					Concentration Area	C/-	Foraging										
	Shorebird	Semipalmated sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Short-billed dowitcher					Concentration Area	C/-	Foraging										
	Shorebird	Solitary sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Stilt sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Western sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Whimbrel					Concentration Area	C/-	Foraging										
	Shorebird	White-rumped sandpiper					Concentration Area	C/-	Foraging										
	Shorebird	Willet					Concentration Area	C/-	Foraging										
26	Wading	Great blue heron					Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-

## FISH

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

## HABITATS & RARE PLANTS

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

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	Very Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	May-Jun
	Amphibian	Jefferson salamander	Vulnerable Occurrence	C/C	Low	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	Apr-Jun	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	C/C	Common	Common	-	-	-	-	-	-	-	-	-	-	-	-	Mar-May	Apr-Jun	Apr-Jun
	Amphibian	Spotted salamander	Concentration Area	T/T	Very Low	Common	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jun-Sep	Jun-Sep
	Amphibian	Wood Frog	Concentration Area	C/C	Very Low	Common	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	Apr-Jun	Apr-Jun
Turtle	Spotted turtle	Vulnerable Occurrence	May-Jul	Aug-Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec	Jan-Dec
Turtle	Wood turtle	Vulnerable Occurrence	May-Jul	Aug-Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Nov	Jan-Nov

### INVERTEBRATES

Map ID	Subelement	Species	Monthly Presence												
			ME/NH			S F			Concentration			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	Eggs	Larvae	Juveniles	Adults
676	Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	May-Nov	May-Nov	May-Nov	Eggs	Larvae	Juveniles	Jan-Dec
681	Insect	Rare insect	Vulnerable Occurrence	C/-	-	-	-	-	May-Jul	-	-	Eggs	Larvae	Juveniles	Jan-Dec

### MARINE MAMMALS

Map ID	Subelement	Species	Monthly Presence												
			ME/NH			S F			Concentration			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	Monthly Presence												
		ME/NH			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	-	-	-	-	-	May-Oct	-	-	-	-	-
	Common tern	General Distribution	C/T	-	-	-	-	-	May-Aug	-	-	-	-	-
	Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-

### FISH

Subelement	Species	Monthly Presence												
		ME/NH			S F			Concentration			J F M A M J J A S O N D			
Diadromous	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	High	High	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
Estuarine Nursery	Black Seabass	Concentration Area	Low	Low	Low	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec

### REPTILES & AMPHIBIANS

Subelement	Species	Monthly Presence												
		ME/NH			S F			Concentration			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	Monthly Presence												
		ME/NH			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	May-Jul	Eggs	Larvae	Juveniles	Adults
													Jan-Dec	Jan-Dec

**BIRDS**

Monthly Presence												Molt
J	F	M	A	M	J	J	A	S	O	N	D	
Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-
Dovekie	-	-	-	-	-	-	-	-	-	-	-	-
Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-
D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-
Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-
Red-necked grebe	-	-	-	-	-	-	-	-	-	-	-	-
Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-
G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-
Herring gull	-	-	-	-	-	-	-	-	-	-	-	-
Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-
Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-

**FISH**

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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												Pupping
		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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	0.09	0.00
10B		Freshwater Marshes	388.44	0.61
10C		Swamps	648.20	1.01
10D		Scrub and Shrub Wetlands	417.53	0.65
5		Mixed Sand and Gravel Beaches	184.31	0.29
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	0.85	0.00

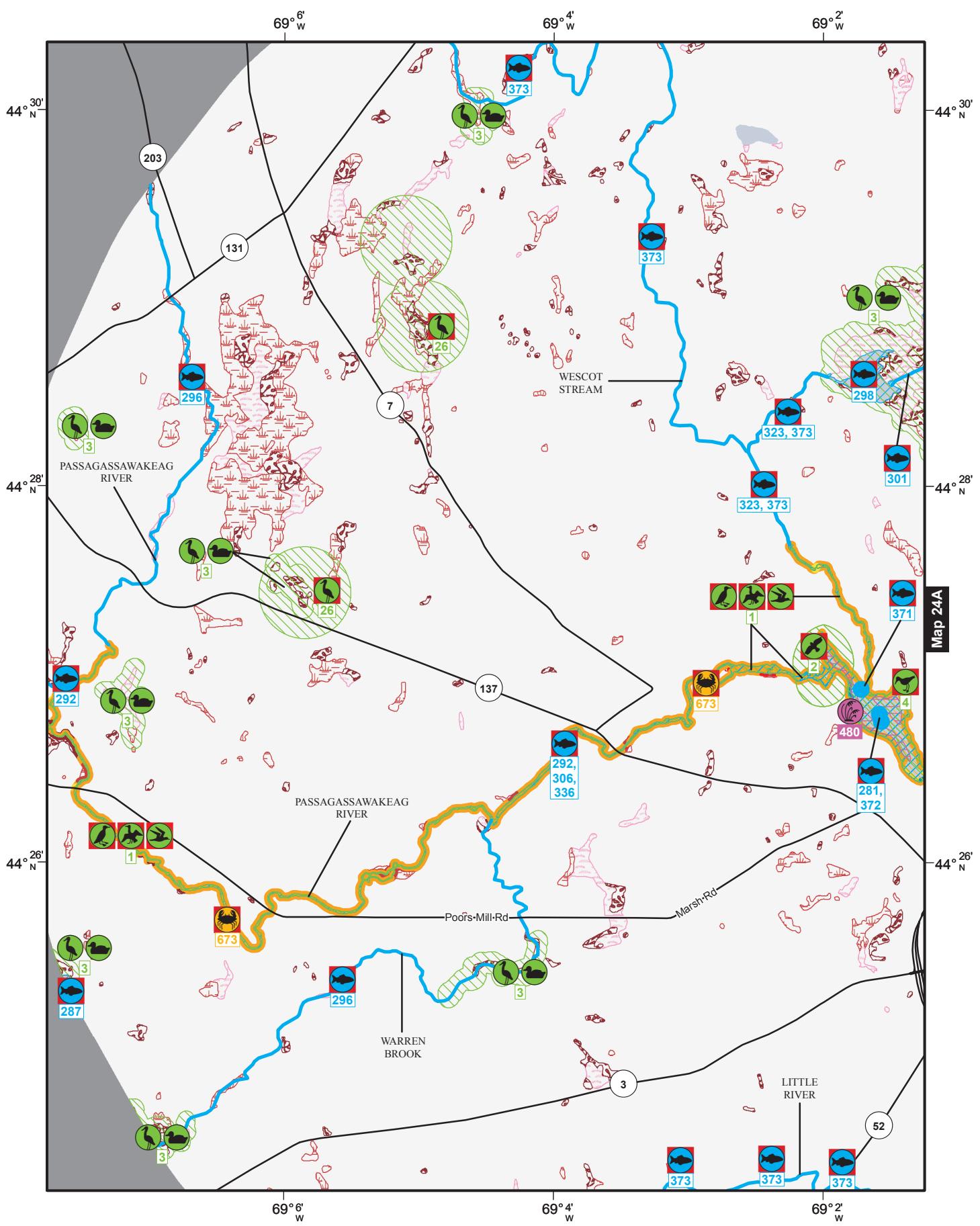
ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10A		Salt and Brackish Water Marshes	50.12	0.03	< 1%
10B		Freshwater Marshes	14,396.55	8.95	20%
10C		Swamps	2,198.42	1.37	3%
10D		Scrub and Shrub Wetlands	4,735.90	2.94	6%
9B		Vegetated Low Banks	26,530.67	16.49	36%
8B		Sheltered, Solid Man-Made Structures	253.20	0.16	< 1%
7		Exposed Tidal Flats	471.85	0.29	1%
6B		Riprap	1,648.74	1.02	2%
5		Mixed Sand and Gravel Beaches	15,780.42	9.81	22%
4		Coarse Grained Sand Beaches	3,847.82	2.39	5%
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	389.89	0.24	1%
1B		Exposed, Solid Man-Made Structures	2,599.65	1.62	4%
Total ESI Shoreline:		72,903.21	Total ESI Shoreline:	45.30	
Total Shoreline:		53,426.78	Total Shoreline:	33.20	

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](http://response.restoration.noaa.gov)







**Map 24B**  
Midcoast Maine



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 24B Midcoast Maine

### 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	Harvest Area	M/E/NH	S	F	Concentration	J F M A M J J A S O N D	Monthly Presence
Softbottom	Worm bed	*	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier	M/E/NH	S	F	Concentration	J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt
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	-	-	-	-	-	-	-
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	C/-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/-	T	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	-/C	-	-	-	-	-	-	-	-
26	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence															
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
281	Diadromous	American eel	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Adults
287	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
292	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
296	Diadromous	American eel	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
298	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
301	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
306	Diadromous	Atlantic salmon	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
323	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May
336	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
371	Diadromous	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul
372	Diadromous	Alewife	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
373	Diadromous	American eel	Migration	-C	E	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Midcoast Maine: Map 24B

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence														
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
480	Wetland	Tidal Marsh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<i>Monthly Presence</i>														
		Horseshoe crab	General Distribution	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
			Low	-C	-C	Low	J	F	M	A	M	J	J	A	S	O	N	D
<b>ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)</b>																		

**BIRDS**

				<i>Monthly Presence</i>													
				J	F	M	A	M	J	J	A	S	O	N	D		
				J	F	M	A	M	J	J	A	S	O	N	D		
		Alcid	Black guillemot Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Diving	Thick-billed murre D. crested cormorant Horned grebe Red-necked grebe Red-throated loon G. black-backed gull Herring gull Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Gull/Tern	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Pelagic															-

**INVERTEBRATES**

				<i>Monthly Presence</i>													
				J	F	M	A	M	J	J	A	S	O	N	D		
				J	F	M	A	M	J	J	A	S	O	N	D		
		Bivalve	Northern quahog	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Crab	Atlantic rock crab Blue crab	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Echinoderm	Jonah crab Green urchin	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Lobster	American lobster	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**MARINE MAMMALS**

				<i>Monthly Presence</i>													
				J	F	M	A	M	J	J	A	S	O	N	D		
				J	F	M	A	M	J	J	A	S	O	N	D		
		Pinniped	Harbor seal	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**TERRESTRIAL MAMMALS**

				<i>Monthly Presence</i>													
				J	F	M	A	M	J	J	A	S	O	N	D		
				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.noaa.gov](http://response.noaa.gov)

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9A	Sheltered Tidal Flats
	5	Mixed Sand and Gravel Beaches

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9A	Sheltered Tidal Flats
	9B	Vegetated Low Banks
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Ripples
	5	Mixed Sand and Gravel Beaches

Length (Meters)      % of ESI Shoreline

373.60	0.23	1%
2,358.18	1.47	5%
1,761.18	1.09	4%
2,674.63	1.66	6%
37,792.82	23.48	82%
219.27	0.14	< 1%
245.16	0.15	1%
442.44	0.27	1%

Length (Miles)      % of ESI Shoreline

0.23	0.00	1%
1.47	0.52	5%
1.09	1.13	4%
1.66	0.65	6%
23.48	0.02	82%
0.14	0.00	< 1%
0.15	0.02	1%
0.27	0.00	1%

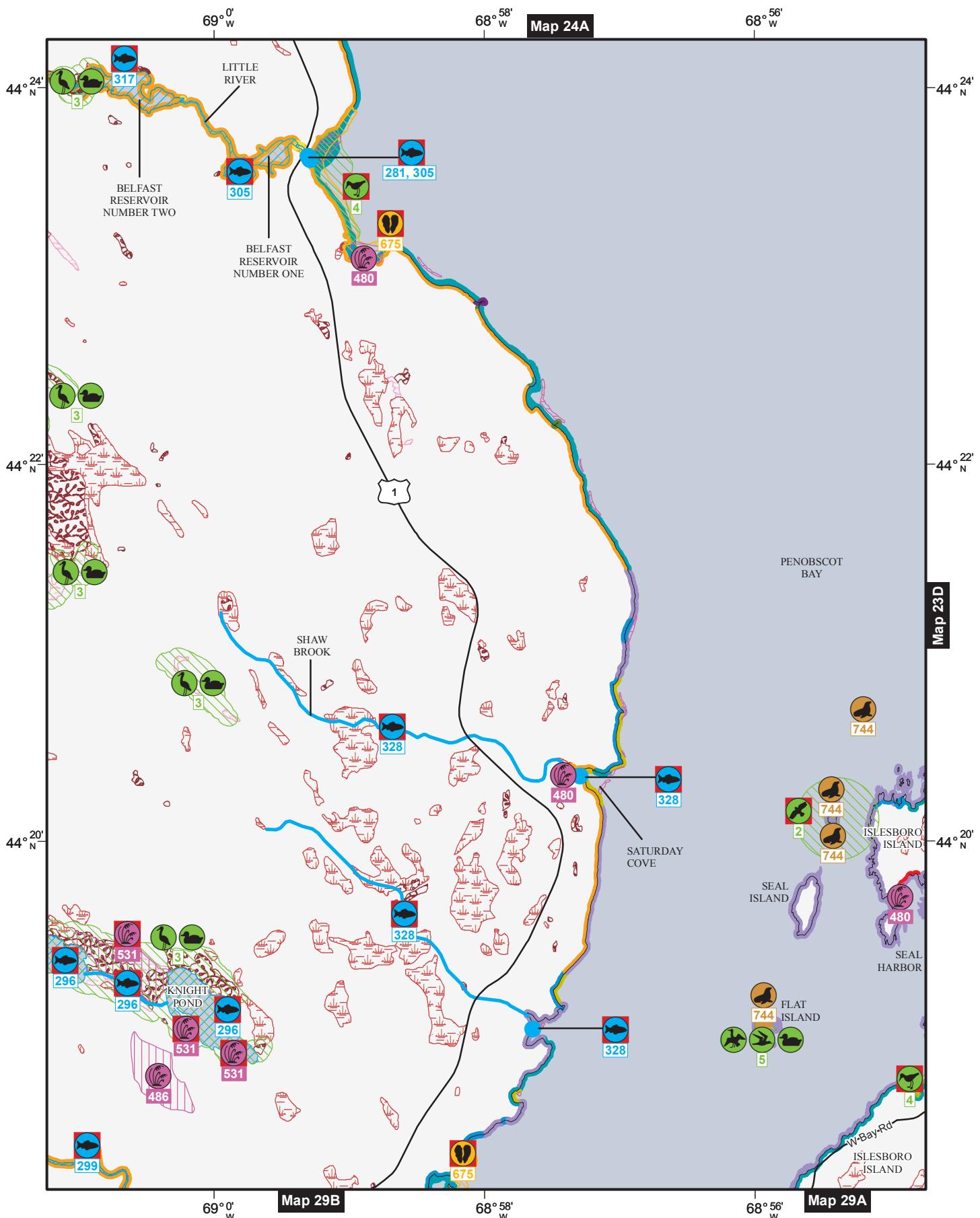
Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats may exceed the length of the mapped shoreline, and the percent of ESI shoreline values will sum to greater than 100%.

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





Map 24A



**Map 24C**  
Midcoast Maine



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 24C Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>S</b>	<b>F</b>	<b>Concentration</b>	<b>Monthly Presence</b>										
	Softbottom	Worm bed	Harvest Area	-	-	High	J	F	M	A	M	J	J	A	S	O	N
	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

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

## FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
281	Diadromous	American eel	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
296	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jul	Apr-Dec
299	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Diadromous	American eel	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	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-May
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr
305	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr
317	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-Dec	Apr-Jul
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
531	Plant	Atlantic white cedar	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct	Jan-Dec
744	Pinniped	Harbor seal	Haul Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Matting	Calving	Pupping	Molt
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
744	Pinniped	Harbor seal	Haul Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)**

**BIRDS**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Common tern	General Distribution	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**FISH**

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

**REPTILES & AMPHIBIANS**

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

**INVERTEBRATES**

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

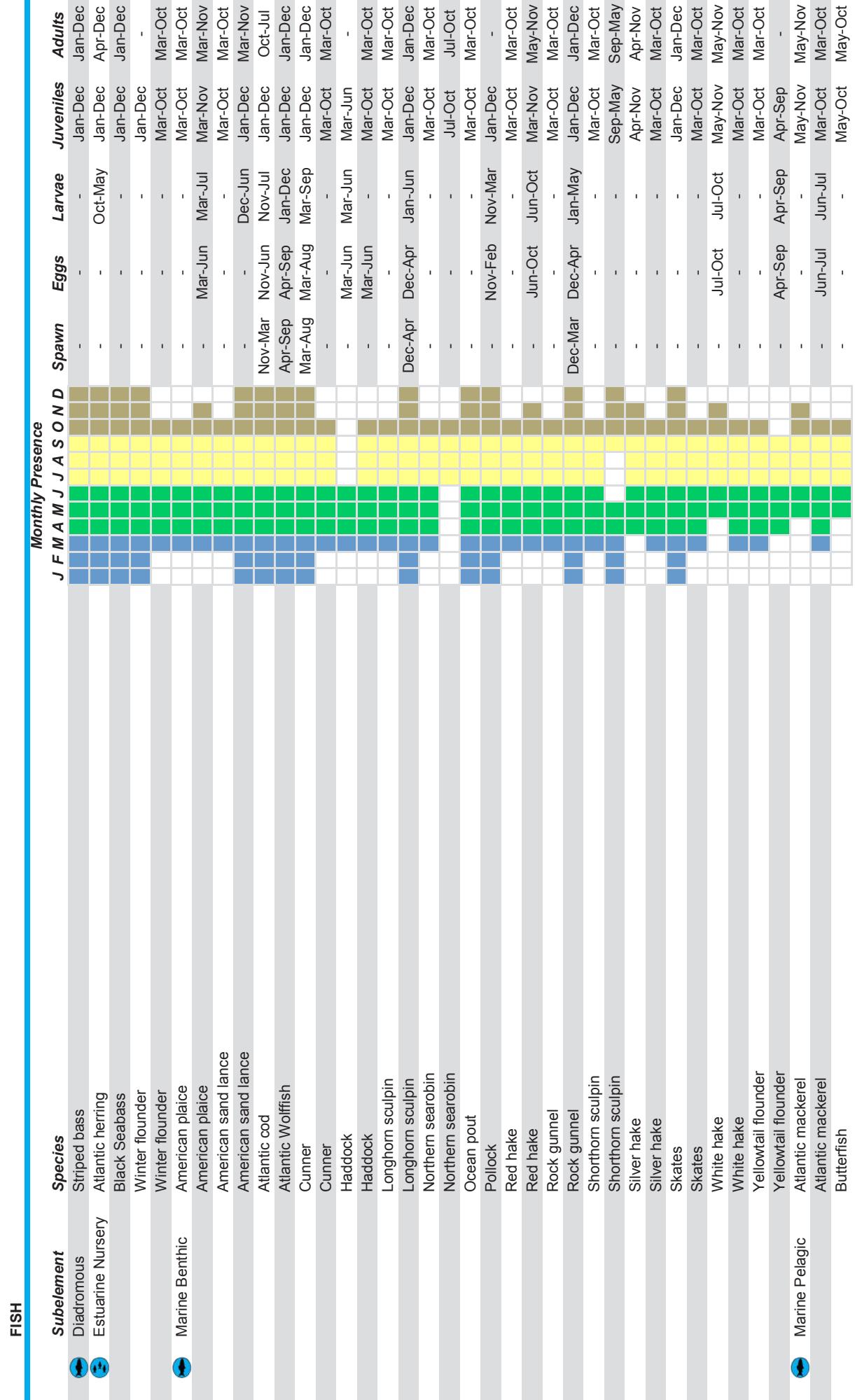
ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt								
Alcid	Black guillemot	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Dovekie	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thick-billed murre	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	D. crested cormorant	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Horned grebe	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Red-necked grebe	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Red-throated loon	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	G. black-backed gull	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### BIRD(S) (continued)

Subelement	Species	Monthly Presence												Molt
		J	F	M	A	M	J	J	A	S	O	N	D	
	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ring-billed gull	-	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-

### FISH



## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence											
		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											
		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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	7	Exposed Tidal Flats
	5	Mixed Sand and Gravel Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9B	Vegetated Low Banks
	8B	Sheltered, Solid Man-Made Structures
	7	Exposed Tidal Flats
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1A	Exposed, Rocky Shores
	1B	Exposed, Solid Man-Made Structures

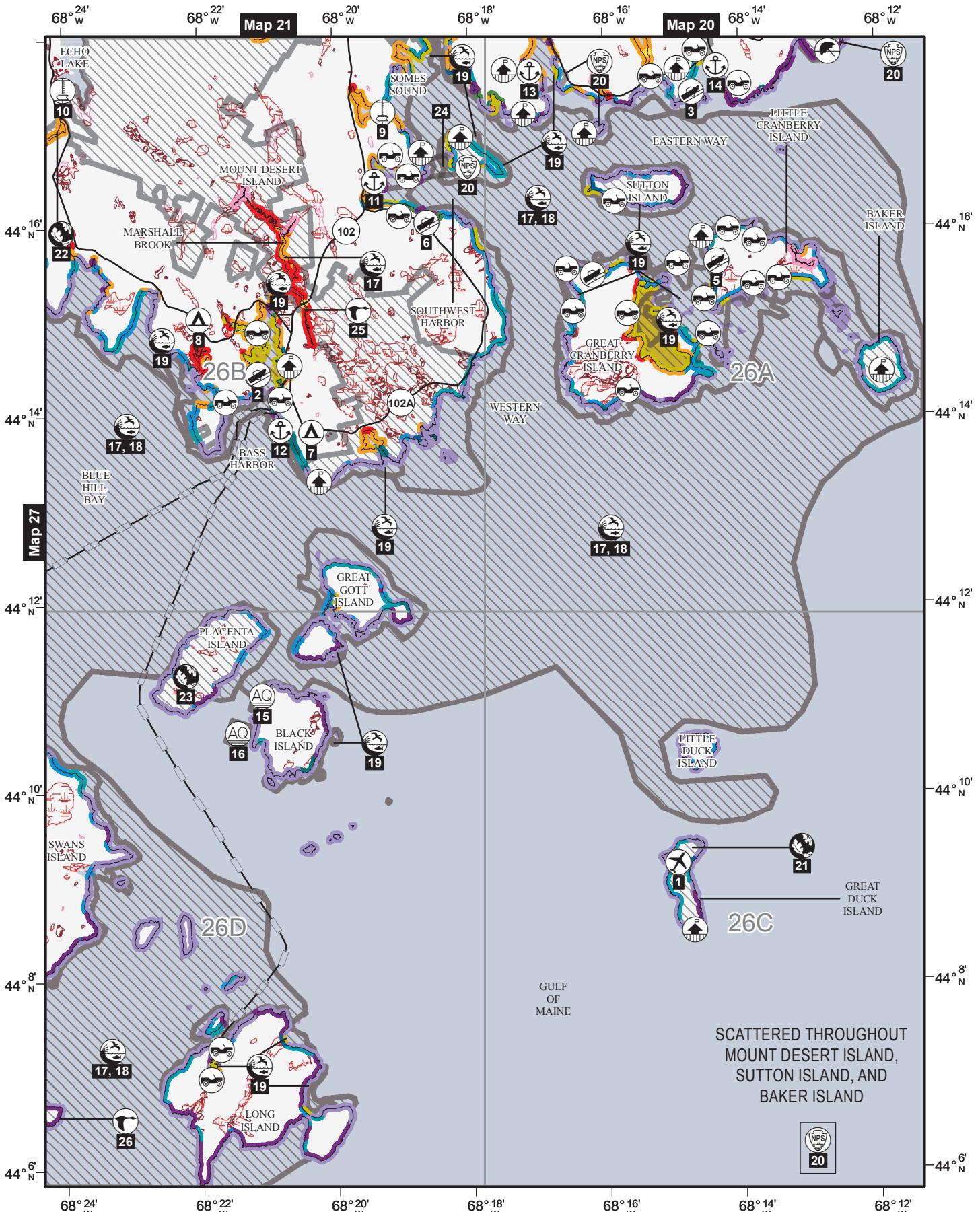
Total ESI Shoreline: 59,241.18      Total ESI Shoreline: 36.81  
 Total Shoreline: 39,914.05      Total Shoreline: 24.80

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](http://response.restoration.noaa.gov)







**Map 26**  
Downeast Maine



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

## Map 26 Downeast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	AIRPORT	LANDING STRIP 1
2	BOAT RAMP	BASS HARBOR BOAT RAMP
3	BOAT RAMP	DODGE POINT ROAD RAMP
4	BOAT RAMP	GREAT CRANBERRY TOWN LANDING
5	BOAT RAMP	ISLESFORD LANDING
6	BOAT RAMP	SOUTHWEST HARBOR BOAT RAMP
7	CAMPGROUND	BASS HARBOR CAMPGROUND
8	CAMPGROUND	QUIETSIDE CAMPGROUND
9	LOCK AND DAM	NORWOOD COVE DAM
10	LOCK AND DAM	SEAL COVE DAM
11	MARINA	DYSARTS GREAT HARBOR MARINA
12	MARINA	MORRIS YACHTS
13	MARINA	NORTHEAST HARBOR MARINA
14	MARINA	SEAL HARBOR YACHT CLUB

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
15	AQUACULTURE	SWAN BI - BLACK ISLAND
16	AQUACULTURE	SWAN BIS - BLACK ISLAND
17	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA
18	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA
19	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA
20	NATIONAL PARK	ACADIA NATIONAL PARK
21	NATURE CONSERVANCY	GREAT DUCK ISLAND
22	NATURE CONSERVANCY	KETTERLINUS PRESERVE
23	NATURE CONSERVANCY	PLACENTIA ISLAND PRESERVE
24	PIPELINE	CABLE AND PIPELINE 8
25	WILDLIFE REFUGE	MOUNT AGAMENTICUS WILDLIFE MANAGEMENT AREA
26	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 1

JURISDICTIONS		
County:	FEMA:	Region 1
COAST GUARD:		
USACE:		
	EPA:	Region 1

## SHORELINE RESOURCES

### ESI POLYGON HABITAT TYPES

ESI Rank	Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes	164.16	0.26
10B	Freshwater Marshes	255.40	0.40
10C	Swamps	1,430.29	2.23
10D	Scrub and Shrub Wetlands	564.95	0.88
7	Exposed Tidal Flats	450.59	0.70
5	Mixed Sand and Gravel Beaches	58.76	0.09
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,358.32	2.12

### ESI SHORELINE HABITAT TYPES

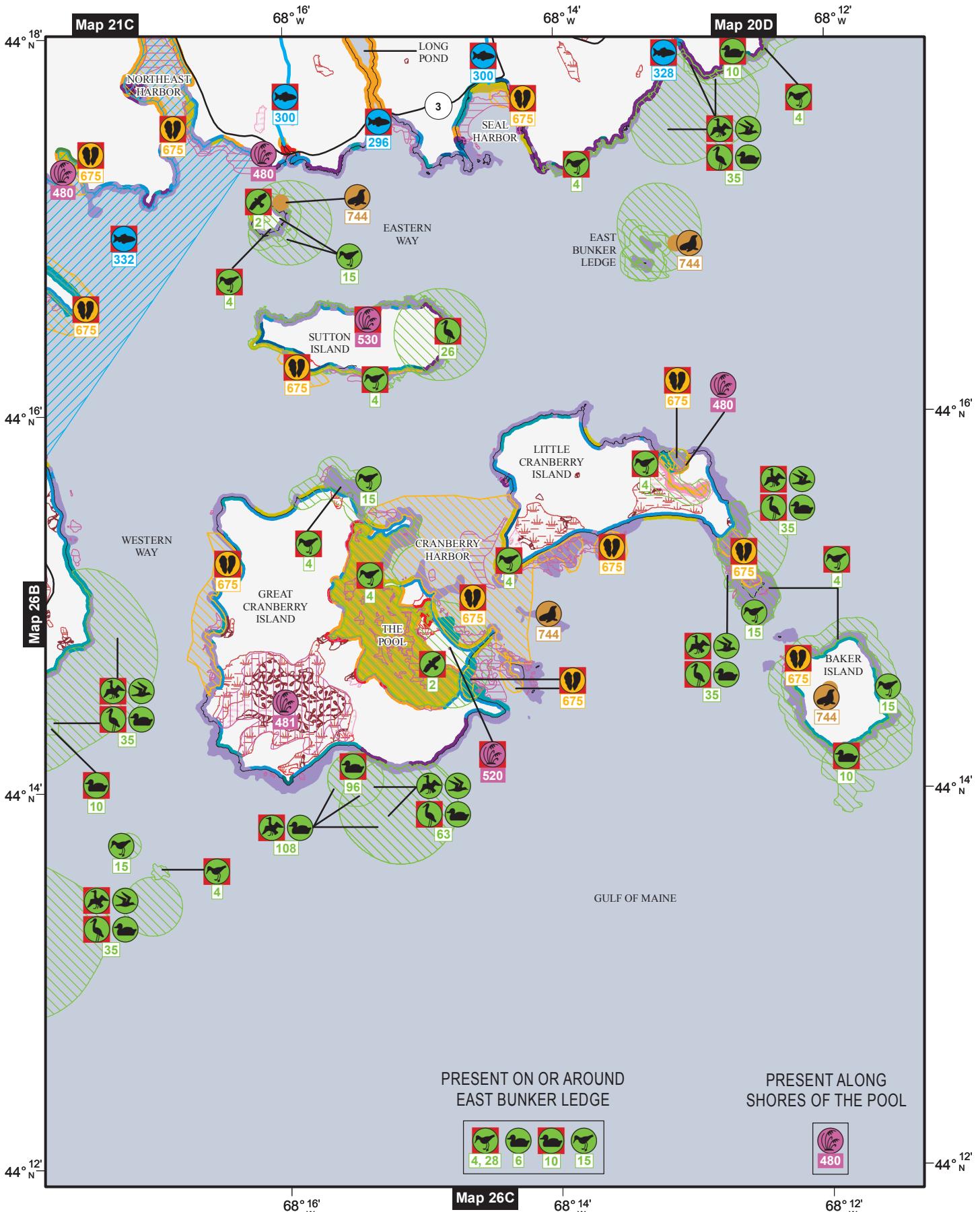
ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	15,598.86	9.69	5%
10B	Freshwater Marshes	3,644.83	2.26	1%
10C	Swamps	1,059.01	0.66	<1%
10D	Scrub and Shrub Wetlands	957.11	0.59	<1%
9B	Vegetated Low Banks	27,856.13	17.31	9%
8A	Sheltered, Impermeable, Rocky Shores	833.78	0.52	<1%
8B	Sheltered, Solid Man-Made Structures	206.84	0.13	<1%
8C	Sheltered Riprap	126.87	0.08	<1%
7	Exposed Tidal Flats	31,161.92	19.36	10%
6A	Gravel Beaches	3,375.03	2.10	1%
6B	Riprap	1,990.31	1.24	1%
5	Mixed Sand and Gravel Beaches	28,248.33	17.55	9%
4	Coarse Grained Sand Beaches	34,273.71	21.30	11%
3A	Fine to Medium Grained Sand Beaches	4,053.21	2.52	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	129,746.75	80.62	41%
1A	Exposed, Rocky Shores	28,438.46	17.67	9%
1B	Exposed, Solid Man-Made Structures	8,603.04	5.35	3%
Total ESI Shoreline:		320,174.18	Total ESI Shoreline:	198.95
Total Shoreline:		216,470.69	Total Shoreline:	134.51

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](http://response.restoration.noaa.gov)







**Map 26A**  
**Downeast Maine**



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



## Map 26A Downeast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<i>Monthly Presence</i>									
		Harvest Area	High Ecological Value	High Ecological Value	High Ecological Value	High Ecological Value	J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt				
Softbottom	Worm bed						-	-	-	-	-				
SAV	Eelgrass						-	-	-	-	-				
SAV	Eelgrass						-	-	-	-	-				
SAV	Eelgrass						-	-	-	-	-				
SAV	Eelgrass						-	-	-	-	-				

#### BIRDS

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

## BIRDSS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt					
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Mailard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	White-winged scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
26	Wading	Great blue heron	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
28	Shorebird	BB sandpiper	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Black-bellied plover	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Dunlin	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Hudsonian godwit	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Least sandpiper	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Lesser yellowlegs	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Pectoral sandpiper	Hudsonian godwit	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Red Knot	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Ruddy turnstone	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Semipalmated plover	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Semipalmated sandpiper	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Solitary sandpiper	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Stilt sandpiper	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Western sandpiper	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Whimbrel	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	White-rumped sandpiper	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Willet	Willett	Roosting	-JC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
35	Diving	Common Loon	D. crested cormorant	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	G. black-backed gull	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	Herring gull	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Black Scoter	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Bufflehead	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Common eider	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Goldeneye	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Green-winged teal	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Long-tailed duck	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Mailard	Mailard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### BIRDS (continued)

Map ID	Subelement	Species	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
	Waterfowl	Scaup	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scoters	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-
<b>63</b>	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-
<b>96</b>	Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-
<b>108</b>	Diving	Common Loon	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scooter	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-

### FISH

Map ID	Subelement	Species	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
	Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-
<b>296</b>	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-
<b>300</b>	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-
<b>328</b>	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-
<b>332</b>	Diadromous	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic sturgeon	Migration	-/T	-	-	-	-	-	-	-	-	-	-
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-

### HABITATS & RARE PLANTS

Map ID	Subelement	Species	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
<b>480</b>	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-
<b>481</b>	Wetland	Rare ecol. community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-
<b>520</b>	Wetland	Moonwort	Vulnerable Occurrence	E/-	-	-	-	-	-	-	-	-	-	-
<b>530</b>	Plant	Mountain laurel	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-

Downeast Maine: Map 26A

### INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	M/E/NH	S	F	Concentration	J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
			Harvest Area	-C	-	-	-	May-Oct	May-Oct	May-Nov	May-Nov	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam											

### MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	M/E/NH	S	F	Concentration	J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
			Haul Out	-C	-	-	-	May-Oct	May-Oct	May-Nov	May-Nov	Jan-Dec	Jan-Dec
744	Pinniped	Harbor seal											

WIDESPREAD IN MAPPED AREA ( > 10 SQUARE KILOMETERS )

### BIRDS

Subelement	Species	Mapping Qualifier	M/E/NH	S	F	Concentration	J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt
			General Distribution	T/-	-	-	-	-	-	-	-
	Alcid	Atlantic puffin	General Distribution	T/-	-	-	-	-	-	-	-
	Razorbill	Common Loon	General Distribution	-T	-	-	-	-	-	-	-
	Diving	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	-	-	-	-	-	-	-
	Pelagic	Leach's storm-petrel	General Distribution	C/-	-	-	-	-	-	-	-
	Shorebird	Red-necked phalarope	General Distribution	C/-	-	-	Jun	-	-	-	-

### FISH

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

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

Subelement	Species	Mapping Qualifier	M/E/NH	S	F	Concentration	J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
			Harvest Area	-C	-	-	May-Nov	May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec
	Bivalve	Blue mussel	General Distribution	-C	-	-	Jul-Oct	-	-	-	Jan-Dec	Jan-Dec
		Sea scallop	General Distribution	-C	-	Low	May-Jul	-	-	Jan-Dec	Jan-Dec	Jan-Dec
	Crab	Horseshoe crab	General Distribution	-C	-	Low	-	Dec-Apr	Jan-Dec	Jan-Dec	Dec-Apr	Dec-Apr
	Shrimp	Northern shrimp	General Distribution	-C	-	Low	-	-	-	-	-	-

## MARINE MAMMALS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Whale	Fin whale	-	-	-	-	-	-	-	-	-	-	-	-
	Humpback whale	-	-	-	-	-	-	-	-	-	-	-	-
	N.A. right whale	-	-	-	-	-	-	-	-	-	-	-	-
	Sei whale	-	-	-	-	-	-	-	-	-	-	-	-
	Sperm whale	-	-	-	-	-	-	-	-	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-
	Common murre	-	-	-	-	-	-	-	-	-	-	-	-
Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-
Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-
D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red phalarope	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Striped bass	-	-	-	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-
	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-
	American plaice	-	-	-	-	-	-	-	-	-	-	-	-
	American plaice	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-

## FISH (continued)

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

## INVERTEBRATES

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

**MARINE MAMMALS**

Subelement	Species	Monthly Presence											
		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	-	-	-	-	-	-	-	-	-	-	-	-

**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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	7	Exposed Tidal Flats
	5	Mixed Sand and Gravel Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9B	Vegetated Low Banks
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Riprap
	7	Exposed Tidal Flats
	6A	Gravel Beaches
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	3A	Fine to Medium Grained Sand Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1A	Exposed, Rocky Shores
	1B	Exposed, Solid Man-Made Structures

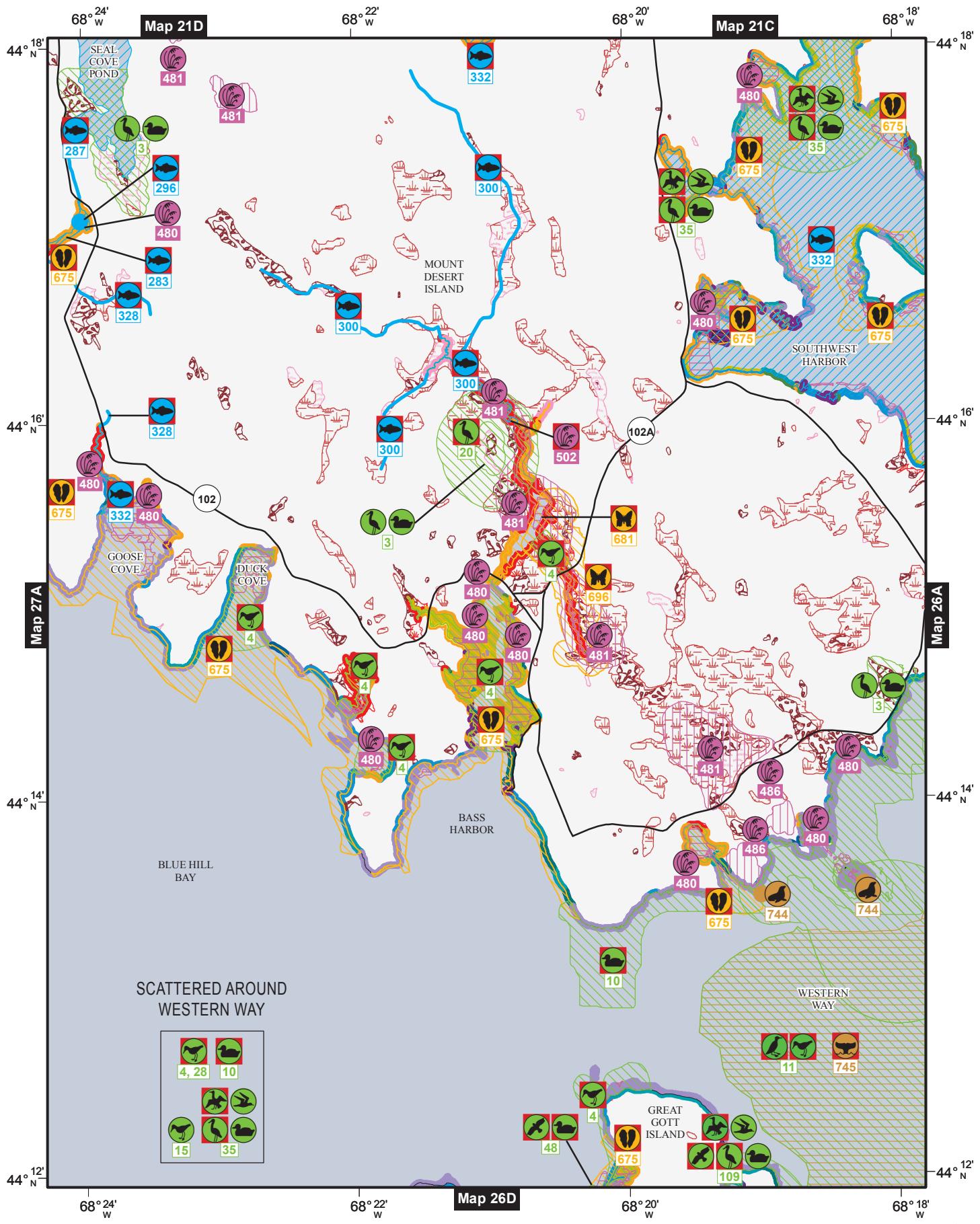
Total ESI Shoreline: 111,808.81      Total ESI Shoreline: 69.47  
 Total Shoreline: 68,950.91      Total Shoreline: 42.84

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.noaa.gov](http://response.noaa.gov)







**Map 26B**  
Downeast Maine



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

## Map 26B Downeast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>
		Harvest Area	High Ecological Value	High Ecological Value	High Ecological Value	J F M A M J J A S O N D
Softbottom	Worm bed				-	-
SAV	Eelgrass				-	-
SAV	Eelgrass				-	-
SAV	Eelgrass				-	-
SAV	Eelgrass				-	-

#### BIRDS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>
							J F M A M J J A S O N D
3	Wading	Wading birds	Vulnerable Occurrence	-			Apr-Nov
	Waterfowl	Waterfowl	Vulnerable Occurrence	-			Apr-Jun
4	Shorebird	American golden-plover	Concentration Area	C/-			Apr-Nov
Shorebird	American oystercatcher	Concentration Area	C/-				Apr-Jun
Shorebird	Baird's sandpiper	Concentration Area	C/-				Aug
Shorebird	BB sandpiper	Concentration Area	C/-				May
Shorebird	Black-bellied plover	Concentration Area	C/-				May
Shorebird	Dunlin	Concentration Area	C/-				May
Shorebird	Greater yellowlegs	Concentration Area	C/-				May
Shorebird	Hudsonian godwit	Concentration Area	C/-				May
Shorebird	Least sandpiper	Concentration Area	C/-				May
Shorebird	Lesser yellowlegs	Concentration Area	C/-				May
Shorebird	Pectoral sandpiper	Concentration Area	C/-				May
Shorebird	Red Knot	Concentration Area	C/-	T			May
Shorebird	Ruddy turnstone	Concentration Area	C/-				May
Shorebird	Sanderling	Concentration Area	C/-				May
Shorebird	Semipalmated plover	Concentration Area	C/-				May
Shorebird	Semipalmated sandpiper	Concentration Area	C/-				May
Shorebird	Short-billed dowitcher	Concentration Area	C/-				May
Shorebird	Solitary sandpiper	Concentration Area	C/-				May
Shorebird	Stilt sandpiper	Concentration Area	C/-				May
Shorebird	Western sandpiper	Concentration Area	C/-				May
Shorebird	Whimbrel	Concentration Area	C/-				Jun
Shorebird	White-rumped sandpiper	Concentration Area	C/-				Jul
Shorebird	Willet	Concentration Area	C/-				Jul
10	Waterfowl	Vulnerable Occurrence	T/-C				Jul
11	Alcid	General Distribution	T/-C				Jul
Pelagic	Leach's storm-petrel	General Distribution	C/-				Jul

**BIRDSS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt					
				ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)
15	Shorebird	Red-necked phalarope	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	Wading	Purple sandpiper	Vulnerable Occurrence	E/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	Shorebird	Least bittern	Vulnerable Occurrence	E/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35	Diving	Common Loon	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scoter	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Goldeneye	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Long-tailed duck	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	mallard	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scallop	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scoters	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	Raptor	Bald eagle	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### BIRDSS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
109	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
	Watertowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-

### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
283	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American shad	Migration	-C	E	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic salmon	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-
	Diadromous	Blueback herring	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Sea lamprey	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
287	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
296	Diadromous	Alewife	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
300	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
328	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
332	Diadromous	American eel	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-
	Diadromous	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-
	Diadromous	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-
	Diadromous	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-
	Marine Benthic	Atlantic tomcod	Migration	Dec-Feb	-	-	-	-	-	-	-	-	-	-	-

Downeast Maine: Map 26B

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	ME/NH						Monthly Presence								
			S	F	Concentration	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
502	Plant	Horned pondweed	Vulnerable Occurrence	C/E	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	ME/NH						Monthly Presence								
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
681	Insect	Rare insect	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
696	Insect	Little bluet	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-

## MARINE MAMMALS

Map ID	Subelement	Species	ME/NH						Monthly Presence								
			S	F	Concentration	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	-	-	-	-	-	-	-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )

## BIRDS

Subelement	Species	ME/NH						Monthly Presence								
		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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	ME/NH						Monthly Presence								
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Atlantic sturgeon	General Distribution	-T	T	Rare	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	General Distribution	E/E	E	Rare	-	-	-	-	-	-	-	-	-	-	-
	Striped bass	Concentration Area	High	Low	-	-	-	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Black Seabass	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
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												Monthly Presence											
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
Bivalve	Blue mussel	Harvest Area	-	-	-													May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec				
	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				

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

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

## FISH

Species	Monthly Presence												Adults
	J	F	M	A	M	J	J	A	S	O	D		
Striped bass	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
Diadromous	-	-	-	-	-	-	-	-	-	-	-	Oct-May	Jan-Dec
Estuarine Nursery	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Apr-Dec
Black Seabass	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Jan-Dec
Winter flounder	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Mar-Oct
Winter flounder	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	-
Marine Benthic	American plaice	American plaice	American sand lance	Mar-Oct	Mar-Oct								
	Atlantic cod	Atlantic Wolffish	Cunner	Mar-Oct	Mar-Oct								
Haddock	Haddock	Longhorn sculpin	Longhorn sculpin	Northern searobin	Northern searobin	Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct
Haddock	Haddock	Longhorn sculpin	Longhorn sculpin	Northern searobin	Northern searobin	Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct
Longhorn sculpin	Longhorn sculpin	Northern searobin	Northern searobin	Ocean pout	Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct
Longhorn sculpin	Longhorn sculpin	Northern searobin	Northern searobin	Ocean pout	Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct
Northern searobin	Northern searobin	Northern searobin	Northern searobin	Ocean pout	Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct
Northern searobin	Northern searobin	Northern searobin	Northern searobin	Ocean pout	Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct
Ocean pout	Pollock	Red hake	Red hake	Rock gunnel	Rock gunnel	Rock gunnel	Mar-Oct	Mar-Oct					
Pollock	Pollock	Shorthorn sculpin	Shorthorn sculpin	Silverside	Mar-Oct	Mar-Oct							
Red hake	Red hake	Shorthorn sculpin	Shorthorn sculpin	Silverside	Mar-Oct	Mar-Oct							
Red hake	Red hake	Silverside	Mar-Oct	Mar-Oct									
Rock gunnel	Rock gunnel	Silverside	Mar-Oct	Mar-Oct									
Rock gunnel	Rock gunnel	Silverside	Mar-Oct	Mar-Oct									
Silverside	Mar-Oct	Mar-Oct											
Silverside	Mar-Oct	Mar-Oct											
Silverside	Mar-Oct	Mar-Oct											
White hake	May-Nov	May-Nov											
White hake	May-Nov	May-Nov											
Yellowtail flounder	Mar-Oct	Mar-Oct											
Yellowtail flounder	Mar-Oct	-											
Marine Pelagic	Atlantic mackerel	May-Nov	May-Nov										
	Butterfish	May-Oct	May-Oct										

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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
		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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10A	Salt and Brackish Water Marshes	126.71
10B	Freshwater Marshes	167.57
10C	Swamps	1,001.90
10D	Scrub and Shrub Wetlands	379.69
7	Exposed Tidal Flats	163.96
5	Mixed Sand and Gravel Beaches	12.28
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	264.98

ESI SHORELINE HABITAT TYPES		
ESI Rank	Shoreline Habitat Classification	Length (Meters)
10A	Salt and Brackish Water Marshes	13,582.39
10B	Freshwater Marshes	2,122.00
10C	Swamps	915.11
10D	Scrub and Shrub Wetlands	710.49
9B	Vegetated Low Banks	19,743.80
8A	Sheltered, Impermeable, Rocky Shores	833.78
8B	Sheltered, Solid Man-Made Structures	31.75
7	Exposed Tidal Flats	13,691.37
6A	Gravel Beaches	2,289.85
6B	Riprap	1,671.00
5	Mixed Sand and Gravel Beaches	10,296.54
4	Coarse Grained Sand Beaches	11,526.71
3A	Fine to Medium Grained Sand Beaches	835.45
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	28,272.91
1A	Exposed, Rocky Shores	202.76
1B	Exposed, Solid Man-Made Structures	5,829.38

Total ESI Shoreline: 112,555.28  
Total Shoreline: 82,541.54

Total ESI Shoreline: 69.94  
Total Shoreline: 51.29

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](http://response.restoration.noaa.gov)







**Map 26C**  
**Downeast Maine**



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 26C Downeast Maine

### 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	ME/NH												Monthly Presence												Molt	
			Mapping Qualifier			S	F	C/T	Concentration			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)		
2	Raptor	Bald eagle	Vulnerable Occurrence																						-	-	-	
4	Shorebird	American golden-plover	Concentration Area	C/-																					May-Jun	May	Sep	-
	Shorebird	American oystercatcher	Concentration Area																						-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area																						-	-	-	-
	Shorebird	BB sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area																						-	-	-	-
	Shorebird	Dunlin	Concentration Area																						-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area																						-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area																						-	-	-	-
	Shorebird	Least sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-																					-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/-	T																				-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area																						-	-	-	-
	Shorebird	Sanderling	Concentration Area																						-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area																						-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-																					-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area																						-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Western sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-																					-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area																						-	-	-	-
	Shorebird	Willet	Concentration Area	-C																					-	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-																					-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence																						-	-	-	-
31	Alcid	Black guillemot	Roosting																						-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting																						-	-	-	-
	Gull/Tern	Herring gull	Roosting																						-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	C/-																				-	-	-	-	
	Shorebird	American golden-plover	Roosting																					-	-	-	-	
	Shorebird	American oystercatcher	Roosting	C/-																				-	-	-	-	
	Shorebird	Baird's sandpiper	Roosting																					-	-	-	-	
	Shorebird	Black-bellied plover	Roosting																					-	-	-	-	
	Shorebird	Dunlin	Roosting																					-	-	-	-	
	Shorebird	Greater yellowlegs	Roosting																					-	-	-	-	

**BIRDS (continued)**

Map ID	Subelement	Species	Monthly Presence												Mig.(F)	Molt
			J	F	M	A	M	J	J	A	S	O	N	D		
	Shorebird	Hudsonian godwit	Roosting												-	Jul-Oct
	Shorebird	Least sandpiper	Roosting												-	May-Jun
	Shorebird	Lesser yellowlegs	Roosting	C/-											-	Jul-Oct
	Shorebird	Pectoral sandpiper	Roosting												-	Apr-May
	Shorebird	Red Knot	Roosting	C/-	T										-	Aug-Oct
	Shorebird	Ruddy turnstone	Roosting												-	Jul-Oct
	Shorebird	Sanderling	Roosting												-	Apr-May
	Shorebird	Semipalmated plover	Roosting												-	May-Jun
	Shorebird	Semipalmated sandpiper	Roosting												-	Jul-Oct
	Shorebird	Short-billed dowitcher	Roosting												-	May-Jun
	Shorebird	Solitary sandpiper	Roosting												-	Jun
	Shorebird	Stilt sandpiper	Roosting												-	Jul
	Shorebird	Western sandpiper	Roosting												-	Jul
	Shorebird	Whimbrel	Roosting	C/-											-	Oct
	Shorebird	White-rumped sandpiper	Roosting												-	Jul-Oct
	Shorebird	Willet	Roosting												-	May-Jun
	Waterfowl	Common eider	Roosting												-	Jul-Oct
72	Waterfowl	Canada goose	Roosting												-	May-Jun
	Waterfowl	Common eider	Roosting	-C											-	Jul-Sep
82	Diving	Common Loon	Rafting												-	-
	Waterfowl	American black duck	Rafting												-	-
	Waterfowl	Black Scoter	Rafting												-	-
	Waterfowl	Brant	Rafting												-	Feb
	Waterfowl	Bufflehead	Rafting												-	Dec
	Waterfowl	Common eider	Rafting												-	-
	Waterfowl	Goldeneye	Rafting												-	-
	Waterfowl	Green-winged teal	Rafting												-	-
	Waterfowl	Mallard	Rafting												-	-
	Waterfowl	Scoters	Rafting												-	-
	Waterfowl	Surf scooter	Rafting												-	-
110	Alcid	Black guillemot	Roosting												-	-
	Diving	D. crested cormorant	Roosting												-	-
	Diving	Great cormorant	Roosting												-	-
	Gull/Tern	G. black-backed gull	Roosting												-	-
	Gull/Tern	Herring gull	Roosting												-	-
	Pelagic	Leach's storm-petrel	Roosting												-	-
	Shorebird	American golden-plover	Roosting												-	Aug
	Shorebird	American oystercatcher	Roosting	C/-											-	Oct
	Shorebird	Baird's sandpiper	Roosting												-	May-Jun
	Shorebird	BB sandpiper	Roosting												-	Sep
	Shorebird	Black-bellied plover	Roosting												-	Jul-Oct
	Shorebird	Dunlin	Roosting												-	Aug-Oct
	Shorebird	Greater yellowlegs	Roosting												-	Jul-Oct
	Shorebird	Hudsonian godwit	Roosting												-	Jul-Oct

## BIRDS (continued)

Map ID	Subelement	Species	Monthly Presence														
			ME/NH			S F			Concentration			J F M A M J J A S O N D			Nest	Mig.(S)	Mig.(F)
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	-	-

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Monthly Presence													
			ME/NH			S F			Concentration			J F M A M J J A S O N D				
509	Plant	A. water minerslettuce	Vulnerable Occurrence	-		-			-			-			-	-

## MARINE MAMMALS

Map ID	Subelement	Species	Monthly Presence													
			ME/NH			S F			Concentration			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 )

Subelement	Species	Monthly Presence													
		ME/NH			S F			Concentration			J F M A M J J A S O N D				
Alcid	Atlantic puffin	General Distribution	T/-	-	-			-			-			-	-
Pelagic	Razorbill	General Distribution	T/-	-				-			-			-	-
Shorebird	Leach's storm-petrel	General Distribution	C/-	-				-			-			-	-
	Red-necked phalarope	General Distribution	C/-	-				-			-			-	-

## FISH

Subelement	Species	Monthly Presence													
		ME/NH			S F			Concentration			J F M A M J J A S O N D				
Diadromous	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	Low	-	-		-			-			Jan-Dec	Jan-Dec
Estuarine Nursery	Black Seabass	Concentration Area	Low	-	-	-		-			-			Jan-Dec	Jan-Dec

Downeast Maine: Map 26C

## REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Turtle	Green sea turtle	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-
	K. ridley sea turtle	General Distribution	E/-	E	Rare									
	Leatherback sea turtle	General Distribution	E/-	E	Low									
	Loggerhead sea turtle	General Distribution	E/-	T	Low									

## INVERTEBRATES

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-
	Sea scallop	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-
Crab	Horseshoe crab	General Distribution	-C	-	Low									
	Shrimp	General Distribution	-C	-	Low									

## MARINE MAMMALS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			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	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Common murre	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cory's shearwater	-	-	-	-	-	-	-	-	-	-	-	-	-
	Great shearwater	-	-	-	-	-	-	-	-	-	-	-	-	-
	Manx shearwater	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northern fulmar	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sooty shearwater	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wilson's storm-petrel	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red phalarope	-	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

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

## INVERTEBRATES

Monthly Presence												
	J	F	M	A	M	J	J	A	S	O	N	D
Crab	Atlantic rock crab											
	Blue crab											
	Jonah crab											
Echinoderm	Green urchin											
Lobster	American lobster											

## MARINE MAMMALS

Monthly Presence												
	J	F	M	A	M	J	J	A	S	O	N	D
Dolphin	Atl. wh.-side dolphin											
	Dolphins											
	Gray seal											
Pinniped	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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES											
	Habitat Classification										
10A	Salt and Brackish Water Marshes										
10D	Scrub and Shrub Wetlands										
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)										

ESI SHORELINE HABITAT TYPES											
	Shoreline Habitat Classification										
5	Mixed Sand and Gravel Beaches										
4	Coarse Grained Sand Beaches										
3A	Fine to Medium Grained Sand Beaches										
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)										
1A	Exposed, Rocky Shores										

Total ESI Shoreline: 12,248.04  
Total Shoreline: 8,252.56

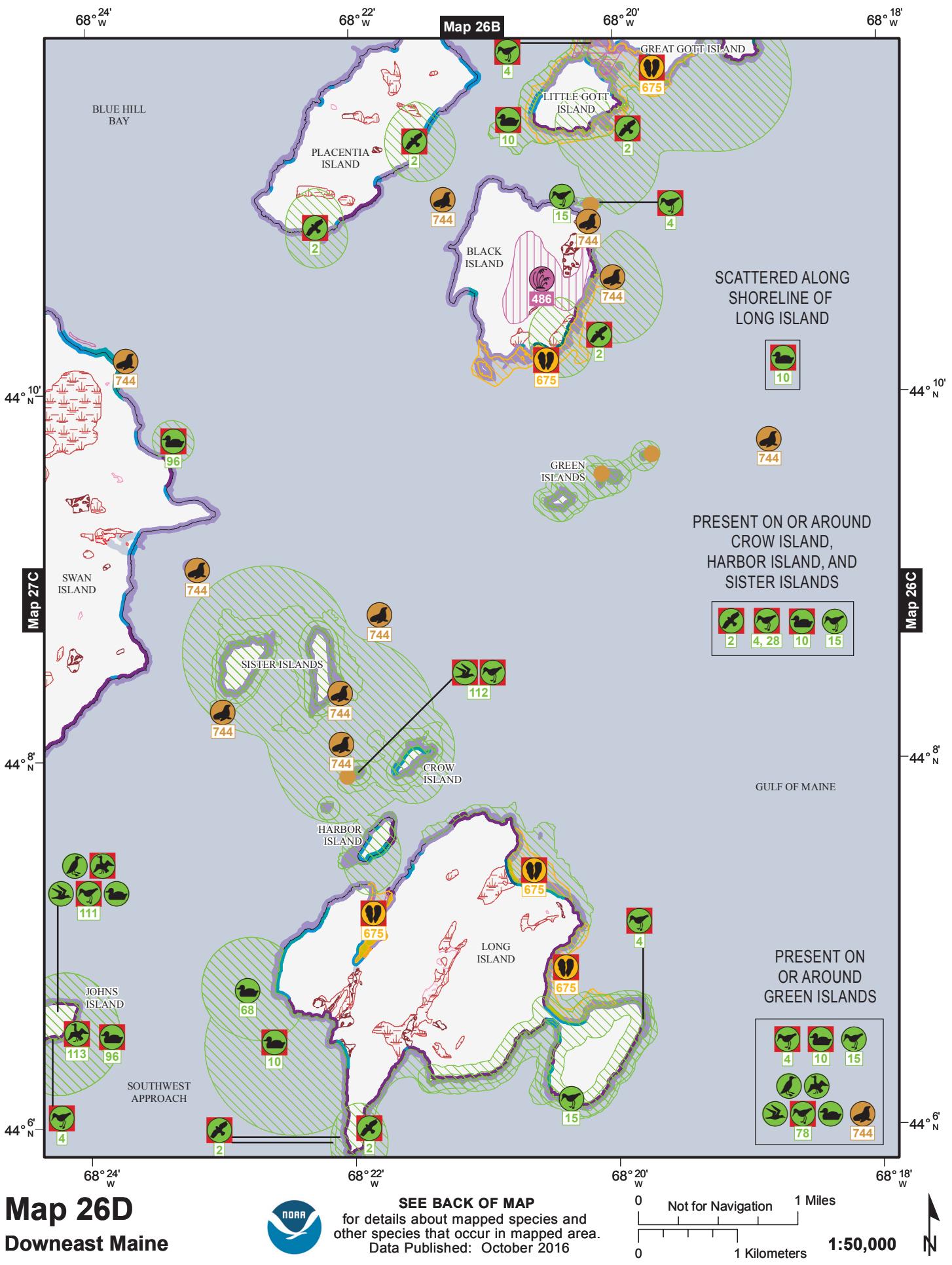
Total ESI Shoreline: 7.61  
Total Shoreline: 5.13

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](http://response.restoration.noaa.gov)







## Map 26D Downeast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

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

**BIRDSS (continued)**

Map ID	Subelement	Species	ME/NH			Mapping Qualifier	S	F	Concentration	Monthly Presence									
			J	F	M					J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	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	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	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting			-				-						-	May-Jun	Jul-Sep	-
	Shorebird	Willet	Roosting			-				-						-	May-Aug	May-Jun	Dec
68	Watertowl	Brant	Rafting			-				-						-	Feb	Dec	-
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			-				-						-	Aug	Oct	-
	Shorebird	American golden-plover	Roosting			-				-						-	May-Jun	May	Sep
	Shorebird	American oystercatcher	Roosting			-				-						-	May-Aug	May-Jun	Dec
	Shorebird	Baird's sandpiper	Roosting			-				-						-	Aug	Oct	-
	Shorebird	BB sandpiper	Roosting			-				-						-	May	Jul-Oct	-
	Shorebird	Black-bellied plover	Roosting			-				-						-	May	Aug-Oct	-
	Shorebird	Dunlin	Roosting			-				-						-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting			-				-						-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting			-				-						-	May-Jun	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting			-				-						-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting			-				-						-	Apr-May	Sep-Oct	-
	Shorebird	Pectoral sandpiper	Roosting			-				-						-	May	Aug-Oct	-
	Shorebird	Red Knot	Roosting			-				-						-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Roosting			-				-						-	Apr-May	-	-
	Shorebird	Sanderling	Roosting			-				-						-	May-Jun	Jul-Oct	-
	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	-

**BIRDSS (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			
96	Watertowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
96	Watertowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Acid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Diving	Great cormorant	Roosting	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Red Knot	Roosting	C/- T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	Watertowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## BIRDS (continued)

Map ID	Subelement	Species	ME/NH			Monthly Presence																	
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt	
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Willet	Roosting	-	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
113	Diving	Great cormorant	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## HABITATS & RARE PLANTS

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

## INVERTEBRATES

Map ID	Subelement	Species	ME/NH			Monthly Presence																	
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D					
	675	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

## MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

## BIRDS

Subelement	Species	ME/NH			Monthly Presence																	
		Mapping Qualifier	S	F	Concentration	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	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
	Great cormorant	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					

## BIRDS (continued)

Map ID	Subelement	Species	ME/NH												Monthly Presence											
			Mapping Qualifier			S	F	Concentration			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
Gull/Tern		Arctic tern	General Distribution	-	T/C	-	-	General Distribution			May-Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Common tern	General Distribution	-	C/T	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		G. black-backed gull	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Herring gull	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Roseate tern	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic		Leach's storm-petrel	General Distribution	-	C/-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red-necked phalarope	Vulnerable Occurrence	-	C/-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Black Scoter	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Bufflehead	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Common eider	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Goldeneye	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Green-winged teal	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Long-tailed duck	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Mallard	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Scaup	Vulnerable Occurrence	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Scoters	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Surf scoter	Rafting	-	-	-	-	General Distribution			May-Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

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

## REPTILES & AMPHIBIANS

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

## INVERTEBRATES

Subelement	Species	ME/NH												Monthly Presence												
		Mapping Qualifier			S	F	Concentration			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Eggs	Larvae	Juveniles	Adults
Bivalve	Blue mussel	Harvest Area	-	-	-	-	General Distribution			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sea scallop	Harvest Area	-	-	-	-	General Distribution			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Crab	Horseshoe crab	-	-	-	-	General Distribution			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shrimp	Northern shrimp	-	-	-	-	General Distribution			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## MARINE MAMMALS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			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	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot													
	Common murre													
	Dovekie													
	Thick-billed murre													
Diving	D. crested cormorant													
	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													
	Sooty shearwater													
	Wilson's storm-petrel													
Shorebird	Red phalarope													

## FISH

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Striped bass													
Estuarine Nursery	Atlantic herring													
	Black Seabass													
	Winter flounder													
	Winter flounder													
Marine Benthic	American plaice													
	American plaice													
	American sand lance													
	American sand lance													
Atlantic cod	Atlantic cod													

**FISH (continued)**

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lf pilot whale	-	-	-	-	-	-	-	-	-	-	-	-	-
	Minke whale	-	-	-	-	-	-	-	-	-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	7	Exposed Tidal Flats
	5	Mixed Sand and Gravel Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

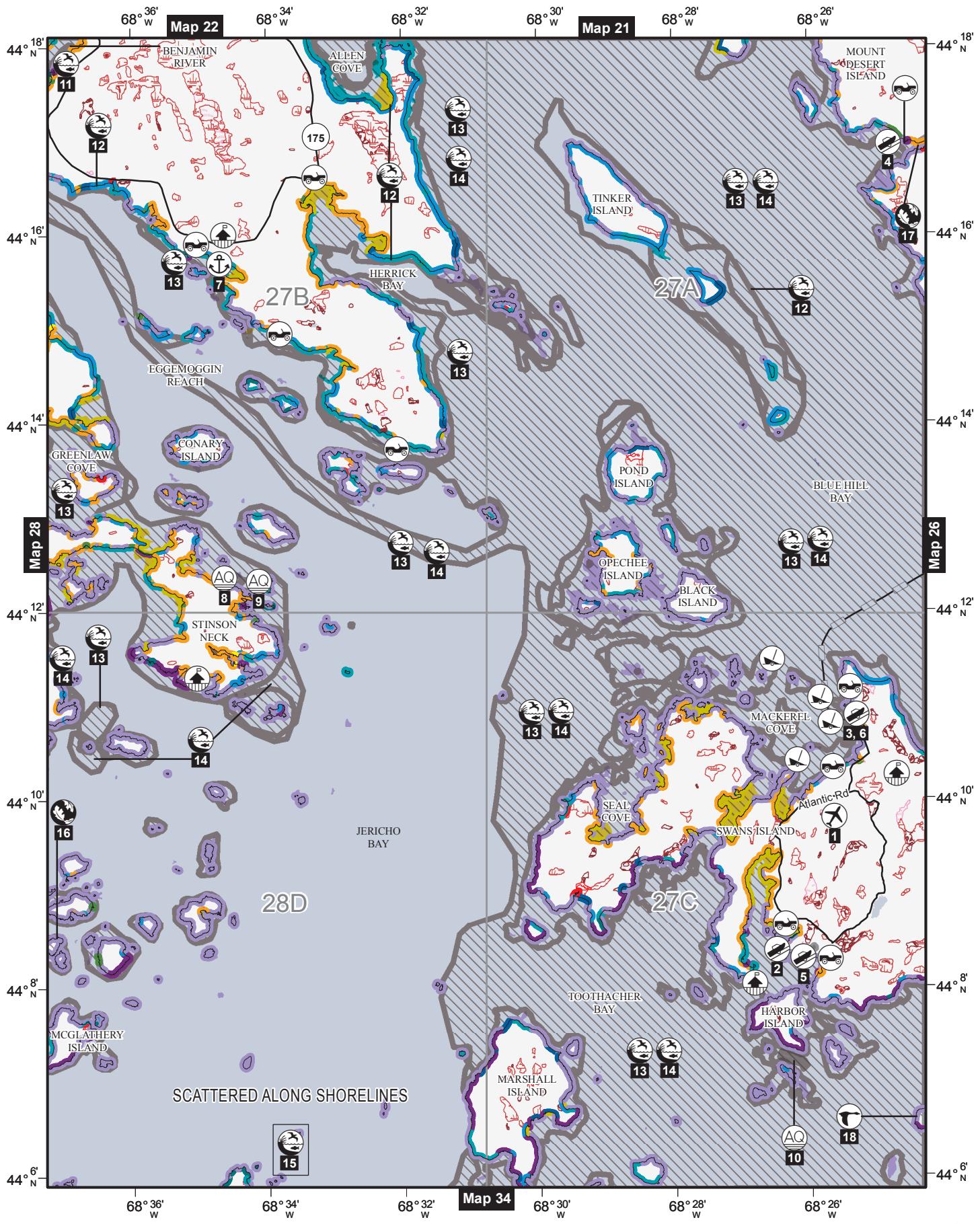
ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	9B	Vegetated Low Banks
	7	Exposed Tidal Flats
	6A	Gravel Beaches
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	3A	Fine to Medium Grained Sand Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1A	Exposed, Rocky Shores
	1B	Exposed, Solid Man-Made Structures

Total ESI Shoreline: 83,581.64  
Total Shoreline: 56,738.95  
Total ESI Shoreline: 51.94  
Total Shoreline: 35.26

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](http://response.restoration.noaa.gov)





**Map 27**  
**Downeast Maine**



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

**Map 27**  
Downeast Maine

**HUMAN USE RESOURCES**

<b>DISPLAYED ON MAP (POINTS)</b>		
<b>Map ID</b>	<b>Type</b>	<b>Name</b>
1	AIRPORT	BANKS AIRPORT
2	BOAT RAMP	BURNT COAT HARBOR BOAT RAMP
3	BOAT RAMP	MACKEREL COVE BOAT RAMP
4	BOAT RAMP	SEAL COVE BOAT RAMP
5	BOAT RAMP	SWANS ISLAND TOWN BOAT LAUNCH 1
6	BOAT RAMP	SWANS ISLAND TOWN BOAT LAUNCH 2
7	MARINA	CENTER HARBOR YACHT CLUB

<b>DISPLAYED ON MAP (POLYGONS)</b>		
<b>Map ID</b>	<b>Type</b>	<b>Name</b>
8	AQUACULTURE	PEN SN3 - MUD COVE, STINSON NECK, PENOBSQUIT BAY
9	AQUACULTURE	PEN SN3 - STINSON NECK, PENOBSQUIT BAY
10	AQUACULTURE	SWAN HS - SCRAG ISLAND, SOUTH OF HARBOR ISLAND, TO
11	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA
12	MANAGEMENT AREA	ATLANTIC SURFCCLAM - SHELLFISH MA
13	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA
14	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA
15	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA
16	NATURE CONSERVANCY	BIG COOMBS ISLAND EASEMENT
17	NATURE CONSERVANCY	KETTERLINUS PRESERVE
18	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 1

<b>JURISDICTIONS</b>		
<b>COUNTY:</b>	<b>FEMA:</b>	<b>REGION I</b>
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	REGION 1
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT	REGION 1

**ESI POLYGON HABITAT TYPES**

<b>ESI Rank</b>	<b>Habitat Classification</b>	<b>Area (Acres)</b>
10A	Salt and Brackish Water Marshes	63.68
10B	Freshwater Marshes	109.69
10C	Swamps	1,329.56
10D	Scrub and Shrub Wetlands	350.70
9A	Sheltered Tidal Flats	17.63
7	Exposed Tidal Flats	589.94
5	Mixed Sand and Gravel Beaches	275.84
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	2,229.43

**ESI SHORELINE HABITAT TYPES**

<b>ESI Rank</b>	<b>Shoreline Habitat Classification</b>	<b>Length (Meters)</b>	<b>% of ESI Shoreline</b>
10A	Salt and Brackish Water Marshes	1,557.86	< 1%
10C	Swamps	733.53	< 1%
10D	Scrub and Shrub Wetlands	104.19	< 1%
9A	Sheltered Tidal Flats	2,321.40	1%
9B	Vegetated Low Banks	50,429.81	11%
8A	Sheltered, Impermeable, Rocky Shores	306.06	< 1%
8B	Sheltered, Solid Man-Made Structures	22.16	< 1%
8C	Sheltered Riprap	98.32	< 1%
7	Exposed Tidal Flats	32,826.89	7%
6A	Gravel Beaches	4,460.00	1%
6B	Riprap	3,863.69	1%
5	Mixed Sand and Gravel Beaches	47,047.75	11%
4	Coarse Grained Sand Beaches	35,585.69	8%
3A	Fine to Medium Grained Sand Beaches	6,432.44	1%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	233,691.44	52%
1A	Exposed, Rocky Shores	23,532.56	5%
1B	Exposed, Solid Man-Made Structures	3,860.48	1%

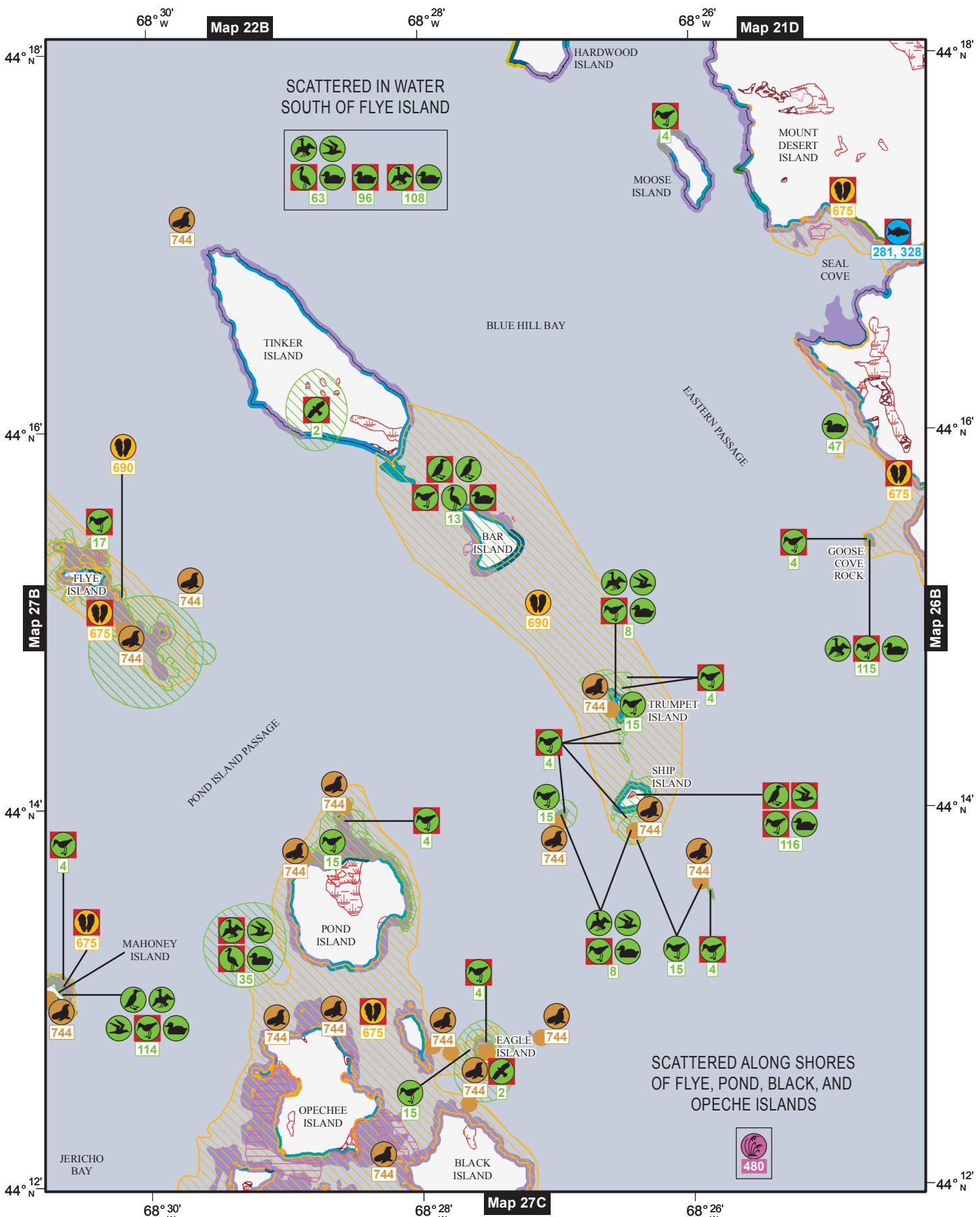
Total ESI Shoreline: 446,874.27  
 Total Shoreline: 317,476.35  
 Total ESI Shoreline: 277.67  
 Total Shoreline: 197.27

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](http://response.restoration.noaa.gov)







**Map 27A**  
**Downeast Maine**



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



## Map 27A Downeast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>
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

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>												
							J	F	M	A	M	J	J	A	S	O	N	D	Nest
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-	-	-	-	-	-	-	-	-	-	-	-	-
4	Shorebird	American golden-plover	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/- T			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	-C			Foraging	-	-	-	-	-	-	-	-	-	-	-	-
8	Diving	D. crested cormorant	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDSS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				ME/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	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	Semipalmented plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Semipalmented 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	Oct	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-	-
	Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Aug	-	-
	Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
<b>13</b>	Alcid	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Shorebird	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Pelagic	Leach's storm-petrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Wading	BC night-heron	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	Apr	Oct	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
<b>15</b>	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Oct	Oct	-
<b>17</b>	Shorebird	American golden-plover	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	Oct	-
	Shorebird	American oystercatcher	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	-
	Shorebird	Baird's sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	Oct	-
	Shorebird	BB sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Black-bellied plover	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
	Shorebird	Dunlin	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Greater yellowlegs	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-
	Shorebird	Hudsonian godwit	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Least sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Oct	Oct	-
	Shorebird	Red Knot	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
	Shorebird	Ruddy turnstone	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt	
				J	F	M	A	M	J	J	A	S	O	N	D		
	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
35	Diving	Common Loon	Rafting	-/T	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-
	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-
	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
63	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-
	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep
96	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-
	Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	Feb	Dec
108	Diving	Common Loon	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-
	Waterfowl	Scooters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							Molt			
							J	F	M	A	M	J	J	A	S	Mig.(F)	
114	Alcid	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
	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	C/-				-										-	Jul	Oct		
	Shorebird	Whimbrel	Roosting	-				-										-	Jul-Oct	-		
	Shorebird	White-rumped sandpiper	Roosting	-				-										-	May-Jun	Jul-Oct		
	Shorebird	Willet	Roosting	-				-										-	May-Aug	Jul-Sep		
116	Waterfowl	Common eider	Roosting	C/T				-										-	May-Aug	-		
	Gull/Tern	Common tern	Roosting	C/T				-										-	May-Aug	-		
	Pelagic	Leach's storm-petrel	Roosting	C/-				-										-	-	-	-	
	Shorebird	American golden-plover	Roosting	-				-										-	Aug	Oct		
	Shorebird	American oystercatcher	Roosting	C/-				-										-	May	Jul-Oct		
	Shorebird	Baird's sandpiper	Roosting	-				-										-	May	Aug-Oct		
	Shorebird	BB sandpiper	Roosting	-				-										-	May	Jul-Oct		
	Shorebird	Black-bellied plover	Roosting	-				-										-	Aug	Oct		
	Shorebird	Dunlin	Roosting	-				-										-	May	Jul-Oct		
	Shorebird	Greater yellowlegs	Roosting	-				-										-	May	Jul-Oct		
	Shorebird	Hudsonian godwit	Roosting	-				-										-	May	Jul-Oct		
	Shorebird	Least sandpiper	Roosting	C/-				-										-	May	Jul-Oct		
	Shorebird	Lesser yellowlegs	Roosting	-				-										-	May	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		
	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	-				-									-	May-Jun	Jul-Sep			
	Waterfowl	Common eider	Roosting	-				-									-	May-Aug	-			

**FISH**

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

### HABITATS & RARE PLANTS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	Monthly Presence														
		Tidal Marsh	High Ecological Value	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
480	Wetland			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	Monthly Presence															
		Softshell clam	Harvest Area	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	
675	Bivalve	Softshell clam	Harvest Area	-/C	-	-	May-Oct												
690	Bivalve	Atlantic surfclam	Harvest Area	-	-	-	Jun-Aug	-	-	-	-	-	-	-	-	-	-	-	-

### MARINE MAMMALS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	Monthly Presence														
		Harbor seal	Haul Out	S	F	Concentration	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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	Monthly Presence														
		General Distribution	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Razorbill	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	Monthly Presence														
		Migration	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Alewife	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American eel	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American shad	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic salmon	Migration	-/C	E	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic sturgeon	General Distribution	-T	T	Rare	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic sturgeon	Migration	-T	T	-	-	-	-	-	-	-	-	-	-	-	-	-
	Blueback herring	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Brook trout (sea run)	Migration	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sea lamprey	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	General Distribution	E/E	E	Rare	-	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	Migration	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-
	Striped bass	Concentration Area	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Striped bass	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Black Seabass	Concentration Area	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Freshwater	Rainbow smelt	Migration	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Turtle	Green sea turtle	General Distribution	-	-	-	-	-	-	-	-	-	-	-	-
	K. ridley sea turtle	General Distribution	E/-	E	Rare									
	Leatherback sea turtle	General Distribution	E/-	E	Low									
	Loggerhead sea turtle	General Distribution	E/-	T	Low									

## INVERTEBRATES

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-
	Sea scallop	Harvest Area	-/C	-	-	-	-	-	-	-	-	-	-	-
Crab	Horseshoe crab	General Distribution	-/C	-	Low									

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-
	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-
Diving	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-
	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											
		J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Striped bass	-	-	-	-	-	-	-	-	-	-	-	-
	Estuarine Nursery	-	-	-	-	-	-	-	-	-	-	-	-
	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-
Marine Benthic	American plaice	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-
Cunner	Cunner	-	-	-	-	-	-	-	-	-	-	-	-

## FISH (continued)

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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	-	-	-	-	-	-	-	-	-	-	-	-	-

## TERRrestrial MAMMALS

Subelement	Species	Monthly Presence										
		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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

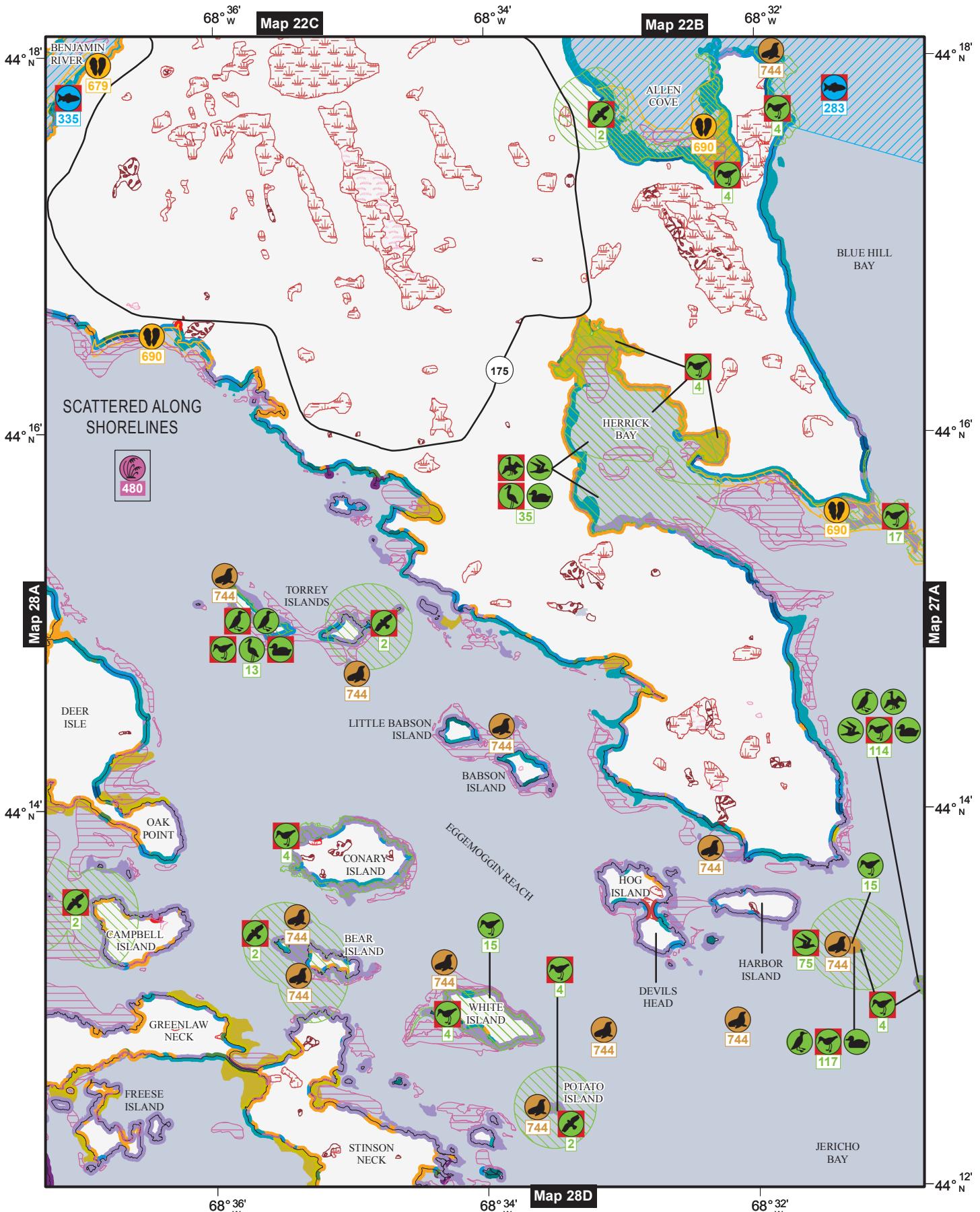
ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
10A	Salt and Brackish Water Marshes		19.90	0.03
10B	Freshwater Marshes		4.54	0.01
10C	Swamps		107.56	0.17
10D	Scrub and Shrub Wetlands		34.77	0.05
5	Mixed Sand and Gravel Beaches		10.28	0.02
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		664.13	1.04

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes		199.49	0.12	< 1%
9B	Vegetated Low Banks		3,016.23	1.87	5%
7	Exposed Tidal Flats		453.35	0.28	1%
6B	Riprap		430.36	0.27	1%
5	Mixed Sand and Gravel Beaches		6,472.03	4.02	10%
4	Coarse Grained Sand Beaches		12,870.11	8.00	20%
3A	Fine to Medium Grained Sand Beaches		1,726.99	1.07	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)		39,751.72	24.70	61%
1B	Exposed, Solid Man-Made Structures		94.78	0.06	< 1%
Total ESI Shoreline:			65,015.06	Total ESI Shoreline: 40.40	
Total Shoreline:			45,662.66	Total Shoreline: 28.37	

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](http://response.restoration.noaa.gov)





**Map 27B**  
Downeast Maine



## Map 27B Downeast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>
Softbottom	Worm bed	Harvest Area	High Ecological Value		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

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>												
							J	F	M	A	M	J	J	A	S	O	N	D	Nest
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T			-	-	-	-	-	-	-	-	-	-	-	-	-
4	Shorebird	American golden-plover	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Mar-May
	Shorebird	American oystercatcher	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Baird's sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	BB sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Black-bellied plover	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Dunlin	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Greater yellowlegs	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Hudsonian godwit	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Least sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Lesser yellowlegs	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Pectoral sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Red Knot	Concentration Area	C/- T			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Ruddy turnstone	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Sanderling	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Semipalmated plover	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Short-billed dowitcher	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Solitary sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	May-Jun
	Shorebird	Stilt sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Jun
	Shorebird	Western sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Jul
	Shorebird	Whimbrel	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Jul
	Shorebird	White-rumped sandpiper	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Jul
	Shorebird	Willet	Concentration Area	C/-			Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Jul
13	Alcid	Black guillemot	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	Oct
	Gull/Tern	G. black-backed gull	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	Oct
	Gull/Tern	Herring gull	Roosting				-	-	-	-	-	-	-	-	-	-	-	-	Oct
	Pelagic	Leach's storm-petrel	Roosting	C/-			-	-	-	-	-	-	-	-	-	-	-	-	Oct

**BIRDSS (continued)**

Map ID	Subelement	Species	Monthly Presence												Mig.(F)	Molt							
			J	F	M	A	M	J	J	A	S	O	N	D	Nest								
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt	
Wading	BC night-heron	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Watertowl	Common eider	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>15</b>	Shorebird	Purple sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>17</b>	Shorebird	American golden-plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	BB sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Black-bellied plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Dunlin	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Greater yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Hudsonian godwit	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Least sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Lesser yellowlegs	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red Knot	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Ruddy turnstone	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Sanderling	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated plover	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Short-billed dowitcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Solitary sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Stilt sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Western sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Whimbrel	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	White-rumped sandpiper	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Willet	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>35</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watertowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>75</b>	Gull/Tern	Roseate tern	Nesting	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDSS (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				
114	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	May-Aug	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	Oct	Jul-Oct	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	May	May	Aug-Oct	Aug-Oct	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	May	May	Jul-Oct	Jul-Oct	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	Jul-Oct	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Sep	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
117	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Jun	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-May	-

### BIRDS (continued)

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

### FISH

Map ID	Subelement	Species	ME/NH						Monthly Presence													
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec	-
	Freshwater	Rainbow smelt	Migration	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Apr	-
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec	-
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	-
	Marine Benthic	Atlantic tomcod	Migration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec	-

### HABITATS & RARE PLANTS

Map ID	Subelement	Species	ME/NH						Monthly Presence													
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
679	Bivalve	Atl. jackknife clam	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
690	Bivalve	Atlantic surfclam	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

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

### MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

### BIRDS

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

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

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

<i>Subelement</i>	<i>Species</i>	<i>Mapping Qualifier</i>	<i>ME/NH</i>	<i>S</i>	<i>F</i>	<i>Concentration</i>	<i>J F M A M J J A S O N D</i>	<i>Spawn</i>	<i>Eggs</i>	<i>Larvae</i>	<i>Juveniles</i>	<i>Adults</i>
Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	May-Nov	May-Nov	-	-	Jan-Dec
	Sea scallop	Harvest Area	-C	-	-	-	-	-	-	-	-	Jan-Dec
	Softshell clam	General Distribution	-C	-	-	-	-	May-Oct	May-Oct	May-Oct	May-Oct	Jan-Dec
	Horseshoe crab	General Distribution	-C	-	Low	Low	-	May-Jul	May-Jul	-	-	Jan-Dec

**BIRDS**

		Monthly Presence													
		J F M A M J J A S O N D		Nest		Mig.(S)		Mig.(F)		Molt					
Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D		
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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													
		J F M A M J J A S O N D		Spawn		Eggs		Larvae		Juveniles		Adults			
Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D		
Estuarine	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	Oct-May	Jan-Dec
Nursery	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Marine Benthic	American plaice	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Nov
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jun
	Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-	-	Nov-Jul
	Cunner	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Sep
	Haddock	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Aug
	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun
	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun
	Ocean pout	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Pollock	-	-	-	-	-	-	-	-	-	-	-	-	-	Nov-Feb
	Red hake	-	-	-	-	-	-	-	-	-	-	-	-	-	Nov-Mar
	Rock gurnel	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Oct
	Shorthorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Silver hake	-	-	-	-	-	-	-	-	-	-	-	-	-	Sep-May
	Skates	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Nov
	White hake	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Nov
Marine Pelagic	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Nov
	Butterfish	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct

**INVERTEBRATES**

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

**MARINE MAMMALS**

Subelement	Species	Monthly Presence											
		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											
		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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	17.75	0.03
10B		Freshwater Marshes	66.67	0.10
10C		Swamps	808.09	1.26
10D		Scrub and Shrub Wetlands	110.08	0.17
9A		Sheltered Tidal Flats	6.70	0.01
7		Exposed Tidal Flats	282.00	0.44
5		Mixed Sand and Gravel Beaches	260.01	0.41
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	381.58	0.60

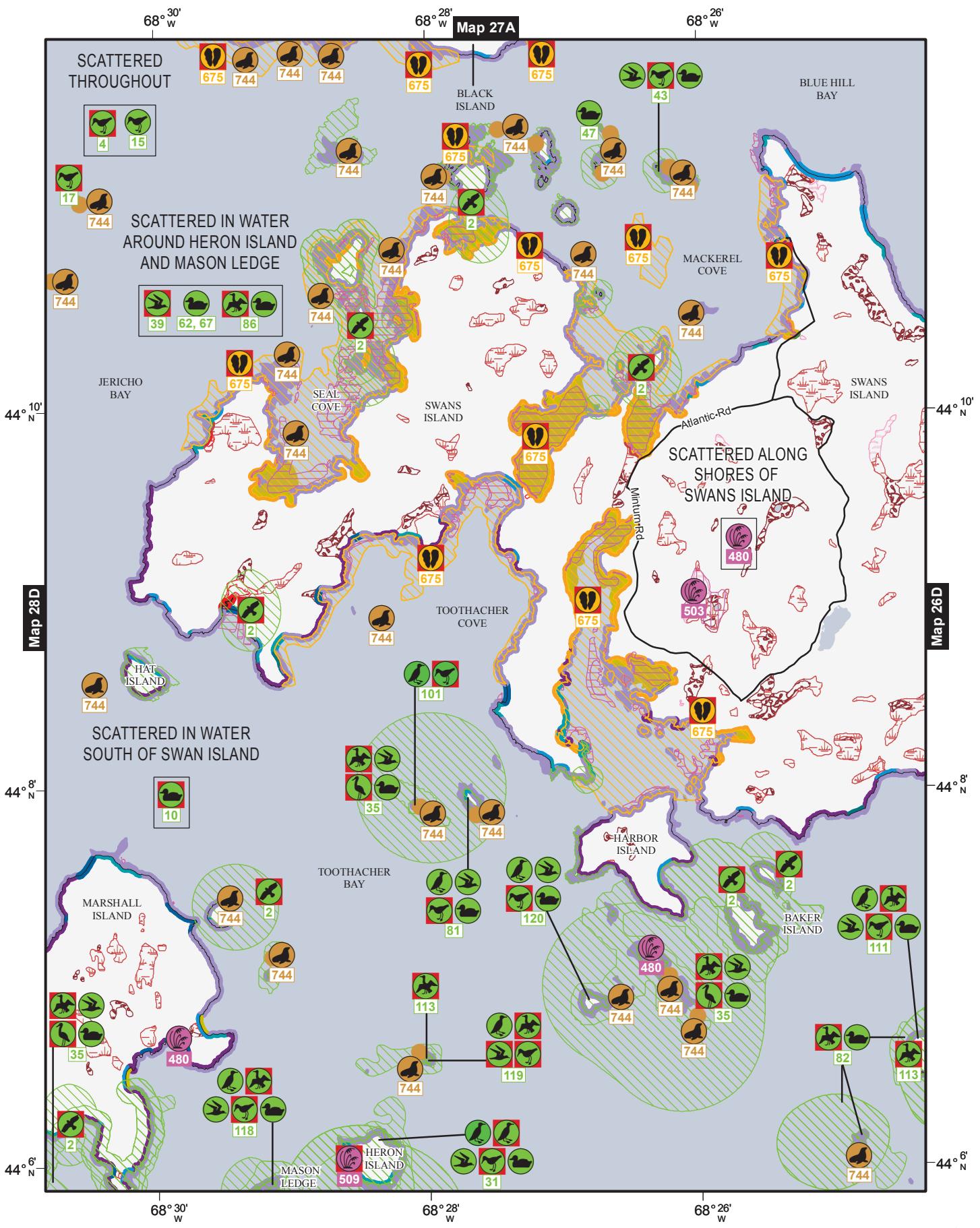
ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10A		Salt and Brackish Water Marshes	468.31	0.29	< 1%
10C		Swamps	351.48	0.22	< 1%
10D		Scrub and Shrub Wetlands	104.19	0.06	< 1%
9A		Sheltered Tidal Flats	819.53	0.51	1%
9B		Vegetated Low Banks	25,832.99	16.05	17%
8A		Sheltered, Impermeable, Rocky Shores	56.94	0.04	< 1%
8C		Sheltered Riprap	57.48	0.04	< 1%
7		Exposed Tidal Flats	16,177.20	10.05	11%
6A		Gravel Beaches	2,119.92	1.32	1%
6B		Riprap	2,708.14	1.68	2%
5		Mixed Sand and Gravel Beaches	30,622.88	19.03	20%
4		Coarse Grained Sand Beaches	16,864.49	10.48	11%
3A		Fine to Medium Grained Sand Beaches	2,674.32	1.66	2%
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	52,816.12	32.82	34%
1A		Exposed, Rocky Shores	319.66	0.20	< 1%
1B		Exposed, Solid Man-Made Structures	1,670.87	1.04	1%
Total ESI Shoreline:		153,664.52	Total ESI Shoreline:	95.48	
Total Shoreline:		104,980.20	Total Shoreline:	65.23	

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](http://response.restoration.noaa.gov)







**Map 27C**  
Downeast Maine



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

0 1 Miles  
0 1 Kilometers  
1:50,000



## Map 27C Downeast Maine

### 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	J F M A M J J A S O N D	Monthly Presence
Softbottom	Worm bed	Harvest Area	High Ecological Value		High	-	-
SAV	Eelgrass	Vulnerable Occurrence	High Ecological Value		0% To 10% Cover	-	-
SAV	Eelgrass	Concentration Area	High Ecological Value		10% To 40% Cover	-	-
SAV	Eelgrass	Concentration Area	High Ecological Value		40% To 70% Cover	-	-
SAV	Eelgrass	Concentration Area	High Ecological Value		70% To 100% Cover	-	-

#### BIRDS

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

**BIRDSS (continued)**

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	Nest	Mig.(S)	Mig.(F)	Molt
	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	Foraging					-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	Foraging					-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Purple sandpiper	Vulnerable Occurrence	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	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	Foraging					-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	Foraging					-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	Foraging					-	-	-	-	-	-	-	-	-	-	-	-	-	-
31	Alcid	Black guillemot	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pelagic	Leach's storm-petrel	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BIRD(S) (continued)

Map ID	Subelement	Species	ME/NH			Monthly Presence															
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>35</b>	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>39</b>	Arctic tern	Vulnerable Occurrence	T/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>43</b>	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red Knot	Roosting	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	ME/NH			Monthly Presence															
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct
Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	Jul-Sep
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
<b>47</b>	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
<b>62</b>	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
<b>67</b>	Waterfowl	Canada goose	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	Apr-Aug	-
<b>81</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	-
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	-
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	-
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	-
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	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	-
Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
<b>82</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Feb	Dec	-
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence												
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt						
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<b>86</b>	Diving	Common Loon	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Black Scooter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>101</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>111</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Great cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	ME/NH			Monthly Presence															
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
	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	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
113	Diving	Great cormorant	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
118	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	Great cormorant	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-
	Shorebird	Red Knot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	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	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt				
				S	F	Concentration	J	F	M	A	M	J	J	A	S	N	D	Nest	Mig.(S)	Mig.(F)
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	Jul-Oct	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	-
	Shorebird	Willet	Roosting	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
119	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-
	Diving	Great cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Common tern	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Aug	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-
	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-Aug	May-Jun	Jul-Sep
	Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
120	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-

## BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
Shorebird	Pectoral sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-
Shorebird	Red Knot	Roosting	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	-	-

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
503	Wetland	Forested wetland	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
509	Plant	A. water minerslettuce	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
675	Bivalve	Softshell clam	Harvest Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct	Jan-Dec	Jan-Dec
744	Pinniped	Harbor seal	Haul Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
744	Pinniped	Harbor seal	Haul Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

**BIRDS**

<b>Subelement</b>	<b>Species</b>	ME/NH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt					
Alcid	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Leach's storm-petrel	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Red-necked phalarope	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
																	-	-	-	-	-	-	-	-	

**FISH**

<b>Subelement</b>	<b>Species</b>	ME/NH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
Diadromous	Atlantic sturgeon	-T	T	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shortnose sturgeon	E/E	E	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Striped bass	Concentration Area	High	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Black Seabass	Concentration Area	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**REPTILES & AMPHIBIANS**

<b>Subelement</b>	<b>Species</b>	ME/NH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
Turtle	Green sea turtle	-J-	T	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	K. ridley sea turtle	E/-	E	Rare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Leatherback sea turtle	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Loggerhead sea turtle	E/-	T	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**INVERTEBRATES**

<b>Subelement</b>	<b>Species</b>	ME/NH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults				
Bivalve	Blue mussel	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Nov	May-Nov	May-Nov	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	
	Sea scallop	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	
Crab	Horseshoe crab	-C	Low	Low	-	-	-	-	-	-	-	-	-	-	-	May-Jul	May-Jul	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	

**MARINE MAMMALS**

<b>Subelement</b>	<b>Species</b>	ME/NH												Monthly Presence											
		S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Matting	Calving	Pupping	Molt					
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

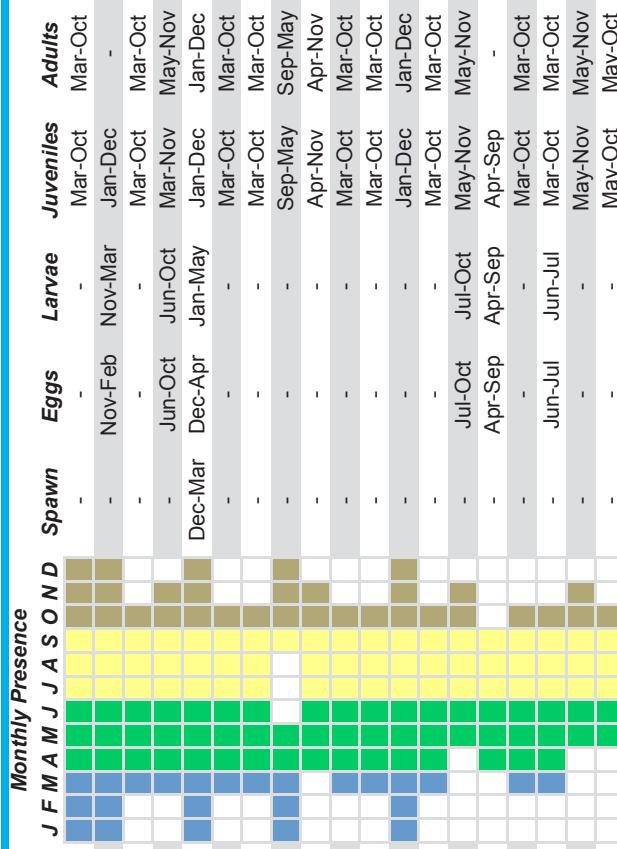
**BIRDS**

		<b>Species</b>	<i>Monthly Presence</i>												<b>Molt</b>		
<b>Sublement</b>	<b>Alcid</b>		J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Common murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<b>Pelagic</b>																
	<b>Gull/Tern</b>																
	<b>Shorebird</b>																

**FISH**

		<b>Species</b>	<i>Monthly Presence</i>												<b>Adults</b>			
<b>Sublement</b>	<b>Diadromous</b>		J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
	Striped bass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Estuarine Nursery	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Oct-May	Jan-Dec
	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Apr-Dec
	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	American plaice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Nov	Mar-Nov
	American plaice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun	Jan-Dec
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Oct-Jul	Oct-Jul
	Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Cunner	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Haddock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun	-
	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Jan-Dec
	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	Jul-Oct
	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	<b>Marine Benthic</b>																	

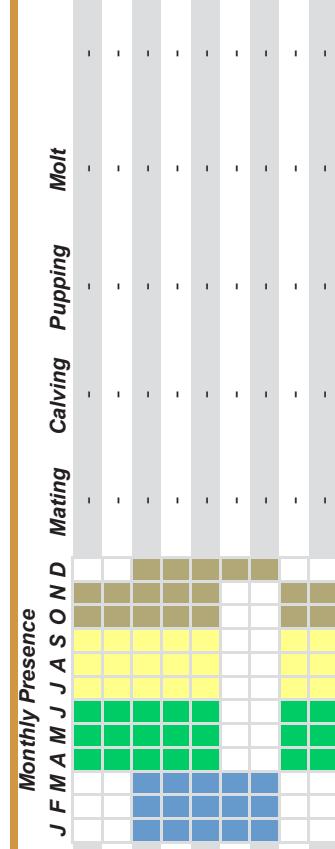
## FISH (continued)



## INVERTEBRATES



## MARINE MAMMALS



For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES	
ESI/Rank	Habitat Classification
10A	Salt and Brackish Water Marshes
10B	Freshwater Marshes
10C	Swamps
10D	Scrub and Shrub Wetlands
7	Exposed Tidal Flats
5	Mixed Sand and Gravel Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES	
ESI/Rank	Shoreline Habitat Classification
10A	Salt and Brackish Water Marshes
10C	Swamps
9B	Vegetated Low Banks
7	Exposed Tidal Flats
6A	Gravel Beaches
6B	Riprap
5	Mixed Sand and Gravel Beaches
4	Coarse Grained Sand Beaches
3A	Fine to Medium Grained Sand Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
1A	Exposed, Rocky Shores
1B	Exposed, Solid Man-Made Structures

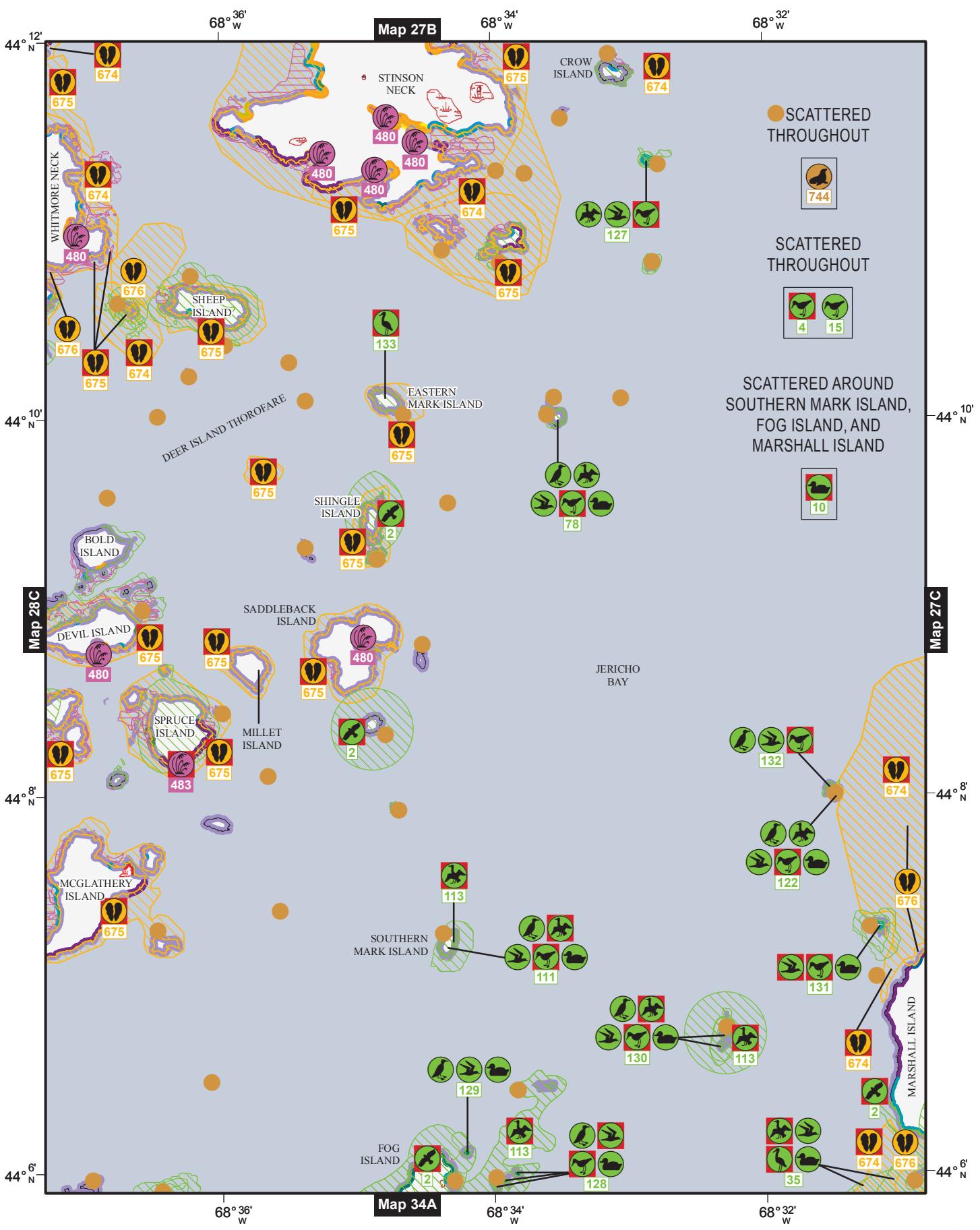
Total ESI Shoreline: 152,505.78      Total ESI Shoreline: 94.76  
 Total Shoreline: 102,541.96      Total Shoreline: 63.72

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](http://response.restoration.noaa.gov)





**Map 27D**  
**Downeast Maine**



## Map 27D Downeast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>
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

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>S F</b>	<b>Concentration</b>	<b>Monthly Presence</b>
2	Raptor	Bald eagle	Vulnerable Occurrence	C/T	-	-	- - - - -
4	Shorebird	American golden-plover	Concentration Area	C/-	Foraging	-	- - - - -
Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Dunlin	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Red Knot	Concentration Area	C/- T	Foraging	-	-	- - - - -
Shorebird	Ruddy turnstone	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Sanderling	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Whimbrel	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	White-rumped sandpiper	Concentration Area	C/-	Foraging	-	-	- - - - -
Shorebird	Willet	Concentration Area	C/-	Foraging	-	-	- - - - -
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	- - - - -
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	T/-	-	-	- - - - -
35	Diving	Common Loon	Rafting	-T	-	-	- - - - -
	Diving	D. crested cormorant	Rafting	-	-	-	- - - - -
				Jun-Sep	-	-	- - - - -

**BIRDSS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Mig.(F)	Molt	
				J	F	M	A	M	J	J	A	S	O	N	D			
Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	
Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-	
Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Goldeye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>78</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Red Knot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>111</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt	
				J	F	M	A	M	J	J	A	S	O	N	D	Nest	
	Diving	Great cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmented plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmented sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	Diving	Great cormorant	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-
122	Acid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt						
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
127	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	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	-	-
	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	Sep	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	-
	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	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	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	Jul-Sep	-
	Shorebird	Willet	Roosting	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	-
128	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Sep	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence						Mig.(F)	Molt
							J	F	M	A	M	J	J	
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	May	Aug-Oct
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	May	Jul-Oct
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-
	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	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	Jun	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Sep
129	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-
129	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-
130	Alcid	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-
130	Diving	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-
		Great cormorant	Roosting	T/-	-	-	-	-	-	-	-	-	-	-
		G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	May-Aug	-
		American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	Aug	Oct
		American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	May	Sep
		Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-
		BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	Aug	Oct
		Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	May	Jul-Oct
		Dunlin	Roosting	-	-	-	-	-	-	-	-	-	May	Aug-Oct
		Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	May	Jul-Oct
		Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-
		Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
		Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
		Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct
		Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	May	Aug-Oct
		Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
		Sanderling	Roosting	C/-	-	-	-	-	-	-	-	-	Apr-May	-
		Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
		Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
		Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
		Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	Jun	-
		Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	Jul	Sep

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence												Molt		
					S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
131	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/- T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
132	Alcid	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	C/- T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
	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
133	Wading	BC night-heron	Concentration Area	E/-																Apr	Oct	-
	Wading	Glossy ibis	Concentration Area	Foraging	-															May-Sep	Apr	Oct
	Wading	Great blue heron	Concentration Area	C/-																May-Sep	-	Apr
	Wading	Great egret	Concentration Area	Foraging	-															May-Sep	Apr	Oct
	Wading	Little blue heron	Concentration Area	Foraging	-															May-Sep	Apr	Oct
	Wading	Snowy egret	Concentration Area	Foraging	-															May-Sep	Apr	Oct

### HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
480	Wetland	Tidal Marsh	High Ecological Value	-																-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C	-															-	-	-

### INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
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	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-															May-Nov	May-Nov	Jan-Dec	Jan-Dec	Jan-Dec

### MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS)

**BIRDS**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Atlantic puffin	-	-	-	-	-	-	-	-	-	-	-	-
	Razorbill	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Common Loon	-	-	-	-	-	-	-	-	-	-	-	-
	Great cormorant	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Arctic tern	-	-	-	-	-	-	-	-	-	-	-	-
	Common tern	-	-	-	-	-	-	-	-	-	-	-	-
	Roseate tern	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Leach's storm-petrel	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red-necked phalarope	-	-	-	-	-	-	-	-	-	-	-	-

**FISH**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Atlantic sturgeon	-	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	-	-	-	-	-	-	-	-	-	-	-	-
Striped bass	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-

**REPTILES & AMPHIBIANS**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Turtle	Green sea turtle	-	-	-	-	-	-	-	-	-	-	-	-
	K. ridley sea turtle	-	-	-	-	-	-	-	-	-	-	-	-
	Leatherback sea turtle	-	-	-	-	-	-	-	-	-	-	-	-
	Loggerhead sea turtle	-	-	-	-	-	-	-	-	-	-	-	-

**INVERTEBRATES**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Crab	Horseshoe crab	-	-	-	-	-	-	-	-	-	-	-	-
Shrimp	Northern shrimp	-	-	-	-	-	-	-	-	-	-	-	-

**MARINE MAMMALS**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Whale	Fin whale	-	-	-	-	-	-	-	-	-	-	-	-
	Humpback whale	-	-	-	-	-	-	-	-	-	-	-	-
	N.A. right whale	-	-	-	-	-	-	-	-	-	-	-	-
	Sei whale	-	-	-	-	-	-	-	-	-	-	-	-
	Sperm whale	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS**

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

**FISH**

Monthly Presence													
		Species											
		J	F	M	A	M	J	J	A	S	O	N	D
 Estuarine Nursery		Atlantic herring											
 Marine Benthic		Winter flounder											
 American sand lance		American plaice											
 Atlantic cod		Atlantic Wolffish											
 Cunner		Cunner											
 Haddock		Haddock											
 Longhorn sculpin		Longhorn sculpin											
 Northern searobin		Northern searobin											
 Ocean pout		Ocean pout											
 Pollock		Pollock											
 Red hake		Red hake											
 Rock gunnel		Rock gunnel											
 Shorthorn sculpin		Shorthorn sculpin											
 Silver hake		Silver hake											
 Skates		Skates											
 White hake		White hake											
 Yellowtail flounder		Yellowtail flounder											

## FISH (continued)

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
Marine Pelagic	Atlantic mackerel													May-Nov
	Butterfish													May-Oct

## INVERTEBRATES

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
Bivalve	Northern quahog													Jan-Dec
Crab	Atlantic rock crab													Jan-Dec
	Blue crab													Jan-Dec
	Jonah crab													Jan-Dec
Echinoderm	Green urchin													Jan-Dec
Lobster	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													-	-	-	-
	Hooded seal													-	-	-	-
	Lf pilot whale													-	-	-	-
Whale	Minke whale													-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

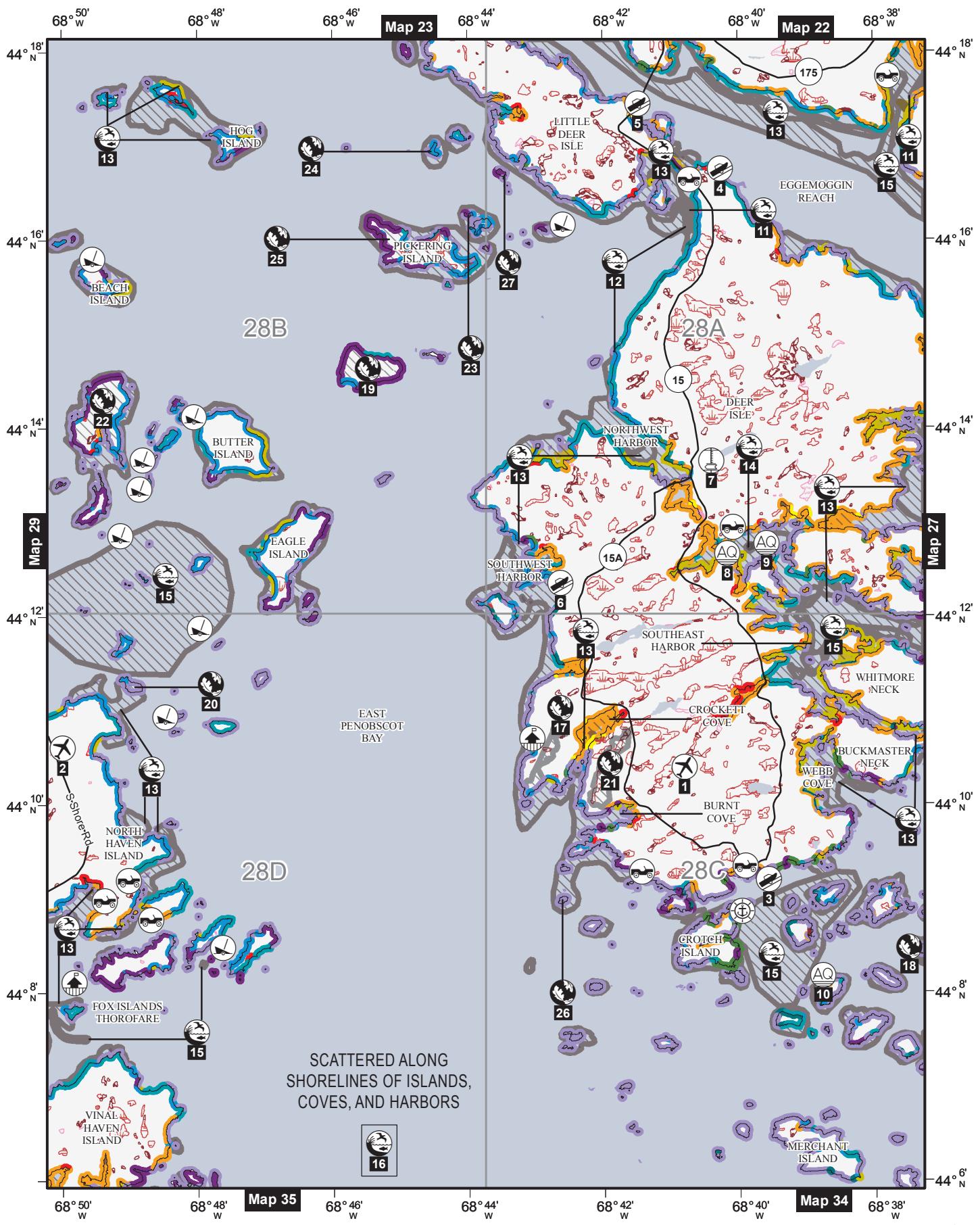
ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	9A	Sheltered Tidal Flats
	7	Exposed Tidal Flats
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	9A	Sheltered Tidal Flats
	9B	Vegetated Low Banks
	8A	Sheltered, Impermeable, Rocky Shores
	8B	Sheltered, Solid Man-Made Structures
	8C	Sheltered Riprap
	7	Exposed Tidal Flats
	6A	Gravel Beaches
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	3A	Fine to Medium Grained Sand Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1A	Exposed, Rocky Shores
	1B	Exposed, Solid Man-Made Structures
		Total ESI Shoreline:
		75,659.94
		Total Shoreline:
		64,272.99
		Total ESI Shoreline:
		47.01
		Total Shoreline:
		39.94

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.noaa.gov](http://response.noaa.gov)





**Map 28**  
**Midcoast Maine**



## Map 28 Midcoast Maine

### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)		
Map ID	Type	Name
1	AIRPORT	STONINGTON MUNICIPAL AIRPORT
2	AIRPORT	WATSON LANDING STRIP
3	BOAT RAMP	DEER ISLE THOROUGHFARE BOAT RAMP
4	BOAT RAMP	OLD FERRY LANDING 1
5	BOAT RAMP	RTE 15 BRIDGE
6	BOAT RAMP	SOUTHWEST HARBOR ROAD
7	LOCK AND DAM	LILY POND DAM

DISPLAYED ON MAP (POLYGONS)		
Map ID	Type	Name
8	AQUACULTURE	PEN LD2 - LONG COVE
9	AQUACULTURE	PEN LD3 - LONG COVE
10	AQUACULTURE	PEN STH2 - DEER ISLE THOROFARAE, PENOBSCOT BAY
11	MANAGEMENT AREA	ATLANTIC JACKKNIFE CLAM - SHELLFISH MA
12	MANAGEMENT AREA	ATLANTIC SURFCALM - SHELLFISH MA
13	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA
14	MANAGEMENT AREA	EASTERN OYSTER - SHELLFISH MA
15	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA
16	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA
17	NATURE CONSERVANCY	BARRED ISLAND PRESERVE
18	NATURE CONSERVANCY	BIG COOMBS ISLAND EASEMENT
19	NATURE CONSERVANCY	BRADBURY ISLAND PRESERVE
20	NATURE CONSERVANCY	BURNT ISLAND
21	NATURE CONSERVANCY	CROCKETT COVE WOODS PRESERVE
22	NATURE CONSERVANCY	GREAT SPRUCE HEAD ISLAND EASEMENT
23	NATURE CONSERVANCY	LITTLE EATON ISLAND
24	NATURE CONSERVANCY	OUTER SCOTT ISLAND EASEMENT
25	NATURE CONSERVANCY	PICKERING ISLAND EASEMENT
26	NATURE CONSERVANCY	SECOND ISLAND EASEMENT
27	NATURE CONSERVANCY	SHEEP ISLAND (DEER ISLE)

ALSO PRESENT IN MAPPED AREA (POLYGONS)		
Type	Name	Contact
STATE PROTECTED AREA	BURNT ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE
STATE PROTECTED AREA	EAST BARRED ISLAND	MAINE DEPARTMENT OF CONSERVATION
STATE PROTECTED AREA	HARDWOOD ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE
STATE PROTECTED AREA	SHEEP ISLAND	MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE
STATE PROTECTED AREA	WEST BARRED ISLAND	MAINE DEPARTMENT OF CONSERVATION

**JURISDICTIONS**

**COUNTY:** HANCOCK, KNOX  
**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)
10A	Salt and Brackish Water Marshes	118.14
10B	Freshwater Marshes	96.32
10C	Swamps	1,701.73
10D	Scrub and Shrub Wetlands	524.52
9A	Sheltered Tidal Flats	229.70
7	Exposed Tidal Flats	463.53
5	Mixed Sand and Gravel Beaches	181.94
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,288.82

ESI SHORELINE HABITAT TYPES		
ESI Rank	Shoreline Habitat Classification	Length (Meters)
10A	Salt and Brackish Water Marshes	7,870.62
10B	Freshwater Marshes	135.97
10C	Swamps	873.08
10D	Scrub and Shrub Wetlands	484.25
9A	Sheltered Tidal Flats	18,086.07
9B	Vegetated Low Banks	70,687.53
8A	Sheltered, Impermeable, Rocky Shores	2,484.92
8B	Sheltered, Solid Man-Made Structures	90.64
7	Exposed Tidal Flats	42,674.79
6A	Gravel Beaches	5,120.72
6B	Riprap	10,038.95
5	Mixed Sand and Gravel Beaches	59,119.27
4	Coarse Grained Sand Beaches	65,833.39
3A	Fine to Medium Grained Sand Beaches	1,872.63
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	227,619.72
1A	Exposed, Rocky Shores	45,276.34
1B	Exposed, Solid Man-Made Structures	7,598.65

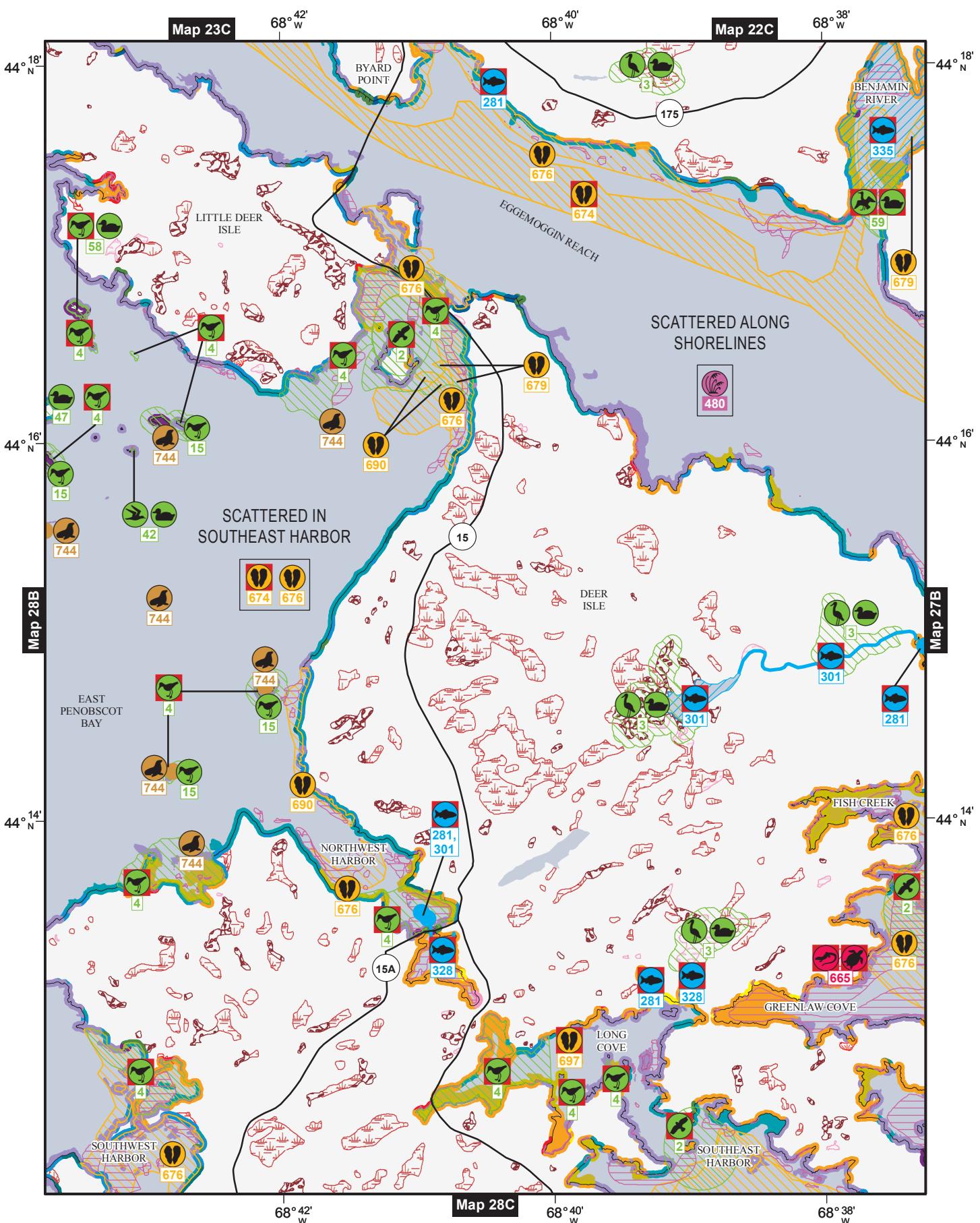
Total ESI Shoreline: 565,867.52 Total ESI Shoreline: 351.61  
 Total Shoreline: 380,145.61 Total Shoreline: 236.21

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 28A**  
**Midcoast Maine**



## Map 28A Midcoast Maine

### 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	MENH												Monthly Presence											
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt					
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier	MENH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt					
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	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Molt
								J	F	M	A	M	J	J	A	S	O	N	D	
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>47</b>	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>58</b>	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>59</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

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

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence												
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults					
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## REPTILES & AMPHIBIANS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults				
665	Amphibian	B. spotted salamander	Vulnerable Occurrence	C/C	C/C	Very Low	C/C	C/C	C/C	Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun									
	Amphibian	Jefferson salamander	Vulnerable Occurrence	-	-	Rare	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	May-Jun	-	Jan-Dec	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun
	Amphibian	Northern leopard frog	Vulnerable Occurrence	-	-	Low	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	May-Jul	-	May-Sep	Mar-Jun	Mar-Jun	Mar-Jun	Mar-Jun	Mar-Jun
	Amphibian	Spotted salamander	Concentration Area	-	-	Common	-	-	-	-	-	-	-	-	-	-	-	-	Mar-May	Apr-May	-	May-Sep	Mar-Sep	Mar-Sep	Mar-Sep	Mar-Sep	Mar-Sep
	Amphibian	Wood Frog	Concentration Area	-	-	Common	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Jun	May-Jul	-	Jun-Sep	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Turtle	Spotted turtle	Vulnerable Occurrence	T/T	Very Low	Very Low	C/C	C/C	C/C	May-Jul	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec									
	Turtle	Wood turtle	Vulnerable Occurrence	-	-	Very Low	-	-	-	-	-	-	-	-	-	-	-	-	Aug-Oct	Aug-Oct	-	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec

## INVERTEBRATES

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

## MARINE MAMMALS

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

**WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )**

**BIRDS**

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

**FISH**

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

**REPTILES & AMPHIBIANS**

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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Internest	Hatch	Adults		
Harvest Area	-/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
General Distribution	-/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>												<b>Monthly Presence</b>											
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Internest	Hatch	Adults		
Black guillemot	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-	-	-	-	
Dovekie	General Distribution	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Thick-billed murre	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
D. crested cormorant	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Horned grebe	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Red-necked grebe	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Red-throated loon	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
G. black-backed gull	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt
	Herring gull							- - -	- - -	- - -	- - -	- - -
	Pelagic	Ring-billed gull						- - -	- - -	- - -	- - -	- - -
	Northern gannet							- - -	- - -	- - -	- - -	- - -

### FISH

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

## **INVERTEBRATES**

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

## **MARINE MAMMALS**

Subelement	Species	Monthly Presence												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
		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](http://response.restoration.noaa.gov)

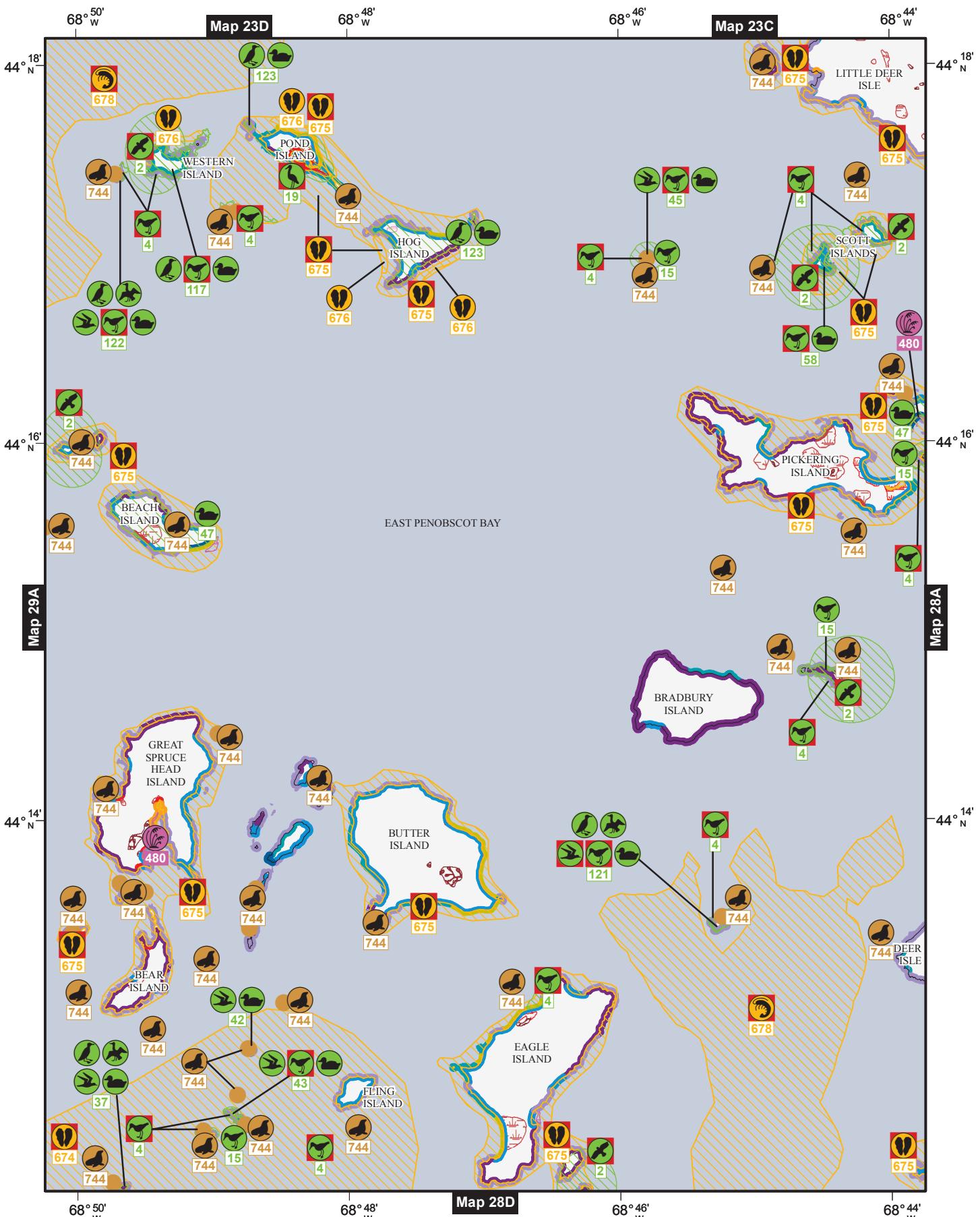
ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	25.18	0.04
10B		Freshwater Marshes	72.72	0.11
10C		Swamps	934.18	1.46
10D		Scrub and Shrub Wetlands	378.90	0.59
9A		Sheltered Tidal Flats	105.14	0.16
7		Exposed Tidal Flats	271.58	0.42
5		Mixed Sand and Gravel Beaches	96.34	0.15
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	315.67	0.49

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10A		Salt and Brackish Water Marshes	2,128.16	1.32	1%
10B		Freshwater Marshes	135.97	0.08	<1%
10C		Swamps	140.63	0.09	<1%
10D		Scrub and Shrub Wetlands	267.38	0.17	<1%
9A		Sheltered Tidal Flats	8,654.81	5.38	5%
9B		Vegetated Low Banks	40,321.56	25.05	23%
8A		Sheltered, Impermeable, Rocky Shores	1,358.53	0.84	1%
8B		Sheltered, Solid Man-Made Structures	90.64	0.06	<1%
7		Exposed Tidal Flats	19,894.71	12.36	11%
6A		Gravel Beaches	2,167.75	1.35	1%
6B		Riprap	4,223.96	2.62	2%
5		Mixed Sand and Gravel Beaches	26,948.77	16.75	15%
4		Coarse Grained Sand Beaches	16,035.57	9.96	9%
3A		Fine to Medium Grained Sand Beaches	828.89	0.52	<1%
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	51,616.86	32.07	29%
1A		Exposed, Rocky Shores	2,021.88	1.26	1%
1B		Exposed, Solid Man-Made Structures	2,154.58	1.34	1%
		Total ESI Shoreline:	178,990.65	Total ESI Shoreline:	111.22
		Total Shoreline:	118,548.40	Total Shoreline:	73.66

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](http://response.restoration.noaa.gov)





**Map 28B**  
**Midcoast Maine**



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



## Map 28B Midcoast Maine

### 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	ME/NH												Monthly Presence											
		Mapping Qualifier			S F			Concentration			J F M A M J J A S O N D			Nest			Mig.(S)			Mig.(F)			Molt		
		High Ecological Value			10% To 40% Cover			70% To 100% Cover																	
SAV	Eelgrass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	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)			
			Vulnerable Occurrence	Concentration Area	C/T	Foraging	Concentration Area	C/-	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging
2	Raptor	Bald eagle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	Shorebird	American golden-plover	Concentration Area	Concentration Area	C/-	Foraging	Concentration Area	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging	Concentration Area	Foraging						
	Shorebird	American oystercatcher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Baird's sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	BB sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Black-bellied plover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Dunlin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Greater yellowlegs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Hudsonian godwit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Least sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Lesser yellowlegs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Pectoral sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Red Knot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Ruddy turnstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Sanderling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Semipalmated plover	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Semipalmated sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Short-billed dowitcher	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Solitary sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Stilt sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Western sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Whimbrel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	White-rumped sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Willet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Purple sandpiper	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	Yellow rail	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
15	Shorebird	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
19	Wading	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
37	Alcid	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Diving	Gull/Tern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Common eider	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence						Molt								
								J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
<b>42</b>	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>43</b>	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>45</b>	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence						Molt	
							J	F	M	A	M	J	J	
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Jun
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Sep
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Oct
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	White-rumped sandpiper	Roosting	-C	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	May-Aug
47	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	May-Aug
58	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	Aug
	Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	Oct
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	May
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	May
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	Aug-Oct
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	May
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	May
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	Aug-Oct
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Jun
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	Sep
	Shorebird	Whimbrel	Roosting	-C	-	-	-	-	-	-	-	-	-	Oct
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Common eider	Roosting	C/-	-	-	-	-	-	-	-	-	-	Jul-Sep
	Shorebird	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-
117	Alcid	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	Oct
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	May-Jun
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Sep
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	Aug
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	Oct
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	May
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	May
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	Jul-Oct
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	May-Jun

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence						Molt	
							J	F	M	A	M	J	J	
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Pectoral sandpiper	Roosting	C/-	T	-	-	-	-	-	Apr-May	Sep-Oct	-	
	Shorebird	Red Knot	Roosting	Ruddy turnstone	-	-	-	-	-	-	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	-	-	-	-	-	-	-	Jun	-	-	
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	Jul	Sep	-	
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	Jul	Oct	-	
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	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	-	-	
	121	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	May-Aug	-	-	
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	May-Aug	-	-	
	Gull/Tern	Common tern	Roosting	-	-	-	-	-	-	-	Jun-Sep	-	-	
	Gull/Tern	G. black-backed gull	Roosting	C/T	-	-	-	-	-	-	May-Aug	-	-	
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	May-Aug	-	-	
	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	May-Jun	May	Sep	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	Aug	Oct	-	
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	Aug	-	-	
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	Aug	Oct	-	
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	Aug	-	-	
	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-Jun	Jul-Oct	-	
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Pectoral sandpiper	Roosting	C/-	T	-	-	-	-	-	Apr-May	Sep-Oct	-	
	Shorebird	Red Knot	Roosting	Ruddy turnstone	-	-	-	-	-	-	May	Aug-Oct	-	
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	Apr-May	-	-	
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	Jun	-	-	
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	Jul	Sep	-	
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	Jul	Oct	-	
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	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	-	-	

## BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence							
								J	F	M	A	M	J	J	A
122	Acid	Black guillemot	Roosting	-				May-Aug							
	Diving	D. crested cormorant	Roosting	-				Jun-Sep							
	Gull/Tern	G. black-backed gull	Roosting	-				May-Aug							
	Shorebird	American golden-plover	Roosting	-				-							
	Shorebird	American oystercatcher	Roosting	C/-				May-Jun							
	Shorebird	Baird's sandpiper	Roosting	-				-							
	Shorebird	BB sandpiper	Roosting	-				-							
	Shorebird	Black-bellied plover	Roosting	-				-							
	Shorebird	Dunlin	Roosting	-				-							
	Shorebird	Greater yellowlegs	Roosting	-				-							
	Shorebird	Hudsonian godwit	Roosting	-				-							
	Shorebird	Least sandpiper	Roosting	C/-				-							
	Shorebird	Lesser yellowlegs	Roosting	-				-							
	Shorebird	Pectoral sandpiper	Roosting	-				-							
	Shorebird	Red Knot	Roosting	C/-	T	-		-							
	Shorebird	Ruddy turnstone	Roosting	-				-							
	Shorebird	Sanderling	Roosting	-				-							
	Shorebird	Semipalmated plover	Roosting	-				-							
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-			-							
	Shorebird	Short-billed dowitcher	Roosting	-				-							
	Shorebird	Solitary sandpiper	Roosting	-				-							
	Shorebird	Stilt sandpiper	Roosting	-				-							
	Shorebird	Western sandpiper	Roosting	-				-							
	Shorebird	Whimbrel	Roosting	C/-	-			-							
	Shorebird	White-rumped sandpiper	Roosting	-				-							
	Shorebird	Willet	Roosting	-C	-			-							
	Waterfowl	Common eider	Roosting	-				-							
123	Acid	Black guillemot	Roosting	-				-							
	Waterfowl	Common eider	Roosting	-				-							

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence									
					J	F	M	A	M	J	J	A	S	O
480	Wetland	Tidal Marsh	High Ecological Value	-										
				-										

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence									
					J	F	M	A	M	J	J	A	S	O
674	Bivalve	Sea scallop	Harvest Area	-C										
675	Bivalve	Softshell clam	Harvest Area	-C	-									
676	Bivalve	Blue mussel	Harvest Area	-										
678	Shrimp	Northern shrimp	General Distribution	-C	-									

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence									
					J	F	M	A	M	J	J	A	S	O
				-										
				-										

### MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH			Monthly Presence											
				S	F	Concentration	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			Monthly Presence											
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Razorbill	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Common Loon	General Distribution	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Great cormorant	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Arctic tern	General Distribution	TIC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Common tern	General Distribution	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-	-	-	-

### FISH

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

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

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

**BIRDS**

		Monthly Presence													
		J F M A M J J A S O N D		Nest		Mig.(S)		Mig.(F)		Molt					
Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D		
Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dovekie		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thick-billed murre		-	-	-	-	-	-	-	-	-	-	-	-	-	-
D. crested cormorant		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	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													
		J F M A M J J A S O N D		Spawn		Eggs		Larvae		Juveniles		Adults			
Subelement	Species	J	F	M	A	M	J	J	A	S	O	N	D		
Diadromous	Striped bass	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
Estuarine	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Apr-Dec
Nursery	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	-
Marine Benthic	American plaice	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	American plaice	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jun	Dec-Jun
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Mar-Oct
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Oct-Jul
	Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
Cunner	Cunner	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Haddock	Haddock	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Haddock	Haddock	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun	Mar-Jun
Longhorn sculpin	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Longhorn sculpin	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Jun	Jan-Jun
Northern searobin	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Northern searobin	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	Jul-Oct
Ocean pout	Ocean pout	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Pollock	Pollock	-	-	-	-	-	-	-	-	-	-	-	-	Nov-Feb	Nov-Mar
Red hake	Red hake	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Oct	Jun-Oct
Red hake	Red hake	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Rock gunnel	Rock gunnel	-	-	-	-	-	-	-	-	-	-	-	-	Jan-May	Jan-Dec
Rock gunnel	Rock gunnel	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
Shorthorn sculpin	Shorthorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	Sep-May	Sep-May
Shorthorn sculpin	Shorthorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct

## FISH (continued)

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
	Silver hake	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Silver hake	-	-	-	-	-	-	-	-	-	-	-	Apr-Nov	Apr-Nov
	Skates	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	Skates	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	White hake	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	White hake	-	-	-	-	-	-	-	-	-	-	-	May-Nov	May-Nov
	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	May-Nov	May-Nov
	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Butterfish	-	-	-	-	-	-	-	-	-	-	-	May-Oct	May-Oct

## INVERTEBRATES

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
	Bivalve	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Crab	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Blue crab	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Jonah crab	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Green urchin	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	American lobster	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec

## MARINE MAMMALS

Subelement	Species	Monthly Presence												Molt
		J	F	M	A	M	J	J	A	S	O	N	D	
	Dolphin	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pinniped	-	-	-	-	-	-	-	-	-	-	-	-	-
	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](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10A	Salt and Brackish Water Marshes	33.07
10B	Freshwater Marshes	1.15
10C	Swamps	61.23
10D	Scrub and Shrub Wetlands	0.10
5	Mixed Sand and Gravel Beaches	0.03
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	0.05

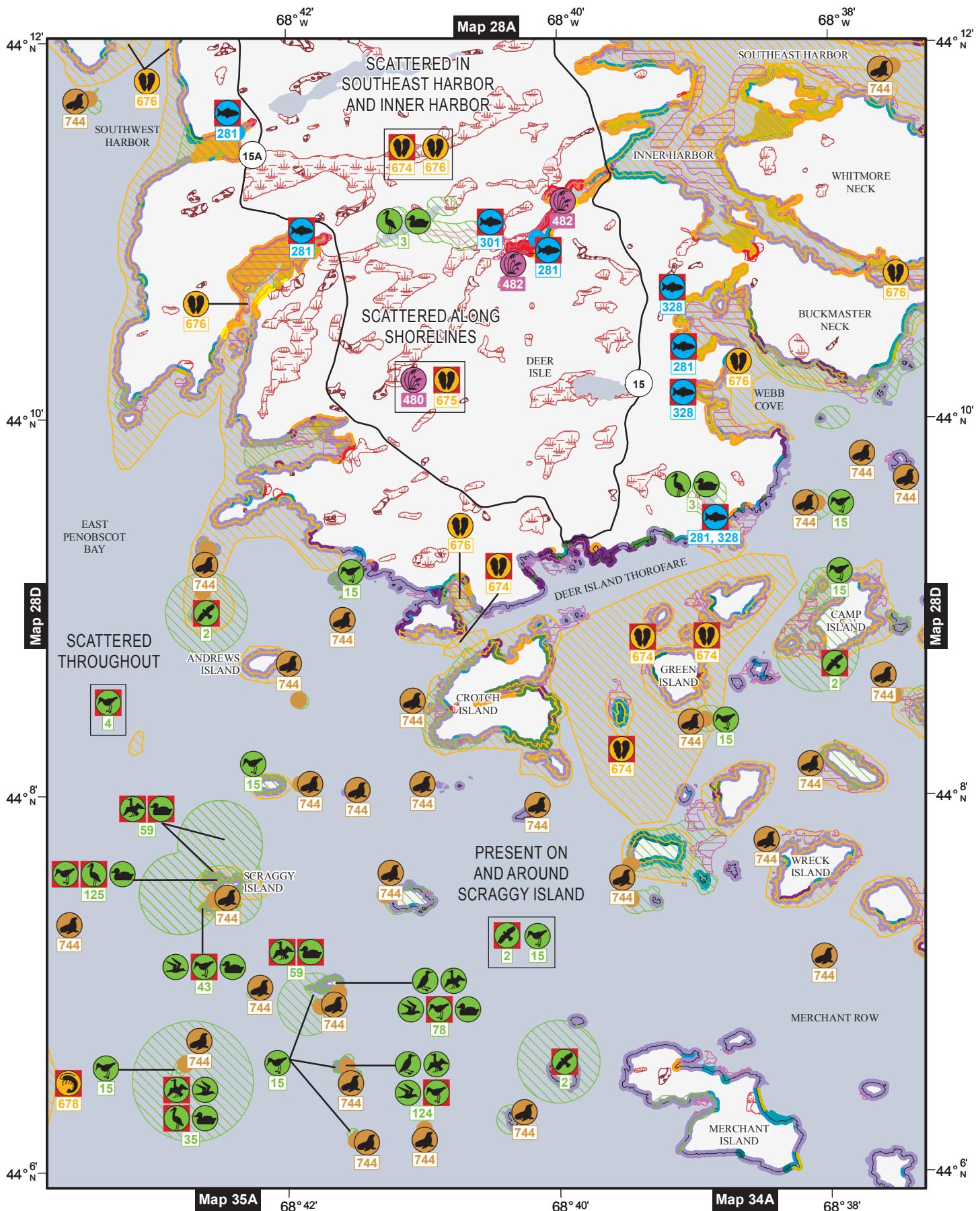
ESI SHORELINE HABITAT TYPES		
ESI Rank	Shoreline Habitat Classification	Length (Meters)
10A	Salt and Brackish Water Marshes	1,803.28
10C	Swamps	604.46
9B	Vegetated Low Banks	654.72
7	Exposed Tidal Flats	4,767.44
5	Mixed Sand and Gravel Beaches	8,466.60
4	Coarse Grained Sand Beaches	26,930.31
3A	Fine to Medium Grained Sand Beaches	993.75
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	44,368.36
1A	Exposed, Rocky Shores	25,727.22

Total ESI Shoreline: 114,316.15      Total ESI Shoreline: 71.03  
 Total Shoreline: 68,773.79      Total Shoreline: 42.73

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](http://response.restoration.noaa.gov)





**Map 28C**  
Midcoast Maine



## Map 28C Midcoast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
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	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Concentration Area	C/-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	Rafting	-	-	-	-	-	-	-	-	-	-	-	-
35	Diving	Common Loon	Concentration Area	-T	-	-	-	-	-	-	-	-	-	-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence							Molt			
								J	F	M	A	M	J	J	A	S	Mig.(F)	
	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>43</b>	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>59</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Monthly Presence												Molt	
			J	F	M	A	M	J	J	A	S	O	N	D		
															Feb	Dec
Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>78</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>124</b>	Alcid	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Diving	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Gull/Tern	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	-	-	-	-	-	-	-	-	-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence						Molt								
								J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
	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	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	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	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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
125	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
	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	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-
	Shorebird	Red Knot	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
	Shorebird	Stilt sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Sep	-
	Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-
	Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep
	Wading	Great blue heron	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Sep	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-

## BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							Mig.(F)	Mig.	
							J	F	M	A	M	J	J	A	S	
122	Alcid	Black guillemot	Roosting	-	-	-	May-Aug	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmented plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Semipalmented sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Willet	Roosting	-/C	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
123	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							Mig.(F)	Mig.
							J	F	M	A	M	J	J	A	
480	Wetland	Tidal Marsh	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-
				-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							Mig.(F)	Mig.
							J	F	M	A	M	J	J	A	
674	Bivalve	Sea scallop	Harvest Area	-/C	-	-	-	-	-	-	-	-	-	-	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-/C	-	-	-	-	-	-	-	-	-	-	Jan-Dec
676	Bivalve	Blue mussel	General Distribution	-/C	Low	-	-	-	-	-	-	-	-	-	Jan-Dec
678	Shrimp	Northern shrimp	-	Dec-Apr	Jan-Dec	-	-	-	-	-	-	-	-	-	Dec-Apr

## REPTILES & AMPHIBIANS

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

## INVERTEBRATES

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

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

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

## FISH

		Monthly Presence															
		ME/NH						J F M A M J J A S O N D									
Subelement	Species	Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Striped bass	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Estuarine Nursery	Atlantic herring	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Apr-Dec
	Black Seabass	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Winter flounder	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
Marine Benthic	American plaice	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	American plaice	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Mar-Nov
	American sand lance	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	American sand lance	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Oct-Jul
	Atlantic cod	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Atlantic Wolffish	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
Cunner	Cunner	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec
	Cunner	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Haddock	-/-	Y	Y	Low	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct

## FISH (continued)

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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	-	-	-	-	-	-	-	-	-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.noaa.gov](http://response.noaa.gov)

ESI POLYGON HABITAT TYPES		
ESI Rank	Habitat Classification	Area (Acres)
10A	Salt and Brackish Water Marshes	43.99
10B	Freshwater Marshes	16.08
10C	Swamps	630.58
10D	Scrub and Shrub Wetlands	98.72
9A	Sheltered Tidal Flats	94.49
7	Exposed Tidal Flats	164.10
5	Mixed Sand and Gravel Beaches	26.17
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	456.61

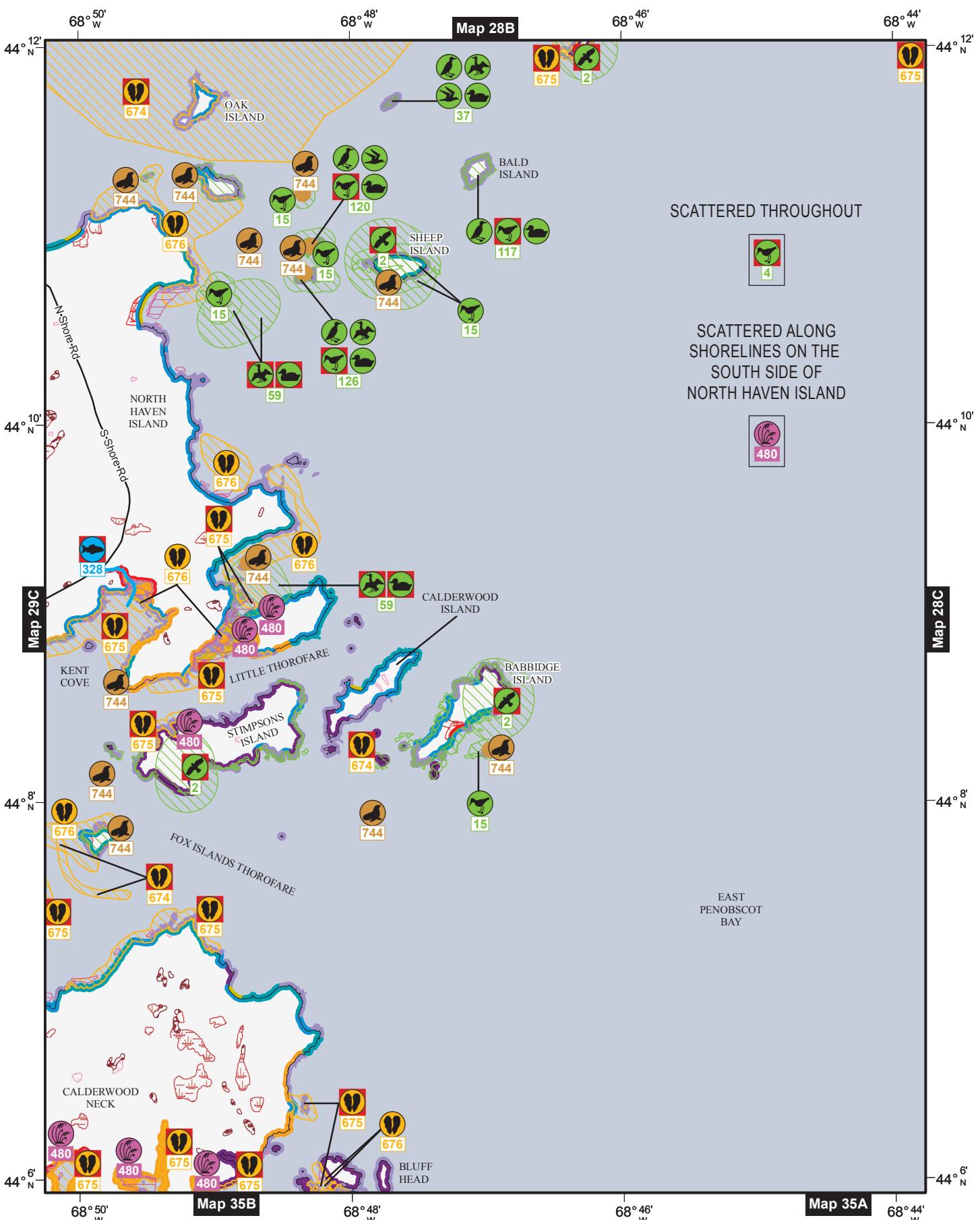
ESI SHORELINE HABITAT TYPES			
ESI Rank	Shoreline Habitat Classification	Length (Meters)	% of ESI Shoreline
10A	Salt and Brackish Water Marshes	2,767.23	2%
10C	Swamps	128.00	< 1%
10D	Scrub and Shrub Wetlands	216.87	< 1%
9A	Sheltered Tidal Flats	5,785.14	3%
9B	Vegetated Low Banks	21,074.36	12%
8A	Sheltered, Impermeable, Rocky Shores	1,126.38	1%
7	Exposed Tidal Flats	15,906.73	9%
6A	Gravel Beaches	2,952.97	2%
6B	Riprap	5,814.99	3%
5	Mixed Sand and Gravel Beaches	10,461.36	6%
4	Coarse Grained Sand Beaches	4,896.30	3%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	93,478.92	54%
1A	Exposed, Rocky Shores	3,068.43	2%
1B	Exposed, Solid Man-Made Structures	5,443.55	3%
Total ESI Shoreline:		173,121.25	Total ESI Shoreline: 107.57
Total Shoreline:		132,934.94	Total Shoreline: 82.60

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](http://response.restoration.noaa.gov)







**Map 28D**  
Midcoast Maine



## Map 28D Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

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

#### BIRDS

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

BIRDS (continued)

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

### BIRDS (continued)

<i>Map ID</i>	<i>Subelement</i>	<i>Species</i>	<i>Mapping Qualifier</i>	<i>ME/NH</i>	<i>Monthly Presence</i>																	
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	<i>Mig.(S)</i>	<i>Mig.(F)</i>	<i>Molt</i>
Shorebird	Willet	Common eider	Roosting	-C	-	-													May-Aug	May-Jun	Jul-Sep	-
Waterfowl			Roosting																May-Aug	-	-	-

### FISH

<i>Map ID</i>	<i>Subelement</i>	<i>Species</i>	<i>Mapping Qualifier</i>	<i>ME/NH</i>	<i>Monthly Presence</i>																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
3228	Freshwater	Rainbow smelt	Migration	-C	-	-													-	-	-	Jan-Dec	Oct-Apr

### HABITATS & RARE PLANTS

<i>Map ID</i>	<i>Subelement</i>	<i>Species</i>	<i>Mapping Qualifier</i>	<i>ME/NH</i>	<i>Monthly Presence</i>																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
480	Wetland	Tidal Marsh	High Ecological Value	-C	-	-													-	-	-	-	-

### INVERTEBRATES

<i>Map ID</i>	<i>Subelement</i>	<i>Species</i>	<i>Mapping Qualifier</i>	<i>ME/NH</i>	<i>Monthly Presence</i>																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles	Adults
674	Bivalve	Sea scallop	Harvest Area	-C	-	-													-	-	Jan-Dec	Jan-Dec	Jan-Dec
675	Bivalve	Softshell clam	Harvest Area	-C	-	-													May-Oct	May-Oct	Jan-Dec	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-C	-	-													May-Nov	May-Nov	Jan-Dec	Jan-Dec	Jan-Dec

### MARINE MAMMALS

<i>Map ID</i>	<i>Subelement</i>	<i>Species</i>	<i>Mapping Qualifier</i>	<i>ME/NH</i>	<i>Monthly Presence</i>																		
				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	-C	-	-													-	-	-	-	-

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )

### BIRDS

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

### FISH

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

## REPTILES & AMPHIBIANS

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

## INVERTEBRATES

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

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

## BIRDS

Subelement	Species	Mapping Qualifier	Monthly Presence												Molt		
			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Alcid	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	Mapping Qualifier	Monthly Presence												Adults		
			J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Diadromous	Striped bass														-	-	-
	Estuarine Nursery	Atlantic herring													Oct-May	Jan-Dec	Apr-Dec
		Black Seabass													-	Jan-Dec	Jan-Dec
	Winter flounder														-	Jan-Dec	-
	Winter flounder														-	Mar-Jun	Mar-Jun
Marine Benthic	American plaice														-	Dec-Jun	Jan-Dec
	American plaice														-	Mar-Nov	Mar-Nov
	American sand lance														-	Mar-Oct	Mar-Oct
	American sand lance														-	Mar-Oct	Mar-Oct
	Atlantic cod														-	Nov-Jul	Jan-Dec
	Atlantic Wolffish														-	Jan-Dec	Jan-Dec
Cunner	Cunner														-	Mar-Oct	Mar-Oct
															-	Jan-Dec	Jan-Dec

## FISH (continued)

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
Dolphin	Harbor porpoise	-	-	-	-	-	-	-	-	-	-	-	-	-
Pinniped	Gray seal	-	-	-	-	-	-	-	-	-	-	-	-	-
	Harbor seal	-	-	-	-	-	-	-	-	-	-	-	-	-
Echinoderm	Harp seal	-	-	-	-	-	-	-	-	-	-	-	-	-
Lobster	Hooded seal	-	-	-	-	-	-	-	-	-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
ESI Rank				
10A		Salt and Brackish Water Marshes	15.90	0.02
10B		Freshwater Marshes	6.37	0.01
10C		Swamps	75.79	0.12
10D		Scrub and Shrub Wetlands	29.59	0.05
9A		Sheltered Tidal Flats	30.06	0.05
7		Exposed Tidal Flats	27.82	0.04
5		Mixed Sand and Gravel Beaches	30.61	0.05
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	251.69	0.39

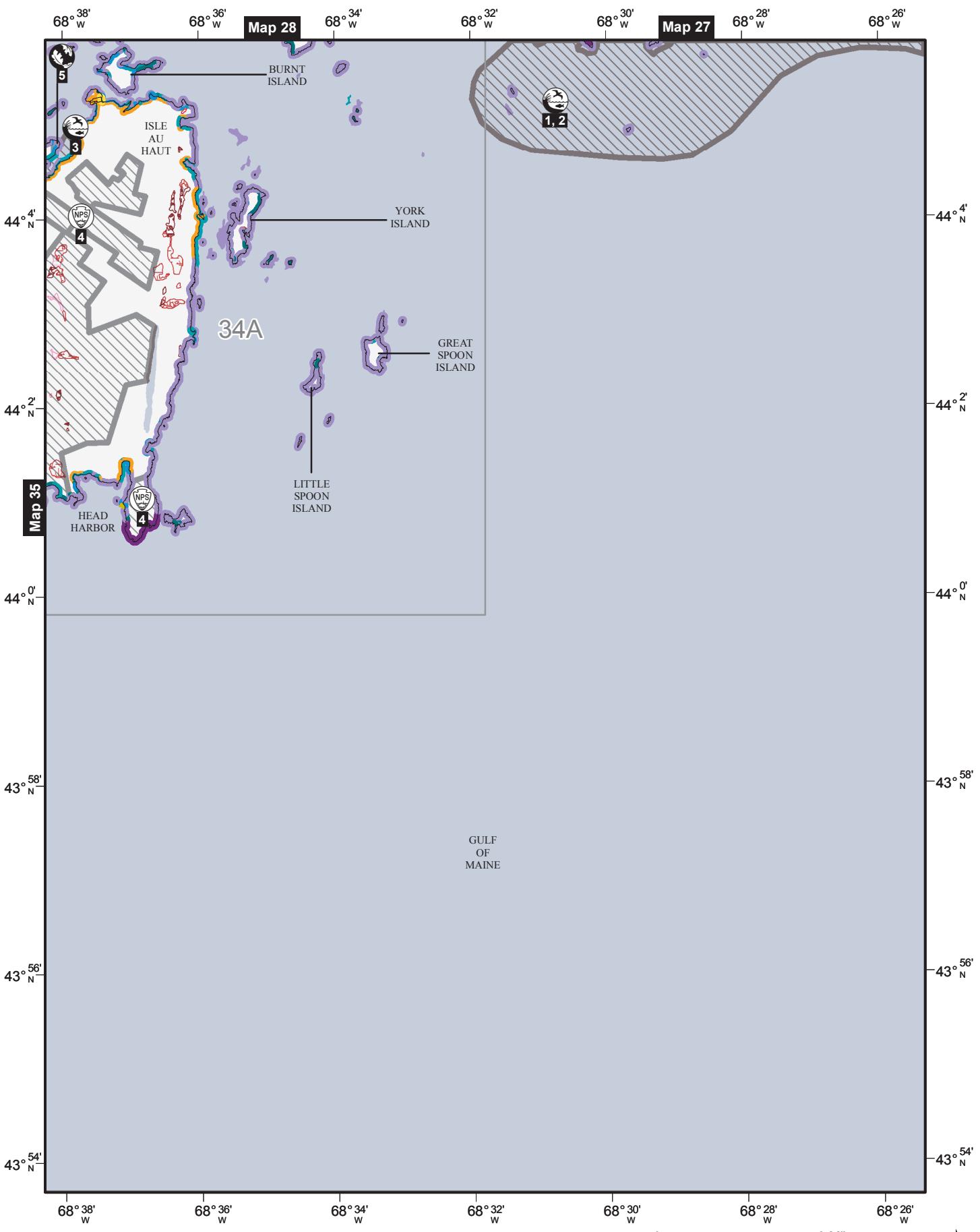
ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
ESI Rank					
10A		Salt and Brackish Water Marshes	1,171.96	0.73	1%
9A		Sheltered Tidal Flats	3,645.08	2.26	4%
9B		Vegetated Low Banks	8,630.65	5.36	9%
7		Exposed Tidal Flats	2,103.26	1.31	2%
5		Mixed Sand and Gravel Beaches	13,242.20	8.23	13%
4		Coarse Grained Sand Beaches	17,973.23	11.17	18%
3A		Fine to Medium Grained Sand Beaches	49.99	0.03	<1%
2A		Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	38,139.63	23.70	38%
1A		Exposed, Rocky Shores	14,454.57	8.98	15%
Total ESI Shoreline:		99,410.56	Total ESI Shoreline:	61.77	
Total Shoreline:		59,865.81	Total Shoreline:	37.20	

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](http://response.restoration.noaa.gov)







**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 34**  
Downeast Maine

**HUMAN USE RESOURCES**

DISPLAYED ON MAP (POLYGONS)		Name	Contact	Phone
Map ID	Type			
1	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
2	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
3	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR)	207-624-6550
4	NATIONAL PARK	ACADIA NATIONAL PARK	THE NATURE CONSERVANCY	207-729-5181
5	NATURE CONSERVANCY	KIMBALL ISLAND 1 AND 2 EASEMENTS		

JURISDICTIONS		FEMA:	REGION 1
COUNTY:	HANCOCK, KNOX		
COAST GUARD:	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND		
USACE:	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES	
ESI Rank	Habitat Classification
10A	Salt and Brackish Water Marshes
10B	Freshwater Marshes
10C	Swamps
10D	Scrub and Shrub Wetlands
7	Exposed Tidal Flats
5	Mixed Sand and Gravel Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES	
ESI Rank	Shoreline Habitat Classification
10A	Salt and Brackish Water Marshes
9B	Vegetated Low Banks
8B	Sheltered, Solid Man-Made Structures
7	Exposed Tidal Flats
6A	Gravel Beaches
6B	Riprap
5	Mixed Sand and Gravel Beaches
4	Coarse Grained Sand Beaches
3A	Fine to Medium Grained Sand Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
1A	Exposed, Rocky Shores
1B	Exposed, Solid Man-Made Structures

ESI POLYGON HABITAT TYPES	
ESI Rank	Habitat Classification
10A	Salt and Brackish Water Marshes
10B	Freshwater Marshes
10C	Swamps
10D	Scrub and Shrub Wetlands
7	Exposed Tidal Flats
5	Mixed Sand and Gravel Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

ESI SHORELINE HABITAT TYPES	
ESI Rank	Shoreline Habitat Classification
10A	Salt and Brackish Water Marshes
9B	Vegetated Low Banks
8B	Sheltered, Solid Man-Made Structures
7	Exposed Tidal Flats
6A	Gravel Beaches
6B	Riprap
5	Mixed Sand and Gravel Beaches
4	Coarse Grained Sand Beaches
3A	Fine to Medium Grained Sand Beaches
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
1A	Exposed, Rocky Shores
1B	Exposed, Solid Man-Made Structures

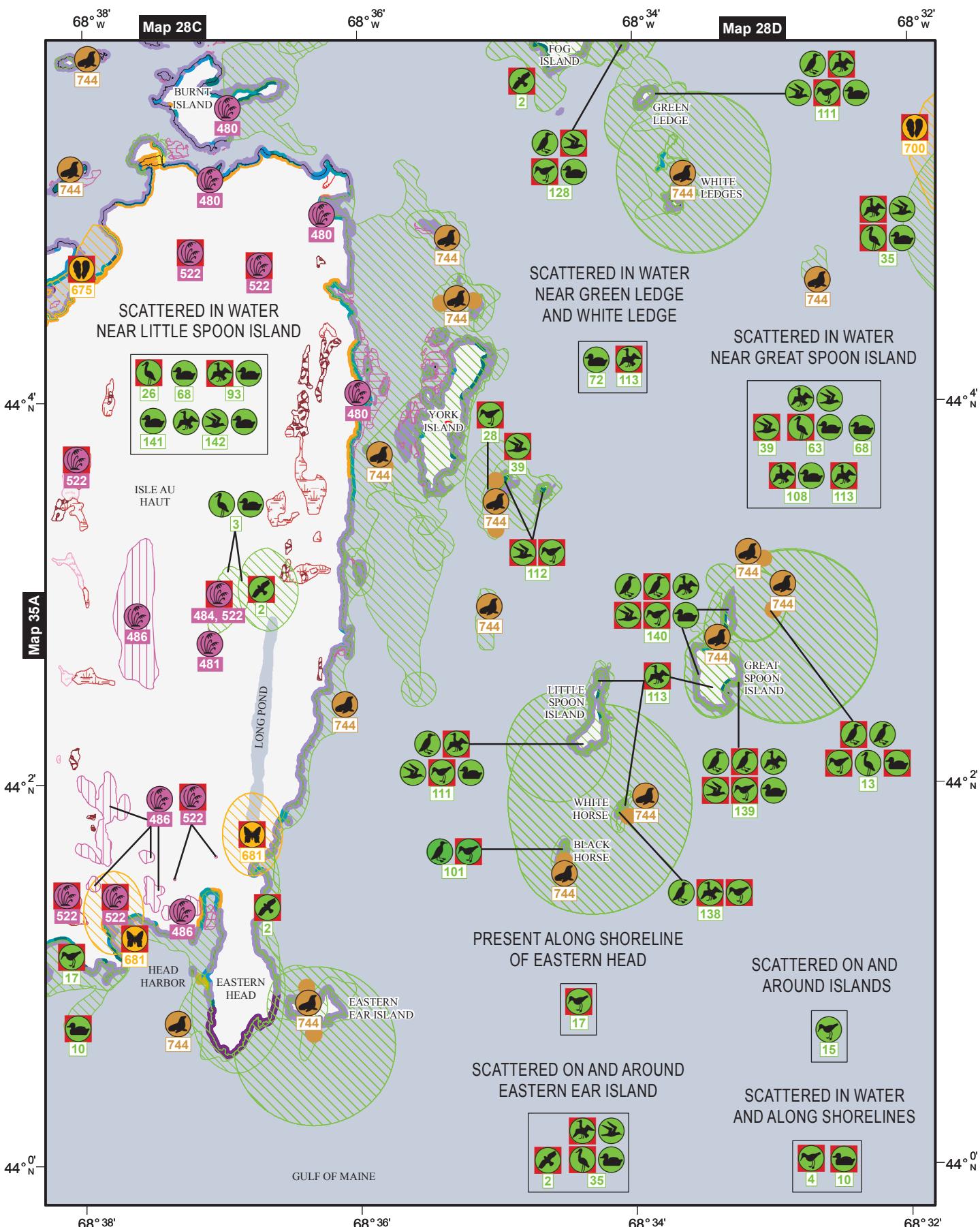
Total ESI Shoreline: 79,143.72      Total ESI Shoreline: 49.18  
 Total Shoreline: 56,745.21      Total Shoreline: 35.26

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.noaa.gov](http://response.noaa.gov)







**Map 34A**  
**Downeast Maine**



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

## Map 34A Downeast Maine

### 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	BENTHIC											
		Mapping Qualifier			Concentration			Monthly Presence					
SAV	Eelgrass	High Ecological Value			0% To 10% Cover			J F M A M J J A S O N D					
SAV	Eelgrass	High Ecological Value			10% To 40% Cover			Mar-May					
SAV	Eelgrass	High Ecological Value			40% To 70% Cover			Apr-Nov					
SAV	Eelgrass	High Ecological Value			70% To 100% Cover			Apr-Jun					
SAV	Eelgrass	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	BIRDS											
		Mapping Qualifier			Concentration			Monthly Presence					
C/T	F	C/I-	C/T	F	C/I-	J	F	M	A	M	J	J	A
2	Raptor	Vulnerable Occurrence	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Wading birds	-	-	-	-	-	-	-	-	-	-
	Waterfowl	Waterfowl	American golden-plover	Concentration Area	Foraging	-	-	-	-	-	-	-	-
4	Shorebird	American oystercatcher	Concentration Area	C/I-	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/I-	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Concentration Area	C/I-	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	T	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Sanderling	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated plover	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/I-	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Short-billed dowitcher	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Solitary sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Stilt sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Western sandpiper	Concentration Area	C/I-	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Whimbrel	Concentration Area	T/-	Foraging	-	-	-	-	-	-	-	-
	Shorebird	White-rumped sandpiper	Concentration Area	Concentration Area	Foraging	-	-	-	-	-	-	-	-
	Shorebird	Willet	Vulnerable Occurrence	J/-C	Foraging	-	-	-	-	-	-	-	-
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	Roosting	-	-	-	-	-	-	-	-
13	Alcid	Black guillemot	Roosting	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-
	Gull/Tern	-	-	-	-	-	-	-	-	-	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence						Mig.(F)	Molt					
							J	F	M	A	M	J	J	A	S	O	N	D	Nest
Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Leach's storm-petrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wading	BC night-heron	Roosting	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>15</b>	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>17</b>	Shorebird	American golden-plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Dunlin	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Red Knot	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Ruddy turnstone	Concentration Area	T	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Sanderling	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Whimbrel	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	White-rumped sandpiper	Concentration Area	-C	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	
Shorebird	Willet	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>26</b>	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>28</b>	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Baird's sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	BB sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Black-bellied plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Dunlin	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Greater yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Hudsonian godwit	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Pectoral sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Red Knot	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Ruddy turnstone	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Sanderling	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							Molt								
							J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	
Shorebird	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
Shorebird	Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
Shorebird	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
Shorebird	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun	-	-	
Shorebird	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sep	-	-	
Shorebird	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-	
Shorebird	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	-	-	
Shorebird	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
Shorebird	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep	
<b>35</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-	-
Gull/Tern	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Gull/Tern	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-	-	-
Wading	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-	-
Waterfowl	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-	-
Waterfowl	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-	-
Waterfowl	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-	-	-
Waterfowl	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct	-	-	-
<b>39</b>	Gull/Tern	Arctic tern	Vulnerable Occurrence	T/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-	-
<b>63</b>	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Gull/Tern	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Gull/Tern	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-	-	-
Wading	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-	-
Waterfowl	Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-	-	-
Waterfowl	Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Feb	Dec	-	-
<b>68</b>	Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-	-
<b>72</b>	Waterfowl	Canada goose	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
Waterfowl	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-
<b>93</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-
Waterfowl	Waterfowl	Black guillemot	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	-
<b>101</b>	Alcid	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-
Shorebird	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-
Shorebird	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
Shorebird	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-
Shorebird	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	S	F	Concentration	Monthly Presence												Molt
								J	F	M	A	M	J	J	A	S	O	N	D	
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May	May	Jul-Oct	-	-
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Apr-May	Sep-Oct	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-	-
	Shorebird	Red Knot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-	-	-
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Semipalmated sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Jun	-	-	-	-
	Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Jun	-	-	-	-
	Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Sep	-	-	-
	Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-	-	-
	Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	Jul-Sep	-	-
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-	-	-
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	Jul-Sep	-	-
108	Diving	Common Loon	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
111	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-	-	-
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	-	-
	Diving	Great cormorant	Roosting	T/-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-	-
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	-	-
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	-	-
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May-Jun	Jul-Oct	-	-
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Apr-May	Sep-Oct	-	-
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	-	-
	Shorebird	Red Knot	Roosting	C/-	T/-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-	-	-

BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence							Mig.(F)	Molt					
							J	F	M	A	M	J	J	A	S	O	N	D	Nest	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>112</b>	Gull/Tern	Common tern	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct
	Shorebird	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Sep	-
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct
	Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct
	Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct
	Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
	Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct
	Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct
	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct
	Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct
Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	
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-Aug	-	
Shorebird	Willet	Roosting	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	
<b>113</b>	Diving	Great cormorant	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	
	Alcid	Black guillemot	Roosting	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	
	Gull/Tern	Common tern	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	
	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Sep	
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	-	
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	-	

BIRDS (continued)

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

Downeast Maine: Map 34A

## BIRDS (continued)

Map ID	Subelement	Species	Monthly Presence																
			M/E/NH	S	F	Concentration	J	F	M	A	J	J	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Jul-Oct	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Sep	-
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
141	Waterfowl	American black duck	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	Apr-Aug	-
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	Apr-Aug	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Aug	-
142	Diving	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-
Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-	-
Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Monthly Presence																
			M/E/NH	S	F	Concentration	J	F	M	A	J	J	S	O	N	D	Nest	Mig.(S)	Mig.(F)
480	Wetland	Tidal Marsh	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
481	Wetland	Rare ecol. community	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
484	Plant	Endangered plant	E/E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
522	Plant	Twinning screwstem	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				J	F	M	A	M	J	J	A	S	O	N	D
675	Bivalve	Softshell clam	Harvest Area	-/C	-	-	-	-	-	-	-	-	-	-	-
681	Insect	Rare insect	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-
700	Bivalve	Blue mussel	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-
	Bivalve	Sea scallop	Harvest Area	-/C	-	-	-	-	-	-	-	-	-	-	-

### MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence											
				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	Monthly Presence											
			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	-T	-	-	-	-	-	-	-	-	-	-	-
	Great cormorant	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Arctic tern	General Distribution	T/C	-	-	-	-	-	-	-	-	-	-	-
	Common tern	General Distribution	C/T	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Roseate tern	General Distribution	E/E	E	-	-	-	-	-	-	-	-	-	-
	Leach's storm-petrel	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red-necked phalarope	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-

### FISH

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Diadromous	Atlantic sturgeon	General Distribution	-T	T	Rare	-	-	-	-	-	-	-	-	-
	Shortnose sturgeon	General Distribution	E/E	E	Rare	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Striped bass	Concentration Area	High	High	High	-	-	-	-	-	-	-	-	-
	Black Seabass	Concentration Area	Low	Low	Low	-	-	-	-	-	-	-	-	-

### REPTILES & AMPHIBIANS

Subelement	Species	Mapping Qualifier	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Turtle	Green sea turtle	General Distribution	-/-	T	Rare	-	-	-	-	-	-	-	-	-
	K. ridley sea turtle	General Distribution	E/-	E	Rare	-	-	-	-	-	-	-	-	-
	Leatherback sea turtle	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-
	Loggerhead sea turtle	General Distribution	E/-	T	Low	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

Subelement	Species	Mapping Qualifier	Monthly Presence														
			J	F	M	A	M	J	J	A	S	O	N	D			
Crab	Horseshoe crab	General Distribution	-C	-	-	-	-	-	-	-	-	-	-	Adults			
Shrimp	Northern shrimp	General Distribution	-C	-	-	-	-	-	-	-	-	-	-	Jan-Dec			
<b>MARINE MAMMALS</b>																	
Subelement	Species	Mapping Qualifier	S	E	Concentration	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	Monthly Presence											
			J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Black guillemot	-C	-	-	-	-	-	-	-	-	-	-	-	-
	Common murre	-	-	-	-	-	-	-	-	-	-	-	-	-
Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horned grebe	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sooty shearwater	-	-	-	-	-	-	-	-	-	-	-	-	-
	Wilson's storm-petrel	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red phalarope	-	-	-	-	-	-	-	-	-	-	-	-	-

## FISH

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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	-	-	-	-	-	-	-	-	-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

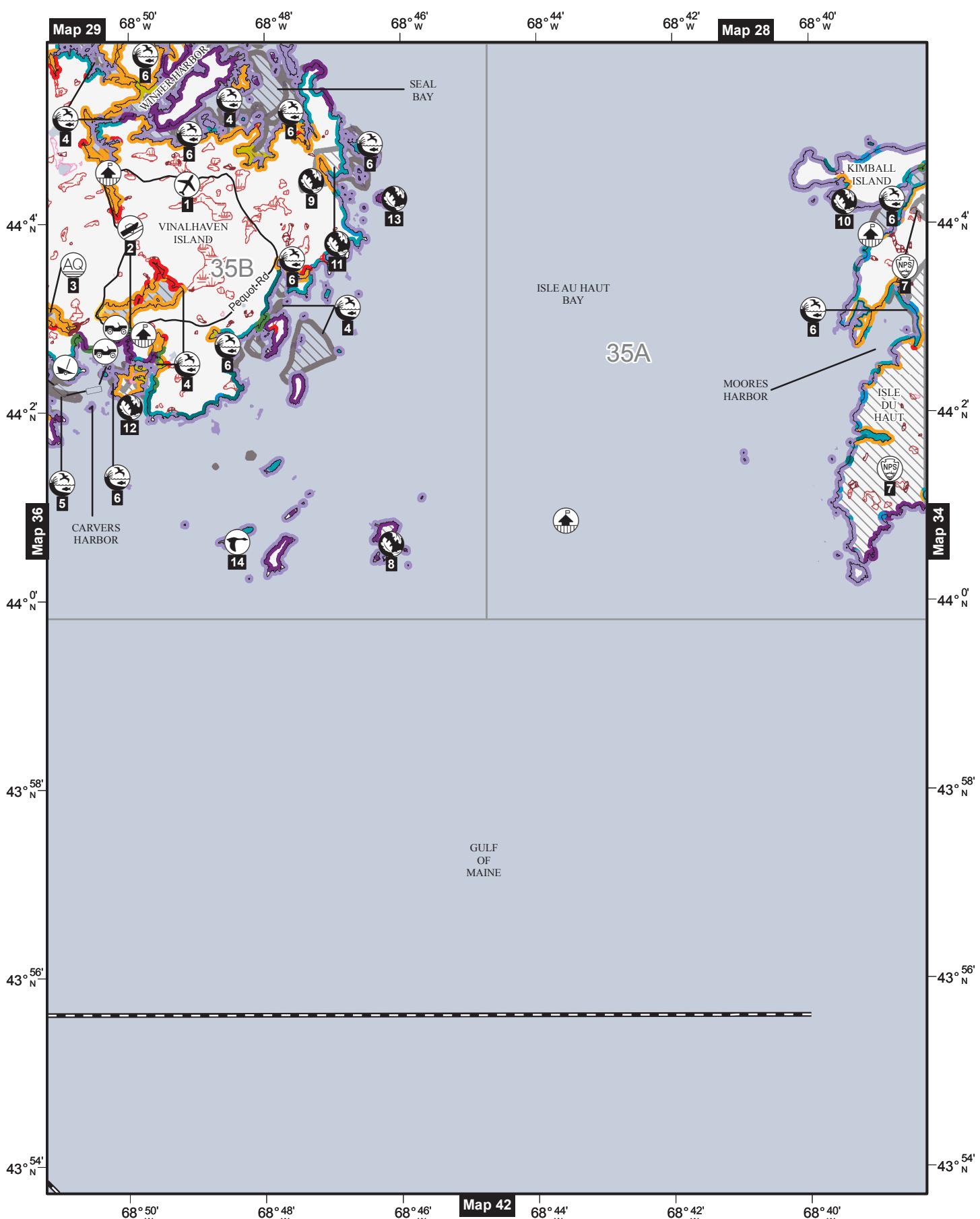
ESI POLYGON HABITAT TYPES		Habitat Classification	Area (Acres)	Area (Sq. Miles)
	10A	Salt and Brackish Water Marshes	3.20	0.00
	10B	Freshwater Marshes	17.27	0.03
	10C	Swamps	103.47	0.16
	10D	Scrub and Shrub Wetlands	46.71	0.07
	7	Exposed Tidal Flats	2.99	0.00
	5	Mixed Sand and Gravel Beaches	2.21	0.00
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	303.97	0.47

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification	Length (Meters)	Length (Miles)	% of ESI Shoreline
	10A	Salt and Brackish Water Marshes	119.21	0.07	< 1%
	9B	Vegetated Low Banks	7,989.68	4.96	10%
	8B	Sheltered, Solid Man-Made Structures	186.64	0.12	< 1%
	7	Exposed Tidal Flats	142.69	0.09	< 1%
	6A	Gravel Beaches	6,174.85	3.84	8%
	6B	Riprap	73.23	0.05	< 1%
	5	Mixed Sand and Gravel Beaches	8,906.05	5.53	12%
	4	Coarse Grained Sand Beaches	3,784.09	2.35	5%
	3A	Fine to Medium Grained Sand Beaches	156.57	0.10	< 1%
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	47,735.37	29.66	62%
	1A	Exposed, Rocky Shores	1,843.58	1.15	2%
	1B	Exposed, Solid Man-Made Structures	174.81	0.11	< 1%
		Total ESI Shoreline:	77,286.78	Total ESI Shoreline:	48.02
		Total Shoreline:	55,280.49	Total Shoreline:	34.35

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](http://response.restoration.noaa.gov)





**Map 35**  
Midcoast Maine



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



**Map 35**  
**Midcoast Maine**

**HUMAN USE RESOURCES**

<b>HUMAN USE RESOURCES</b>			
<b>DISPLAYED ON MAP (POINTS)</b>		<b>Name</b>	<b>Contact</b>
<b>Map ID</b>	<b>Type</b>		<b>Phone</b>
1	AIRPORT	MARY TALBOT MEMORIAL AIRFIELD	MARJORIE STRATTON VINALHAVEN
2	BOAT RAMP	CARVERS HARBOR BOAT RAMP	
<b>DISPLAYED ON MAP (POLYGONS)</b>		<b>Name</b>	<b>Contact</b>
<b>Map ID</b>	<b>Type</b>		<b>Phone</b>
3	AQUACULTURE	OHP VH2 - OLD HARBOR POND, PENOBSQUIT BAY	WELLER, DAVID AND MELISSA BERRY
4	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
5	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
6	MANAGEMENT AREA	SOFTSHELL CLAM - SHELLFISH MA	MAINE DEPT. OF MARINE RESOURCES (MEDMR) 207-624-6550
7	NATIONAL PARK	ACADIA NATIONAL PARK	
8	NATURE CONSERVANCY	BRIMSTONE ISLANDS PRESERVE	THE NATURE CONSERVANCY 207-729-5181
9	NATURE CONSERVANCY	COOMBS NECK	THE NATURE CONSERVANCY 207-729-5181
10	NATURE CONSERVANCY	KIMBALL ISLAND 1 AND 2 EASEMENTS	THE NATURE CONSERVANCY 207-729-5181
11	NATURE CONSERVANCY	LAMONT EASEMENT	THE NATURE CONSERVANCY 207-729-5181
12	NATURE CONSERVANCY	LANES ISLAND PRESERVE	THE NATURE CONSERVANCY 207-729-5181
13	NATURE CONSERVANCY	SMITH ISLAND PRESERVE	THE NATURE CONSERVANCY 207-729-5181
14	WILDLIFE REFUGE	RACHEL CARSON NATIONAL WILDLIFE REFUGE 1	U.S. FISH & WILDLIFE SERVICE
<b>ALSO PRESENT IN MAPPED AREA (POLYGONS)</b>		<b>Name</b>	<b>Contact</b>
<b>Type</b>			<b>Phone</b>
STATE PROTECTED AREA	OTTER ISLAND		MAINE DEPT. OF INLAND FISHERIES AND WILDLIFE
<b>JURISDICTIONS</b>			
<b>County:</b>	KNOX	<b>FEMA:</b>	REGION I
<b>Coast Guard:</b>	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND	<b>EPA:</b>	REGION 1
<b>USACE:</b>	NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT		

**ESI POLYGON HABITAT TYPES**

<b>ESI Rank</b>	<b>Habitat Classification</b>	<b>Area (Acres)</b>	<b>Area (Sq. Miles)</b>
10A	Salt and Brackish Water Marshes	59.48	0.09
10B	Freshwater Marshes	30.60	0.05
Swamps		476.79	0.74
10C	Scrub and Shrub Wetlands	109.93	0.17
10D	Sheltered Tidal Flats	133.07	0.21
9A	Exposed Tidal Flats	71.49	0.11
7	Mixed Sand and Gravel Beaches	7.41	0.01
5	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	787.94	1.23

**ESI SHORELINE HABITAT TYPES**

<b>ESI Rank</b>	<b>Shoreline Habitat Classification</b>	<b>Length (Meters)</b>	<b>Length (Miles)</b>	<b>% of ESI Shoreline</b>
10A	Salt and Brackish Water Marshes	6,250.29	3.88	2%
10B	Freshwater Marshes	132.03	0.08	< 1%
Swamps		34.12	0.02	< 1%
10C	Scrub and Shrub Wetlands	711.76	0.44	< 1%
10D	Sheltered Tidal Flats	12,310.62	7.65	4%
9A	Vegetated Low Banks	55,342.24	34.39	19%
9B	Sheltered, Impermeable, Rocky Shores	2.97	0.00	< 1%
8A	Sheltered Riprap	339.09	0.21	< 1%
8C	Exposed Tidal Flats	5,023.52	3.12	2%
7	Gravel Beaches	6,631.57	4.12	2%
6A	Riprap	2,316.35	1.44	1%
6B	Mixed Sand and Gravel Beaches	34,627.96	21.52	12%
5	Coarse Grained Sand Beaches	4,475.69	2.78	2%
4	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	117,010.48	72.71	41%
2A	Exposed, Rocky Shores	37,883.80	23.54	13%
1A	Exposed, Solid Man-Made Structures	4,559.47	2.83	2%
1B				
Total ESI Shoreline:	287,651.95	Total ESI Shoreline:	178.74	
Total Shoreline:	168,827.90	Total Shoreline:	104.90	

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](http://response.restoration.noaa.gov)





Map 28D

68° 44' W

68° 42' W

Map 28C

68° 40' W

PRESENT IN WATER  
AROUND WESTERN EAR ISLAND



SCATTERED ON SHORELINE  
OF ISLE AU HAUT



44° 4' N

ISLE AU HAUT BAY

Map 35B

Map 34A

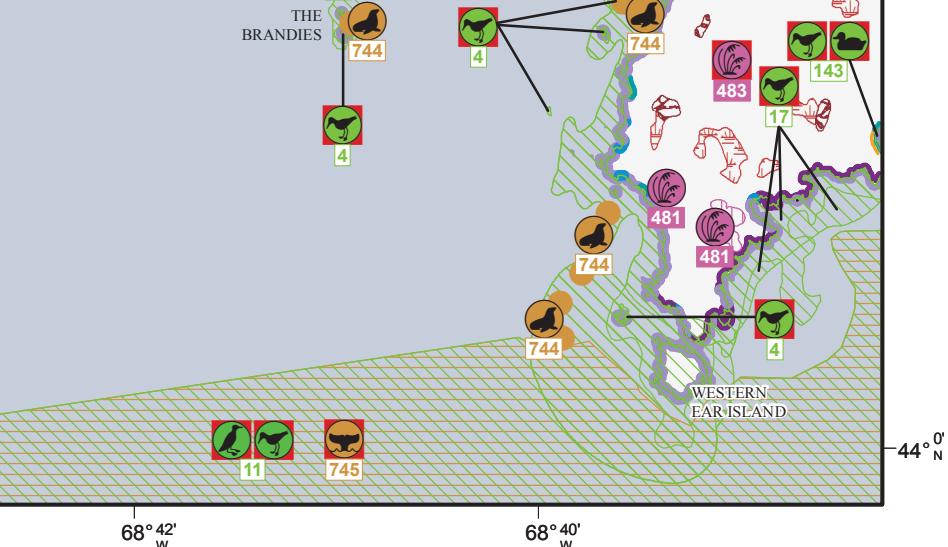
44° 2' N

44° 0' N

SADDLEBACK  
LEDGE

15      744      10

4



**Map 35A**  
Midcoast Maine



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

## Map 35A Midcoast Maine

### BIOLOGICAL RESOURCES

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

DISPLAYED ON MAP

#### BENTHIC

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Concentration</b>	<b>Monthly Presence</b>											
SAV	Eelgrass	High Ecological Value	S	0% To 10% Cover	J	F	M	A	M	J	J	A	S	O	N	D
SAV	Eelgrass	High Ecological Value	F	10% To 40% Cover	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	-	-
SAV	Eelgrass	High Ecological Value	C/T	40% To 70% Cover	-	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	-	-
SAV	Eelgrass	High Ecological Value	-	70% To 100% Cover	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

<b>Map ID</b>	<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Concentration</b>	<b>Monthly Presence</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>
2	Raptor	Bald eagle	Vulnerable Occurrence	S	0% To 10% Cover	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Wading	Wading birds	Vulnerable Occurrence	F	10% To 40% Cover	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Waterfowl	Waterfowl	Vulnerable Occurrence	C/T	40% To 70% Cover	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American golden-plover	Concentration Area	C/-	70% To 100% Cover	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Dunlin	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Red Knot	Concentration Area	T	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Ruddy turnstone	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Sanderling	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Semipalmated sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Whimbrel	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	White-rumped sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
Shorebird	Willet	Vulnerable Occurrence	T/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
10	Waterfowl	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Alcid	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Leach's storm-petrel	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	MENH	Monthly Presence												Molt			
					S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	
	Shorebird	Red-necked phalarope	General Distribution	-																-
<b>15</b>	Shorebird	Purple sandpiper	Vulnerable Occurrence	C/-																-
<b>17</b>	Shorebird	American golden-plover	Concentration Area	C/-																-
	Shorebird	American oystercatcher	Concentration Area	C/-																-
	Shorebird	Baird's sandpiper	Concentration Area	C/-																-
	Shorebird	BB sandpiper	Concentration Area	C/-																-
	Shorebird	Black-bellied plover	Concentration Area	C/-																-
	Shorebird	Dunlin	Concentration Area	C/-																-
	Shorebird	Greater yellowlegs	Concentration Area	C/-																-
	Shorebird	Hudsonian godwit	Concentration Area	C/-																-
	Shorebird	Least sandpiper	Concentration Area	C/-																-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-																-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-																-
	Shorebird	Purple sandpiper	Vulnerable Occurrence	-																-
	Shorebird	Red Knot	Concentration Area	C/-																-
	Shorebird	Ruddy turnstone	Concentration Area	C/-																-
	Shorebird	Sanderling	Concentration Area	C/-																-
	Shorebird	Semipalmated plover	Concentration Area	C/-																-
	Shorebird	Semipalmated sandpiper	Concentration Area	C/-																-
	Shorebird	Short-billed dowitcher	Concentration Area	C/-																-
	Shorebird	Solitary sandpiper	Concentration Area	C/-																-
	Shorebird	Stilt sandpiper	Concentration Area	C/-																-
	Shorebird	Western sandpiper	Concentration Area	C/-																-
	Shorebird	Whimbrel	Concentration Area	C/-																-
	Shorebird	White-rumped sandpiper	Concentration Area	-C																-
	Shorebird	Willet	Concentration Area	-C																-
<b>35</b>	Diving	Common Loon	Rafting	-T																-
	Diving	D. crested cormorant	Rafting	-																-
	Gull/Tern	G. black-backed gull	Rafting	-																-
	Gull/Tern	Herring gull	Rafting	-																-
	Wading	Great blue heron	Vulnerable Occurrence	C/-																-
	Watfowl	American black duck	Rafting	-																-
	Watfowl	Black Scoter	Rafting	-																-
	Watfowl	Bufflehead	Rafting	-																-
	Watfowl	Common eider	Rafting	-																-
	Watfowl	Goldeneye	Rafting	-																-
	Watfowl	Green-winged teal	Rafting	-																-
	Watfowl	Long-tailed duck	Rafting	-																-
	Watfowl	Mallard	Rafting	-																-
	Watfowl	Scaup	Vulnerable Occurrence	-																-
	Watfowl	Scoters	Rafting	-																-
	Watfowl	Surf scoter	Rafting	-																-
<b>143</b>	Shorebird	American golden-plover	Concentration Area	C/-																-
	Shorebird	American oystercatcher	Concentration Area	C/-																-

## BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt					
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	Foraging				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Pectoral sandpiper	Concentration Area	Foraging				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Purple sandpiper	Vulnerable Occurrence	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	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			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Harlequin duck	Vulnerable Occurrence	T/-	Foraging			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## HABITATS & RARE PLANTS

Map ID	Subelement	Species	Mapping Qualifier	ME/NH												Monthly Presence											
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt					
480	Wetland	Tidal Marsh	High Ecological Value				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
481	Wetland	Rare ecol. community	High Ecological Value				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
483	Plant	Rare plant	Vulnerable Occurrence	C/C			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
509	Plant	A. water minisetariae	Vulnerable Occurrence	C/-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
522	Plant	Twinning screwstem	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

## INVERTEBRATES

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

WIDESPREAD IN MAPPED AREA ( > 10 SQUARE KILOMETERS )

### BIRDS

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

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

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

**BIRDS**

			Monthly Presence												Molt	
			J	F	M	A	M	J	J	A	S	O	N	D	Nest	
	Alcid	Black guillemot	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Common murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dovekie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thick-billed murre	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	D. crested cormorant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**FISH**

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

## INVERTEBRATES

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

## MARINE MAMMALS

Subelement	Species	Monthly Presence												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](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		
	ESI Rank	Habitat Classification
	10A	Salt and Brackish Water Marshes
	10B	Freshwater Marshes
	10C	Swamps
	10D	Scrub and Shrub Wetlands
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)

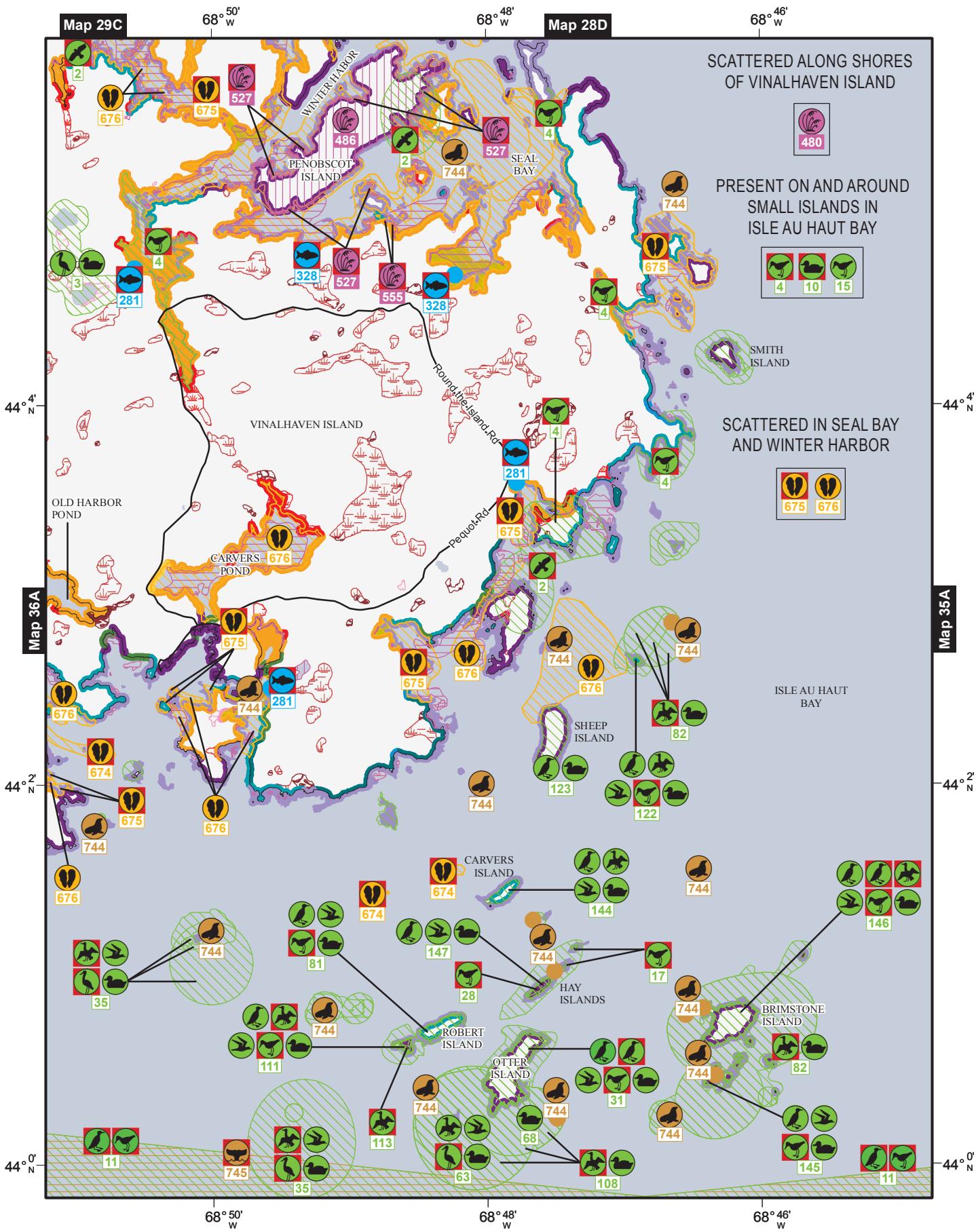
ESI SHORELINE HABITAT TYPES		
	ESI Rank	Shoreline Habitat Classification
	10A	Salt and Brackish Water Marshes
	10D	Scrub and Shrub Wetlands
	9B	Vegetated Low Banks
	6A	Gravel Beaches
	6B	Riprap
	5	Mixed Sand and Gravel Beaches
	4	Coarse Grained Sand Beaches
	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
	1A	Exposed, Rocky Shores

Total ESI Shoreline: 55,513.49      Total ESI Shoreline: 34.49  
 Total Shoreline: 36,774.11      Total Shoreline: 22.85

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](http://response.restoration.noaa.gov)





**Map 35B**  
Midcoast Maine



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

## Map 35B Midcoast Maine

### 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	Monthly Presence													
			S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
Softbottom	Worm bed	Harvest Area	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAV	Eelgrass	High Ecological Value	-	-	-	-	-	-	-	-	-	-	-	-	-	-

#### BIRDS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence													
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N
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	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Dunlin	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Red Knot	Concentration Area	T	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Ruddy turnstone	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Sanderling	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Semipalmented plover	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Semipalmented sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Short-billed dowitcher	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Solitary sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Stilt sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	Whimbrel	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
	Shorebird	White-rumped sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging	Foraging
10	Waterfowl	Willet	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Alcid	Atlantic puffin	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt
				ME/NH			S F			Concentration			J F M A M J J A S O N D			
Pelagic	Leach's storm-petrel	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red-necked phalarope	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>15</b>	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>17</b>	Shorebird	American golden-plover	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	BB sandpiper	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Black-bellied plover	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Dunlin	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Greater yellowlegs	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Hudsonian godwit	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Least sandpiper	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Lesser yellowlegs	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red Knot	Concentration Area	C/- T	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Ruddy turnstone	Concentration Area	Concentration Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Sanderling	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated plover	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated sandpiper	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Short-billed dowitcher	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Shorelark	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Stilt sandpiper	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Western sandpiper	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Whimbrel	Concentration Area	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	White-rumped sandpiper	Concentration Area	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Willet	Concentration Area	-C	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>28</b>	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red Knot	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	ME/NH		Mapping Qualifier	S	F	Concentration	Monthly Presence							Mig.(S)	Mig.(F)	Molt						
			J	F					J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	Shorebird	Solitary sandpiper	Roosting		-				-											-	Jun	-	-	
	Shorebird	Still 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	
<b>31</b>	Alcid	Black guillemot	Roosting																					-
	Gull/Tern	G. black-backed gull	Roosting																					-
	Gull/Tern	Herring gull	Roosting																					-
	Pelagic	Leach's storm-petrel	Roosting	C/-	-				-											-	Aug	Oct	-	
	Shorebird	American golden-plover	Roosting	-					-											-	May	Jul-Oct	-	
	Shorebird	American oystercatcher	Roosting	C/-	-				-											-	May	Aug-Oct	-	
	Shorebird	Baird's sandpiper	Roosting	-					-											-	May	Jul-Oct	-	
	Shorebird	BB sandpiper	Roosting	-					-											-	Aug	Oct	-	
	Shorebird	Black-bellied plover	Roosting	-					-											-	May	Jul-Oct	-	
	Shorebird	Dunlin	Roosting	-					-											-	May	Jul-Oct	-	
	Shorebird	Greater yellowlegs	Roosting	-					-											-	May	Jul-Oct	-	
	Shorebird	Hudsonian godwit	Roosting	-					-											-	May-Jun	Jul-Oct	-	
	Shorebird	Least sandpiper	Roosting	C/-	-				-											-	May-Jun	Jul-Oct	-	
	Shorebird	Lesser yellowlegs	Roosting	-					-											-	Apr-May	Sep-Oct	-	
	Shorebird	Pectoral sandpiper	Roosting	C/-	T	-			-											-	Apr-May	Aug-Oct	-	
	Shorebird	Red Knot	Roosting	-					-											-	May	Jul-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	-	
	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	Jul-Oct	-	
	Shorebird	White-rumped sandpiper	Roosting	-					-											-	May	Jul-Oct	-	
	Shorebird	Willet	Roosting	-C	-				-											-	May-Aug	May-Jun	Jul-Sep	
	Waterfowl	Common eider	Roosting	-					-											-	May	Jul-Aug	-	
	Waterfowl	Common Loon	Rafting	-T	-				-											-	May	Aug	-	
<b>35</b>	Diving	D. crested cormorant	Rafting	-					-											-	Jun-Sep	-	-	
	Gull/Tern	G. black-backed gull	Rafting	-					-											-	May-Aug	-	-	
	Gull/Tern	Herring gull	Rafting	-					-											-	May-Sep	Apr-Aug	-	
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-				-											-	May	Aug	-	
	Waterfowl	American black duck	Rafting	-					-											-	-	-	-	
	Waterfowl	Black Scoter	Rafting	-					-											-	-	-	-	
	Waterfowl	Bufflehead	Rafting	-					-											-	-	-	-	
	Waterfowl	Common eider	Rafting	-					-											-	May-Aug	-	-	
	Waterfowl	Goldeneye	Rafting	-					-											-	-	-	-	

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	S	F	Concentration	Monthly Presence												Mig.(F)	Molt
							J	F	M	A	M	J	J	A	S	O	N	D		
	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			-													-	-
<b>63</b>	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-Aug	-
	Waterfowl	Long-tailed duck	Rafting			-													Dec-Jan	-
	Waterfowl	Scaup	Vulnerable Occurrence			-													Feb	Dec
<b>68</b>	Waterfowl	Brant	Rafting			-													May-Aug	-
	Alcid	Black guillemot	Roosting			-													May-Aug	-
	Gull/Tern	G. black-backed gull	Roosting			-													May-Aug	-
	Gull/Tern	Herring gull	Roosting			-													-	-
<b>81</b>	Shorebird	American golden-plover	Roosting			-													Aug	Oct
	Shorebird	American oystercatcher	Roosting			-													May-Jun	May
	Shorebird	Baird's sandpiper	Roosting			-													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			-													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-Jun	Jul-Sep
	Waterfowl	Common eider	Roosting			-													May-Aug	-
<b>82</b>	Diving	Common Loon	Rafting			-													Apr-Aug	-
	Waterfowl	American black duck	Rafting			-													-	-
	Waterfowl	Black Scoter	Rafting			-													Feb	Dec
	Waterfowl	Brant	Rafting			-													-	-

BIRDS (continued)

Map ID	Subelement	Species	Monthly Presence																		
			M/E/N/H	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>108</b>	Diving	Common Loon	Rafting	-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>111</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Diving	Great cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																			
				M/E/NH	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig (S)	Mig (F)	Molt
Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep	
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>113</b>	Diving	Great cormorant	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>122</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Greater yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Hudsonian godwit	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Least sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Lesser yellowlegs	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Pectoral sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Red Knot	Roosting	C/-	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmented plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Semipalmented sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Western sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Whimbrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>123</b>	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>144</b>	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	GW gull/H gull hybrid	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	GW gull/H gull hybrid	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>145</b>	Alcid	American golden-plover	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Shorebird	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BIRDS (continued)**

Map ID	Subelement	Species	ME/NH			Mapping Qualifier	S	F	Concentration	Monthly Presence									
			J	F	M					J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	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			-							-	Jul-Oct	-	-
	Shorebird	Willet				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	Common eider				Roosting			-							-	May-Aug	Sep	-
	Shorebird	Black guillemot				Roosting			-							-	May-Aug	-	-
	Shorebird	Great cormorant				Roosting			-							-	May-Aug	-	-
	Gull/Tern	G. black-backed gull				Roosting			-							-	May-Aug	-	-
	Gull/Tern	Herring gull				Roosting			-							-	May-Aug	-	-
	Pelagic	Leach's storm-petrel				Roosting			-							-	Aug	Oct	-
	Shorebird	American golden-plover				Roosting			-							-	Aug	Oct	-
	Shorebird	American oystercatcher				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	Baird's sandpiper				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	BB sandpiper				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	Black-bellied plover				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	Dunlin				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	Greater yellowlegs				Roosting			-							-	May-Jun	Jul-Oct	-
	Shorebird	Hudsonian godwit				Roosting			-							-	May-Jun	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			-							-	May-Jun	Jul-Oct	-
	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	-

### BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
	Shorebird	Solitary sandpiper	Roosting			-													-	Jun	-	-
	Shorebird	Still 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	-
	Watertowl	Common eider	Roosting			-													-	May-Aug	-	-
147	Alcid	Black guillemot	Roosting			-													-	May-Aug	-	-
	Gull/Tern	G. black-backed gull	Roosting			-													-	May-Aug	-	-
	Gull/Tern	GW gull/H gull hybrid	Roosting			-													-	May-Aug	-	-
	Gull/Tern	Herring gull	Roosting			-													-	May-Aug	-	-
	Watertowl	Common eider	Roosting			-													-	May-Aug	-	-

### FISH

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
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	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
480	Wetland	Tidal Marsh	High Ecological Value			-												-	-	-	-	-
486	Upland	Rare upland community	High Ecological Value			-												-	-	-	-	-
527	Plant	Pursh seepweed	Vulnerable Occurrence	T/-		-												-	-	-	-	-
555	Plant	Pursh seepweed	Vulnerable Occurrence	T/-		-												-	-	-	-	-
	Wetland	Tidal Marsh	High Ecological Value			-												-	-	-	-	-

### INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
674	Bivalve	Sea scallop	Harvest Area	-C		-												-	-	-	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	-C		-												-	May-Nov	May-Nov	Jan-Dec	Jan-Dec

### MARINE MAMMALS

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Matting	Calving	Pupping	Molt
744	Pinniped	Harbor seal	Haul Out			-												-	-	-	-	-
745	Whale	Fin whale	General Distribution	E/-	E	-												-	-	-	-	-
	Whale	Humpback whale	General Distribution	E/-	E	-												-	-	-	-	-
	Whale	N.A. right whale	General Distribution	E/-	E	-												-	-	-	-	-
	Whale	Sei whale	General Distribution	E/-	E	-												-	-	-	-	-
	Whale	Sperm whale	General Distribution	E/-	E	Rare												-	-	-	-	-

**WIDESpread IN MAPPED AREA (> 10 SQUARE KILOMETERS)**

**BIRDS**

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

**FISH**

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

**REPTILES & AMPHIBIANS**

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

**INVERTEBRATES**

		Monthly Presence																	
		M/E/NH		S F		Concentration		J F M A M J J A S O N D		Spawn		Eggs		Larvae		Juveniles		Adults	
Subelement	Species	Mapping Qualifier	General Distribution	-C	Low	Low	Low	High	Low	High	Low	High	Low	High	Low	High	Low		
Crab	Horseshoe crab	General Distribution																	
	Northern shrimp	General Distribution																	

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

		Monthly Presence															
		M/E/NH		S F		Concentration		J F M A M J J A S O N D		Nest		Mig.(S)		Mig.(F)		Molt	
Subelement	Species	Mapping Qualifier	General Distribution	-/-	T	Rare	Rare	High	Low	High	Low	High	Low	High	Low	High	Low
Alcid	Black guillemot	General Distribution															
	Common murre	General Distribution															
	Dovekie	General Distribution															
	Thick-billed murre	General Distribution															
Diving	D. crested cormorant	General Distribution															
	Horned grebe	General Distribution															
	Red-necked grebe	General Distribution															
	Red-throated loon	General Distribution															

### BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence												Molt					
				S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
Gull/Tern	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				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red phalarope			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### FISH

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

## FISH (continued)

Sublement	Species	Monthly Presence												Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D		
	Skates	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Skates	-	-	-	-	-	-	-	-	-	-	-	-	Jan-Dec	Jan-Dec
	White hake	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	White hake	-	-	-	-	-	-	-	-	-	-	-	-	May-Nov	May-Nov
	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Sep	Apr-Sep
	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	Jul-Oct	Jul-Oct
	Yellowtail mackerel	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Sep	Apr-Sep
	Yellowtail mackerel	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Jul	Jun-Jul
	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct	Mar-Oct
	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	May-Nov	May-Nov
	Butterfish	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct	May-Oct

## INVERTEBRATES

Sublement	Species	Monthly Presence												Juveniles	Adults
		J	F	M	A	M	J	J	A	S	O	N	D		
	Bivalve	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Aug	-
	Crab	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct	May-Oct
	Blue crab	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Aug	Jun-Aug
	Jonah crab	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct	May-Oct
	Echinoderm	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Jun	Mar-Jun
	Lobster	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Oct	-

## MARINE MAMMALS

Sublement	Species	Monthly Presence												Calving	Pupping	Molt
		J	F	M	A	M	J	J	A	S	O	N	D			
	Dolphin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Dolphins	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pinniped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Whale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

**ESI POLYGON HABITAT TYPES**

<b>ESI Rank</b>	<b>Habitat Classification</b>	<b>Area (Acres)</b>
10A	Salt and Brackish Water Marshes	57.50
10B	Freshwater Marshes	23.82
10C	Swamps	435.02
10D	Scrub and Shrub Wetlands	69.32
9A	Sheltered Tidal Flats	133.08
7	Exposed Tidal Flats	71.52
5	Mixed Sand and Gravel Beaches	7.41
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	691.84

**ESI SHORELINE HABITAT TYPES**

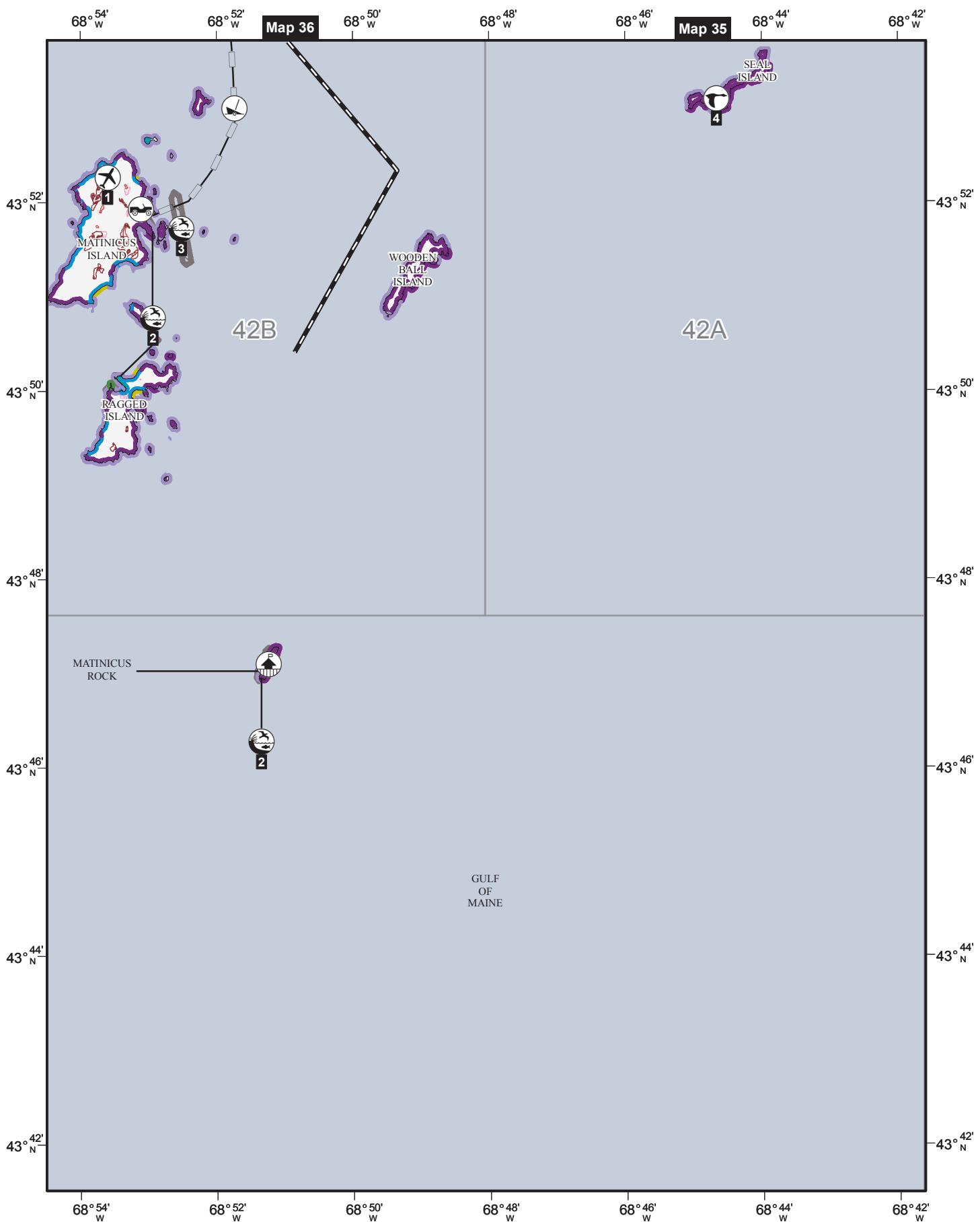
<b>ESI Rank</b>	<b>Shoreline Habitat Classification</b>	<b>Length (Meters)</b>	<b>% of ESI Shoreline</b>
10A	Salt and Brackish Water Marshes	6,228.33	3.87%
10B	Freshwater Marshes	132.03	< 1%
10C	Swamps	34.12	< 1%
10D	Scrub and Shrub Wetlands	508.62	< 1%
9A	Sheltered Tidal Flats	12,310.81	5%
9B	Vegetated Low Banks	45,714.56	20%
8A	Sheltered, Impermeable, Rocky Shores	3.21	< 1%
8C	Sheltered Riprap	0.00	< 1%
7	Exposed Tidal Flats	339.09	0.21%
6A	Gravel Beaches	5,026.07	3.12%
6B	Riprap	4,957.69	2.9%
5	Mixed Sand and Gravel Beaches	2,156.60	1.34%
4	Coarse Grained Sand Beaches	24,939.56	15.50%
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	1,171.45	1.11%
1A	Exposed, Rocky Shores	89,714.80	39.75%
1B	Exposed, Solid Man-Made Structures	34,370.89	15.36%
		4,559.47	2.83%
Total Shoreline:	232,167.26	Total ESI Shoreline:	144.26%
Total Shoreline:	132,075.84	Total Shoreline:	82.07%

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 42 Midcoast Maine

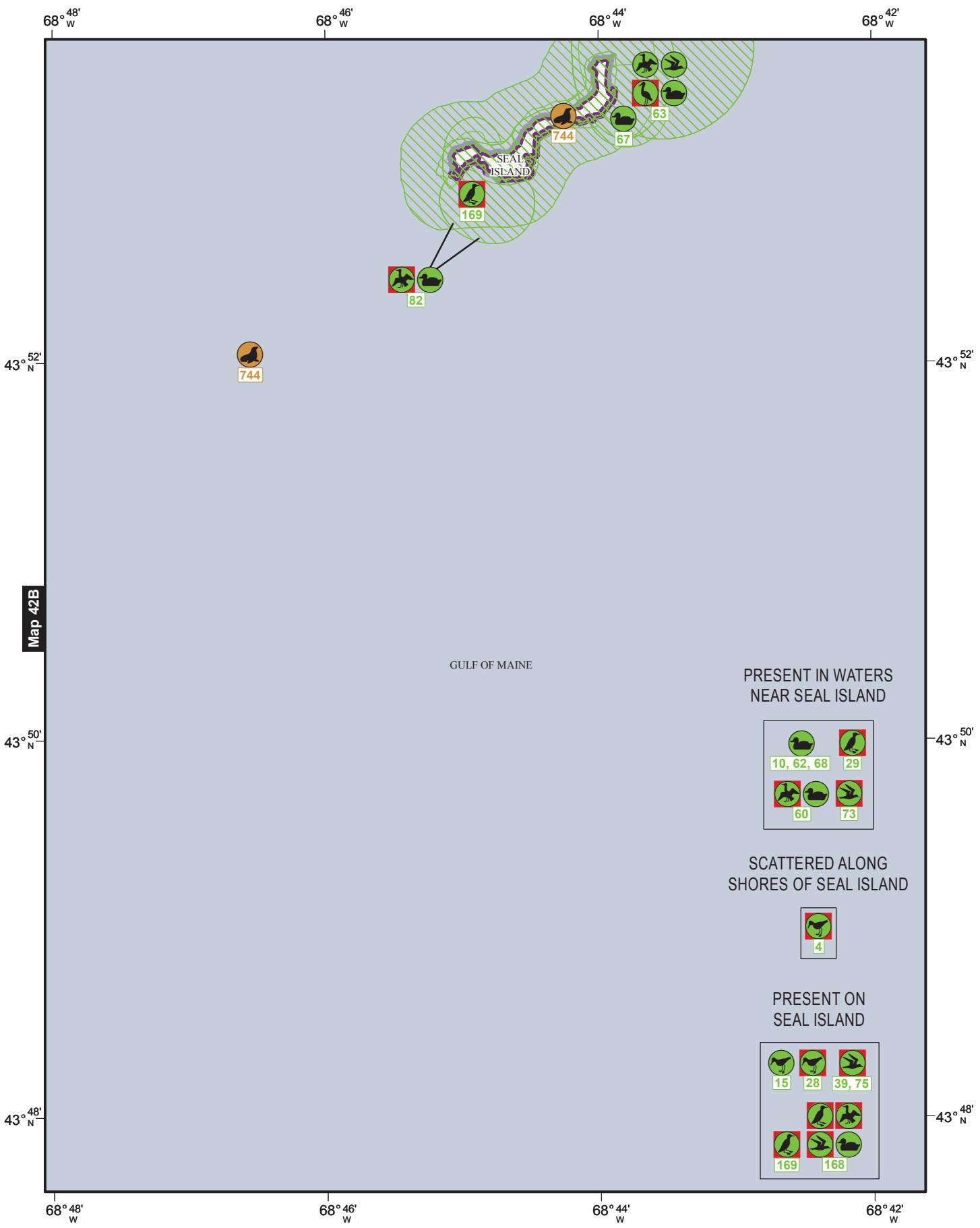
### HUMAN USE RESOURCES

DISPLAYED ON MAP (POINTS)			DISPLAYED ON MAP (POLYGONS)			ALSO PRESENT IN MAPPED AREA (POLYGONS)			SHORELINE RESOURCES			ESI POLYGON HABITAT TYPES			ESI SHORELINE HABITAT TYPES										
Map ID	Type	Name	Map ID	Type	Name	Type	Name	Type	JURISDICTIONS	COUNTY:	COAST GUARD:	USACE:	ESI Rank	Habitat Classification	Area (Acres)	Length (Meters)	ESI Rank	Shoreline Habitat Classification	Length (Meters)	Length (Miles)	Area (Sq. Miles)	% of ESI Shoreline			
1	AIRPORT	MATINICUS ISLAND AIRPORT	2	MANAGEMENT AREA	BLUE MUSSEL - SHELLFISH MA		MAINE DEPT. OF MARINE RESOURCES (MEDMR)		KNOX	DISTRICT 1, SECTOR NORTHERN NEW ENGLAND		NORTH ATLANTIC DIVISION, NEW ENGLAND DISTRICT	10B	Freshwater Marshes	13.48	1,209.30	7	Exposed Tidal Flats	1,209.30	0.75	0.02	1%			
3	MANAGEMENT AREA	SEA SCALLOP - SHELLFISH MA	3	MANAGEMENT AREA	SEAL ISLAND NATIONAL WILDLIFE REFUGE		MAINE DEPT. OF MARINE RESOURCES (MEDMR)						10C	Swamps	18.48	130.18	6B	Riprap	130.18	0.08	0.03	< 1%			
4	WILDLIFE REFUGE		4	WILDLIFE REFUGE			U.S. FISH & WILDLIFE SERVICE						10D	Scrub and Shrub Wetlands	59.42	6,636.68	5	Mixed Sand and Gravel Beaches	1,545.92	0.96	0.96	2%			
													2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	241.48	40,067.37	4	Coarse Grained Sand Beaches	6,636.68	4.12	4.12	7%			
													1A	Exposed, Rocky Shores	39,146.73	39,146.73	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	39,146.73	24.90	24.90	45%			
													1B	Exposed, Solid Man-Made Structures	683.18	683.18				24.32	24.32	44%			
													Total ESI Shoreline:	89,419.37	Total ESI Shoreline:	89,419.37	Total Shoreline:	49,272.59	Total Shoreline:	49,272.59	Total Shoreline:	55.56	Total Shoreline:	30.62	

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 42A Midcoast Maine

### 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	S	F	Concentration	Monthly Presence							Molt				
							J	F	M	A	M	J	J	A	S	Mig.(F)		
4	Shorebird	American golden-plover	Concentration Area	C/-		Foraging	-	May-Jun		May	Aug	Oct	-	-	-	-	-	
	Shorebird	American oystercatcher	Concentration Area	C/-		Foraging	-	Aug		Oct	-	-	-	-	-	-	-	
	Shorebird	Baird's sandpiper	Concentration Area	C/-		Foraging	-	May		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	BB sandpiper	Concentration Area	C/-		Foraging	-	May		Aug-Oct	-	-	-	-	-	-	-	
	Shorebird	Black-bellied plover	Concentration Area	C/-		Foraging	-	May		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	Dunlin	Concentration Area	C/-		Foraging	-	May		Aug-Oct	-	-	-	-	-	-	-	
	Shorebird	Greater yellowlegs	Concentration Area	C/-		Foraging	-	May		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	Hudsonian godwit	Concentration Area	C/-		Foraging	-	May		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	Least sandpiper	Concentration Area	C/-		Foraging	-	May-Jun		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	Lesser yellowlegs	Concentration Area	C/-		Foraging	-	May-Jun		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	Pectoral sandpiper	Concentration Area	C/-		Foraging	-	May-Jun		Jul-Oct	-	-	-	-	-	-	-	
	Shorebird	Red Knot	Concentration Area	C/-		Foraging	-	May-Jun		Jul-Oct	-	-	-	-	-	-	-	
10	Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-		Foraging	-	May-Aug		May-Jun		Jul-Sep	-	-	-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	T/-		Foraging	-	May-Aug		May-Jun		Jul-Oct	-	-	-	-	-	-
28	Shorebird	American golden-plover	Roosting	C/-		Roosting	-	May-Jun		May	Aug	Oct	-	-	-	-	-	-
	Shorebird	American oystercatcher	Roosting	C/-		Roosting	-	May-Jun		May	Aug	Oct	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Roosting	C/-		Roosting	-	May		Aug-Oct	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Roosting	C/-		Roosting	-	May		Jul-Oct	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Roosting	C/-		Roosting	-	May		Aug-Oct	-	-	-	-	-	-	-	-
	Shorebird	Red Knot	Roosting	C/-		Roosting	-	May		Aug-Oct	-	-	-	-	-	-	-	-

**BIRDS (continued)**

Map ID	Subelement	Species	Monthly Presence												J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt								
Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Semipalmated plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Semipalmated sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Short-billed dowitcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Solitary sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Stilt sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Western sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Whimbrel	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Shorebird	Willet	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
29	Alcid	Razorbill	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
39	Gull/Tern	Arctic tern	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
60	Diving	Common Loon	Vulnerable Occurrence	T/C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
62	Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
63	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
67	Waterfowl	Canada goose	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
68	Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
73	Gull/Tern	Roseate tern	Vulnerable Occurrence	E/E	E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
75	Gull/Tern	Roseate tern	Nesting	E/E	E	E	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
82	Diving	Common Loon	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

### BIRDS (continued)

Map ID	Subelement	Species	ME/NH			Monthly Presence																	
			Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt	
168	Alcid	Black guillemot	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Diving	Great cormorant	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	Common tern	Vulnerable Occurrence	C/T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	Laughing gull	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pelagic	Leach's storm-petrel	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Watertowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
169	Alcid	Atlantic puffin	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )

### BIRDS

Subelement	Species	ME/NH			Monthly Presence																	
		Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt	
Alcid	Atlantic puffin	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Razorbill	General Distribution	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pelagic	Leach's storm-petrel	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shorebird	General Distribution	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### REPTILES & AMPHIBIANS

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

### INVERTEBRATES

Subelement	Species	ME/NH			Monthly Presence																	
		Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults
Crab	Horseshoe crab	General Distribution	-C	Low	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Shrimp	General Distribution	-C	Low	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

### MARINE MAMMALS

Subelement	Species	ME/NH			Monthly Presence																	
		Mapping Qualifier	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Hatch	Internest	Juveniles	Adults
Whale	Fin whale	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Humpback whale	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	N.A. right whale	General Distribution	E/-	E	Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**MARINE MAMMALS (continued)**

Subelement	Species	Mapping Qualifier	Monthly Presence											
			MEN/H			S F			Concentration			J F M A M J J A S O N D		
			General Distribution	E/-	E	General Distribution	E/-	E	Low	Rare	-	-	-	Mating
Sei whale	Sei whale	General Distribution	General Distribution	E/-	E	General Distribution	E/-	E	Low	Rare	-	-	-	-
Sperm whale	Sperm whale	General Distribution	General Distribution	E/-	E	General Distribution	E/-	E	Low	Rare	-	-	-	-

ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)

**BIRDS**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
Alcid	Common murre	-	-	-	-	-	-	-	-	-	-	-	-
Dovekie	Red-throated loon	-	-	-	-	-	-	-	-	-	-	-	-
Diving	G. black-backed gull	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Herring gull	-	-	-	-	-	-	-	-	-	-	-	-
Pelagic	Cory's shearwater	-	-	-	-	-	-	-	-	-	-	-	-
	Great shearwater	-	-	-	-	-	-	-	-	-	-	-	-
	Manx shearwater	-	-	-	-	-	-	-	-	-	-	-	-
	Northern fulmar	-	-	-	-	-	-	-	-	-	-	-	-
	Northern gannet	-	-	-	-	-	-	-	-	-	-	-	-
	Sooty shearwater	-	-	-	-	-	-	-	-	-	-	-	-
	Wilson's storm-petrel	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Red phalarope	-	-	-	-	-	-	-	-	-	-	-	-

**FISH**

Subelement	Species	Monthly Presence											
		J	F	M	A	M	J	J	A	S	O	N	D
		Diadromous	Striped bass	-	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-
	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-
Marine Benthic	American plaice	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-
	Cunner	-	-	-	-	-	-	-	-	-	-	-	-
	Haddock	-	-	-	-	-	-	-	-	-	-	-	-
	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-
	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-
	Ocean pout	-	-	-	-	-	-	-	-	-	-	-	-
	Pollock	-	-	-	-	-	-	-	-	-	-	-	-
	Red hake	-	-	-	-	-	-	-	-	-	-	-	-
	Rock gurnel	-	-	-	-	-	-	-	-	-	-	-	-
	Shorthorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-
	Silver hake	-	-	-	-	-	-	-	-	-	-	-	-
	Skates	-	-	-	-	-	-	-	-	-	-	-	-
	White hake	-	-	-	-	-	-	-	-	-	-	-	-

## FISH (continued)

Subelement	Species	Monthly Presence												Adults
		J	F	M	A	M	J	J	A	S	O	N	D	
Marine Pelagic	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	Mar-Oct
	Butterfish	-	-	-	-	-	-	-	-	-	-	-	-	May-Oct

## INVERTEBRATES

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

## MARINE MAMMALS

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

For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

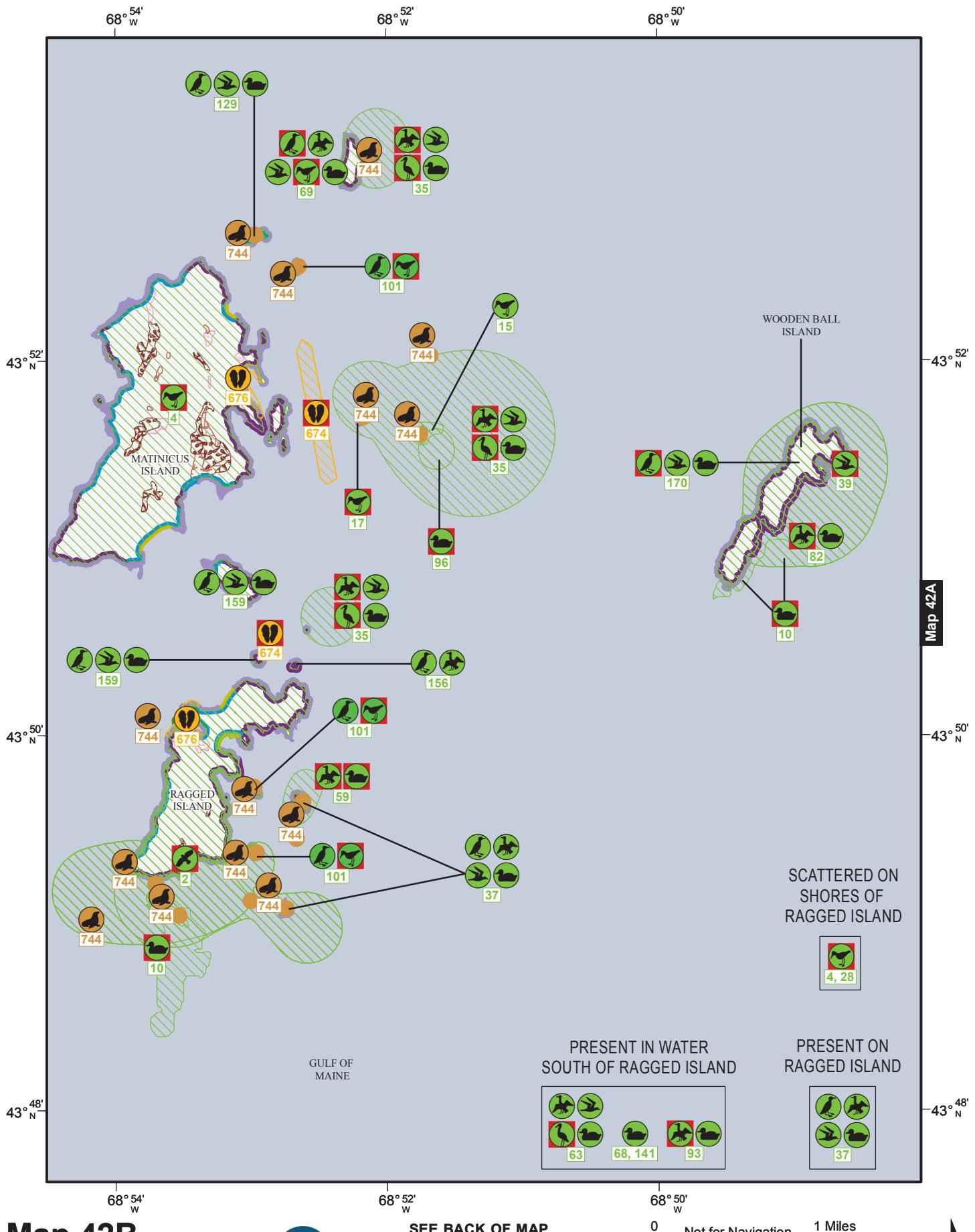
ESI POLYGON HABITAT TYPES		ESI SHORELINE HABITAT TYPES	
ESI Rank	Habitat Classification	ESI Rank	Shoreline Habitat Classification
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)	2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)
1A	Exposed, Rocky Shores	1A	Exposed, Rocky Shores

Total ESI Shoreline:	9,048.59	Total ESI Shoreline:	5.62
Total Shoreline:	5,901.98	Total Shoreline:	3.67

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](http://response.restoration.noaa.gov)





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

## Map 42B Midcoast Maine

### 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	Vulnerable Occurrence	Mapping Qualifier	S	F	Concentration	Monthly Presence												Mig.(F)	Molt
								J	F	M	A	M	J	J	A	S	O	N	D	Nest	
2	Raptor	Bald eagle	Concentration Area	C/-	-	-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Shorebird	American golden-plover	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Watertow	Harlequin duck	Vulnerable Occurrence	T/-	-	-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	Shorebird	American golden-plover	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	American oystercatcher	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Baird's sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	BB sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Black-bellied plover	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Dunlin	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Greater yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Hudsonian godwit	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Least sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Lesser yellowlegs	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Pectoral sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

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	Nest	Mig.(S)	Mig.(F)	Molt
	Shorebird	Purple sandpiper	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Oct	-
	Shorebird	Red Knot	Concentration Area	C/-T	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	
	Shorebird	Ruddy turnstone	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Sanderling	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-	
	Shorebird	Semipalmated plover	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Semipalmated sandpiper	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Short-billed dowitcher	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Solitary sandpiper	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	Jun	-	-	
	Shorebird	Stilt sandpiper	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Sep	-	
	Shorebird	Western sandpiper	Concentration Area	C/-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	Jul	Oct	-	
	Shorebird	Whimbrel	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	White-rumped sandpiper	Concentration Area	-	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Willet	Concentration Area	-C	Foraging	Foraging	Foraging	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep	
<b>28</b>	Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-	
	Shorebird	American oystercatcher	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	
	Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	May	Sep	
	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-Jun	Jul-Oct	-	
	Shorebird	Least sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Lesser yellowlegs	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	Sep-Oct	-	
	Shorebird	Pectoral sandpiper	Roosting	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-	
	Shorebird	Red Knot	Roosting	C/-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Ruddy turnstone	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-May	-	-	
	Shorebird	Sanderling	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Semipalmated plover	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/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	White-rumped sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Jun	Jul-Oct	-	
	Shorebird	Willet	Roosting	-C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	May-Jun	Jul-Sep	
<b>35</b>	Diving	Common Loon	Rafting	-T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-	
	Diving	D. crested cormorant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-	
	Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-	-	
	Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-	
	Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

**BIRDS (continued)**

Map ID	Subelement	Species	Mapping Qualifier	ME/NH	Monthly Presence																	
					S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig (S)	Mig (F)
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>37</b>	<b>Alcid</b>	<b>Black guillemot</b>	<b>Roosting</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>May-Aug</b>	<b>-</b>	<b>-</b>
Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-
Gull/Tern	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Gull/Tern	Herring gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Common eider	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
<b>39</b>	<b>Gull/Tern</b>	<b>Arctic tern</b>	<b>Vulnerable Occurrence</b>	<b>T/C</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>May-Oct</b>	<b>-</b>	<b>-</b>
<b>59</b>	<b>Diving</b>	<b>Common Loon</b>	<b>Rafting</b>	<b>-T</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Apr-Aug</b>	<b>-</b>	<b>-</b>
Waterfowl	American black duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Feb	Dec	-
Waterfowl	Black Scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Brant	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Bufflehead	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Common eider	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Goldeneye	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Green-winged teal	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Waterfowl	Harlequin duck	Vulnerable Occurrence	T/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Apr-Aug	-	-
Waterfowl	Mallard	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Scoters	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waterfowl	Surf scoter	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Jun-Sep	-	-
<b>63</b>	<b>Diving</b>	<b>D. crested cormorant</b>	<b>Rafting</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>May-Aug</b>	<b>-</b>	<b>-</b>
Gull/Tern	G. black-backed gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gull/Tern	Herring gull	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Sep	-	-
Wading	Great blue heron	Vulnerable Occurrence	C/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
Waterfowl	Long-tailed duck	Rafting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Dec-Jan	-	-
Waterfowl	Scaup	Vulnerable Occurrence	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Feb	Dec	-
<b>68</b>	<b>Waterfowl</b>	<b>Brant</b>	<b>Rafting</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>May-Aug</b>	<b>-</b>	<b>-</b>
<b>69</b>	<b>Alcid</b>	<b>Black guillemot</b>	<b>Roosting</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Jun-Sep</b>	<b>-</b>	<b>-</b>
Diving	D. crested cormorant	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May-Aug	-	-
Pelagic	G. black-backed gull	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug-Jun	Oct	-
Shorebird	Leach's storm-petrel	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Sep	-
Shorebird	American golden-plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	American oystercatcher	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shorebird	Baird's sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Aug	Oct	-
Shorebird	BB sandpiper	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Jul-Oct	-
Shorebird	Black-bellied plover	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	May	Aug-Oct	-
Shorebird	Dunlin	Roosting	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**BIRDS (continued)**

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

## BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																		
				M/E/NH	S	F	Concentration	J	F	M	A	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)	Molt
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	-
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/-	-															-	May-Jun	Jul-Oct	-
Shorebird	White-rumped sandpiper	Roosting	-																-	May-Jun	Jul-Sep	-
Shorebird	Willet	Roosting	-/C	-															-	May-Aug	May-Aug	-
129	Alcid	Black guillemot	Roosting	-															-	May-Aug	-	-
	Gull/Tern	G. black-backed gull	Roosting	-															-	May-Aug	-	-
	Waterfowl	Common eider	Roosting	-															-	May-Aug	-	-
141	Waterfowl	American black duck	Rafting	-															-	Apr-Aug	-	-
	Waterfowl	Black Scoter	Rafting	-															-	-	-	-
	Waterfowl	Bufflehead	Rafting	-															-	-	-	-
	Waterfowl	Goldeneye	Rafting	-															-	-	-	-
	Waterfowl	Green-winged teal	Rafting	-															-	May-Aug	Apr-Aug	-
	Waterfowl	Mallard	Rafting	-															-	-	-	-
	Waterfowl	Scoters	Rafting	-															-	-	-	-
	Waterfowl	Surf scoter	Rafting	-															-	-	-	-
156	Alcid	Black guillemot	Roosting	-															-	May-Aug	-	-
	Diving	D. crested cormorant	Roosting	-															-	Jun-Sep	-	-
159	Alcid	Black guillemot	Roosting	-															-	May-Aug	-	-
	Gull/Tern	G. black-backed gull	Roosting	-															-	May-Aug	-	-
	Gull/Tern	Herring gull	Roosting	-															-	-	-	-
	Waterfowl	Common eider	Roosting	-															-	May-Aug	-	-
	Gull/Tern	Black guillemot	Roosting	-															-	May-Aug	-	-
170	Alcid	G. black-backed gull	Roosting	-															-	May-Aug	-	-
	Gull/Tern	Herring gull	Roosting	-															-	May-Aug	-	-
	Gull/Tern	GW gull/H gull hybrid	Roosting	-															-	-	-	-
	Gull/Tern	Herring gull	Roosting	-															-	-	-	-
	Pelagic	Leach's storm-petrel	Vulnerable Occurrence	C/-	-														-	May-Nov	May-Nov	Jan-Dec
	Waterfowl	Common eider	Roosting	-															-	May-Aug	-	-

## INVERTEBRATES

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence																	
				M/E/NH	S	F	Concentration	J	F	M	A	J	J	A	S	O	N	D	Eggs	Larvae	Juveniles
674	Bivalve	Sea scallop	Harvest Area	-/C	-													Jul-Oct	-	Jan-Dec	Jan-Dec
676	Bivalve	Blue mussel	Harvest Area	-														May-Nov	May-Nov	Jan-Dec	Jan-Dec

### MARINE MAMMALS

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

WIDESPREAD IN MAPPED AREA (> 10 SQUARE KILOMETERS )

### BIRDS

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>						
			T/-	S F	Concentration	J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt
Alcid	Atlantic puffin	General Distribution	T/-	-			-	-	-	-
	Razorbill	General Distribution	T/-	-			-	-	-	-
Pelagic	Leach's storm-petrel	General Distribution	C/-	-			-	-	-	-
	Red-necked phalarope	General Distribution	C/-	-			-	-	-	-
Shorebird							-	-	-	-

### REPTILES & AMPHIBIANS

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>							
			T/-	S F	Concentration	J F M A M J J A S O N D	Nest	Hatch	Internest	Juveniles	Adults
Turtle	Green sea turtle	General Distribution	T/-	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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>							
			T/-C	S F	Concentration	J F M A M J J A S O N D	Spawn	Eggs	Larvae	Juveniles	Adults
Crab	Horseshoe crab	General Distribution	-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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>						
			T/-E	S F	Concentration	J F M A M J J A S O N D	Mating	Calving	Pupping	Molt
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

<b>Subelement</b>	<b>Species</b>	<b>Mapping Qualifier</b>	<b>ME/NH</b>	<b>Monthly Presence</b>						
			J/-F	S F	Concentration	J F M A M J J A S O N D	Nest	Mig.(S)	Mig.(F)	Molt
Alcid	Common murre						-	-	-	-
	Dovekie						-	-	-	-
Diving	Red-throated loon						-	-	-	-
	Gull/Tern	G. black-backed gull					-	-	-	-

### BIRDS (continued)

Map ID	Subelement	Species	Mapping Qualifier	Monthly Presence														
				J	F	M	A	M	J	J	A	S	O	N	D	Nest	Mig.(S)	Mig.(F)
	Pelagic	Herring gull		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Cory's shearwater		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Great shearwater		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Manx shearwater		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Northern fulmar		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Northern gannet		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Sooty shearwater		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Wilson's storm-petrel		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shorebird	Red phalarope		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### FISH

Subelement	Species	Monthly Presence															
		J	F	M	A	M	J	J	A	S	O	N	D	Spawn	Eggs	Larvae	Juveniles
Diadromous	Striped bass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estuarine Nursery	Atlantic herring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Black Seabass	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Winter flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American plaice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	American sand lance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic cod	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic Wolffish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Cunner	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Haddock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Longhorn sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Northern searobin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Ocean pout	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Pollack	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Red hake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Rock gurnet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Shortnose sculpin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Silver hake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Skates	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	White hake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Yellowtail flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Atlantic mackerel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Butterfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### INVERTEBRATES

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

Midcoast Maine: Map 42B

## MARINE MAMMALS



For additional information about species locations and extent, reference the underlying GIS data available from [response.restoration.noaa.gov](http://response.restoration.noaa.gov)

## SHORELINE RESOURCES

ESI POLYGON HABITAT TYPES		Habitat Classification		Area (Acres)		Area (Sq. Miles)	
10B	Freshwater Marshes			13,48	0.02		
10C	Swamps			18,48	0.03		
10D	Scrub and Shrub Wetlands			59,42	0.09		
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)			220,52	0.34		

ESI SHORELINE HABITAT TYPES		Shoreline Habitat Classification		Length (Meters)		Length (Miles)		% of ESI Shoreline	
7	Exposed Tidal Flats			1,209,30	0.75			2%	
6B	Riprap			130,18	0.08			< 1%	
5	Mixed Sand and Gravel Beaches			1,545,92	0.96			2%	
4	Coarse Grained Sand Beaches			6,636,68	4.12			9%	
2A	Exposed, Wave-Cut Platforms (Bedrock/Mud/Clay)			36,007,19	22.37			46%	
1A	Exposed, Rocky Shores			31,403,61	19.51			40%	
1B	Exposed, Solid Man-Made Structures			683,18	0.42			1%	
Total ESI Shoreline:		77,616,06		Total ESI Shoreline:		48.23		Total Shoreline:	
Total Shoreline:		41,287.79		Total Shoreline:		25.66			

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](http://response.restoration.noaa.gov)

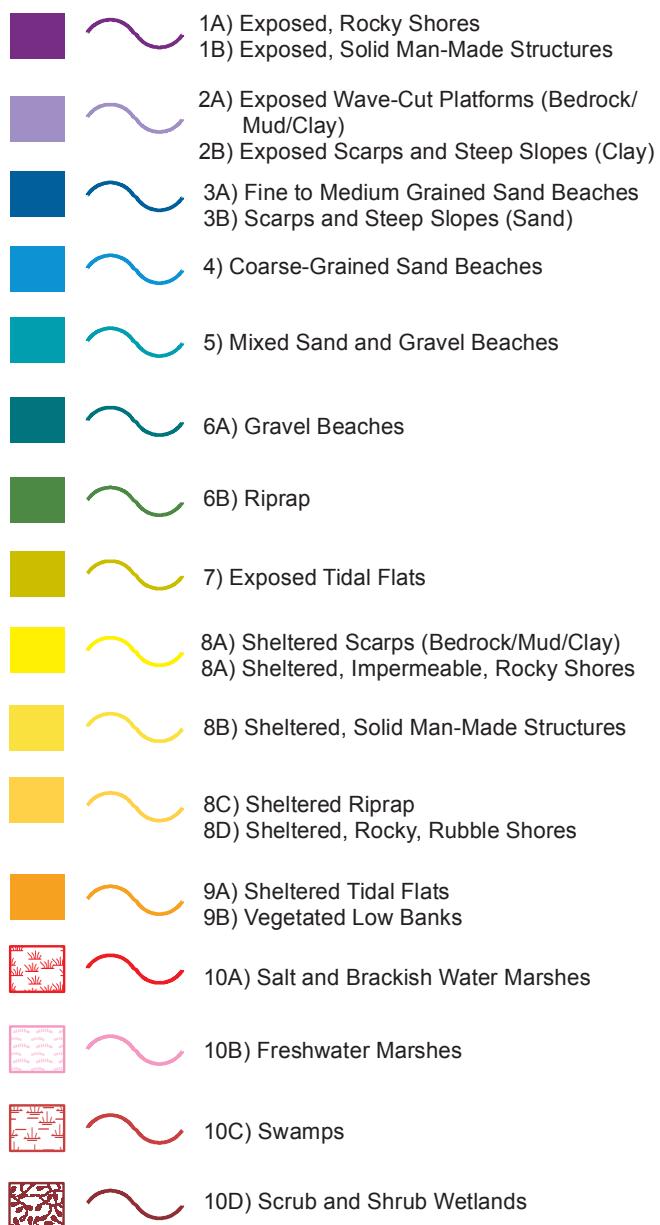




## Human-Use Features

	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



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	 Invertebrates	 Terrestrial Mammals
 Birds	 Invertebrates	 Small Mammal
 Alcid/Pelagic	 Crab/Invertebrate/Shellfish	 Habitats
 Diving	 Bivalve/Barnacle/Chordate	 Upland/Wetland/Plant
 Gull/Tern/Bird	 Cephalopod	 Reptiles & Amphibians
 Passerine	 Insect	 Amphibian/Snake
 Raptor	 Echinoderm	 Turtle
 Shorebird	 Gastropod	 Threatened or Endangered Species
 Wading	 Lobster	
 Waterfowl		
 Fish	 Marine Mammals	 Map ID
 Fish	 Dolphin	 1
 Fish	 Pinniped	 2
 Fish	 Whale	 3
		 4
		 5
		 6

## 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.

