LEGEND: STRAITS OF MACKINAC & ST. CLAIR-DETROIT RIVER SYSTEM

Sensitive Biological Resources

- Birds
- Birds
- Alcid/Pelagic
- Diving
- Gull/Tern/Bird
- Landfowl
- Passerine
- Raptor
- Shorebird
- Wading
- Waterfowl

- Fish
- Fish
- Fish
- Fish/Freshwater/Diadromous
- Invertebrates
- Invertebrates
- Bivalve
- Gastropod
- Insect

- Reptiles & Amphibians
- Amphibian/Reptile/Snake
- Turtle
- Terrestrial Mammal
- Bat
- Feline/Small Mammal

- Benthic
- SAV
- Habitats
- Plant
- Threatened or Endangered Species

1234 Resource At Risk (RAR) or Human Use (HU) Number

Human-Use Features

- Abandoned Vessel
- Access
- Airport
- Anchorage
- Archaeological Site
- Army Corps of Engineers
- Artificial Reef
- Beach
- Boat Ramp
- Campground
- Coast Guard
- Critical Habitat

- EPA Facility
- Essential Habitat
- Ferry
- Fishery Area
- Heliport
- Historical Site
- Invasive Species
- Lock and Dam
- Management Area
- Marina
- Marine Sanctuary
- Military

- Mine Site
- National Forest
- National Park
- Nature Conservancy
- Park
- Pipeline
- Port
- Recreational Fishing
- Renewable Energy
- Repeated Measurement Site
- State Protected Area
- Subsistence Fishing

- Tribal Lands
- Water Intake
- Wildlife Refuge
- Management Area
- Ferry Route
- Pipeline
- Rail Route
- International Border
- US Interstate
- US Highway
- State Highway or Route
- Road

ESI Shoreline and Habitat Ranking

- 1A) Exposed, Rocky Shores
  1B) Exposed, Solid Man-Made Structures
- 2A) Shelving Bedrock Shores
- 3B) Eroding Scarps (Unconsolidated Sediment)
- 4) Sand Beaches
- 5) Mixed Sand and Gravel Beaches
- 6A) Gravel Beaches
- 6B) Riprap
- 7) Exposed Flats
- 8A) Sheltered Scarps (Bedrock/Mud/Clay)

- 8B) Sheltered, Solid Man-Made Structures
- 8C) Sheltered Riprap
- 9A) Sheltered Sand and Mud Flats
  9B) Vegetated Low Banks
- 10B) Freshwater Marshes
- 10C) Swamps
- 10D) Scrub and Shrub Wetlands

Examples of Double and Triple Shoreline Rankings:

- 10B & 4
- 1B & 6A & 7

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 introductory pages and associated metadata.

Sensitive Biological Resources (1:50,000 scale maps): Species are arranged into seven 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 polygons. Each element is represented by a unique color and/or hatch pattern. Icons illustrate the subelement(s) found within each feature. If a species is state or federally listed as threatened, endangered, or of special concern, a red square is placed around the icon. When multiple elements occur in the same location, overlapping hatch patterns will be shown.

The Resources at Risk (RAR) number associated with each feature "links" to the map report where the species and attributes are listed. To maximize readability, Present Throughout (PTO) boxes are used to identify geographic locations for species not displayed on the map. Species found in the PTO box are listed on the report by their RAR number.

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 sensitive) to 10 (most sensitive). Cooler colors represent less sensitive shoreline types; warm and hot colors indicate increased sensitivity. A shoreline may have more than one habitat type present. When this occurs, the most landward shoreline type is mapped on the shoreline, and the more seaward type(s) are mapped adjacent to the water. The aerial extent of wetland habitats may also be mapped as polygons.

Human-Use Features (1:100,000 scale maps): Locations of human-use features and jurisdictional boundaries are mapped as points, lines, or polygons. The Human Use (HU) number associated with each feature "links" to the map report where the name and attributes are listed. Additional features, particularly jurisdictional and other features or boundaries, that cover the majority or entirety of the mapped area, are listed in a Present Throughout (PTO) box and not displayed on the map.