

LEGEND: LONG ISLAND SOUND

Sensitive Biological Resources

Birds

Birds

Alcid/Pelagic

Diving

Gull/Tern

Passerine

Raptor

Shorebird

Wading

Waterfowl

Fish

Fish

Nursery

Invertebrates

Bivalve

Cephalopod

Crab/Invertebrate/Shellfish

Insect

Gastropod

Lobster

Shrimp

Reptiles & Amphibians

Amphibian/Snake

Turtle

Threatened or Endangered Species

Habitats

FAV

Upland/Wetland/Plant

Benthic

Terrestrial Mammal

Bat

Small Mammal

Marine Mammals

Dolphin

Pinniped

Whale

Map ID

Human-Use Features

Abandoned Vessel

Access

Airport

Anchorage

Aquaculture

Archaeological Sites

Army Corp of Engineers

Artificial Reef

Beach

Boat Ramp

Campground

Coast Guard

Commercial Fishing

EPA Facility

EPA Region

Essential Habitat

FEMA region

Ferry

Fishery Area

Heliport

Historic Wreck

Historical Site

Landfill

Lock and Dam

Management Area

Marina

Military

Mine Site

National Landmark

Nature Conservancy

NOAA Facility

Park

Port

Recreational Fishing

Repeated Measurement Site

State Protected Area

Tribal Land

Waste Disposal

Human-Use Features (continued)

Map ID

Ferry Route

Rail Route

Road

Shipping Lane

Interstate

US Highway

State Highway or Route

Management Area

ESI Shoreline and Habitat Ranking

1A) Exposed, Rocky Shores

1B) Exposed, Solid Man-Made Structures

2A) Exposed Wave-Cut Platforms (Bedrock/Mud/Clay)

2B) Exposed Scarps and Steep Slopes (Clay)

3A) Fine to Medium Grained Sand Beaches

3B) Scarps and Steep Slopes (Sand)

4) Coarse-Grained Sand Beaches

5) Mixed Sand and Gravel Beaches

6A) Gravel Beaches

6B) Riprap

7) Exposed Tidal Flats

8A) Sheltered Scarps (Bedrock/Mud/Clay)

8A) Sheltered, Impermeable, Rocky Shores

8B) Sheltered, Solid Man-Made Structures

8C) Sheltered Riprap

9A) Sheltered Tidal Flats

9B) Vegetated Low Banks

10A) Salt and Brackish Water Marshes

10B) Freshwater Marshes

10C) Swamps

10D) Scrub and Shrub Wetlands

Examples of Double and Triple Shoreline Rankings:

10D & 2A

10C & 10A & 4

Shorelines often contain varied geomorphology, and therefore may require two or three ESI types to describe. These symbols will look similar to the examples above. The first shoreline type listed is the most landward shore type.

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.

