



# Map 12B Hudson River

## 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 | S | O | N | D |
|  | SAV        | Water celery | High Ecological Value |   |   | Present       |                  |   |   |   |   |   |   |   |   |   |   | - |
|  | SAV        | Water celery | High Ecological Value |   |   | Potential     |                  |   |   |   |   |   |   |   |   |   |   | - |

#### BIRDS

| Map ID | Subelement | Species             | Mapping Qualifier    | S   | F | Concentration | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Nest    | Mig.(S) | Mig.(F) | Molt |
|--------|------------|---------------------|----------------------|-----|---|---------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|---------|------|
|        |            |                     |                      |     |   |               | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |         |      |
| 66     | Raptor     | Endangered raptor 2 | Nesting              | T/E |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Mar-Jul | -       | -       | -    |
| 86     | Diving     | Pied-billed grebe   | Nesting              | T/E |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
| 129    | Raptor     | Endangered raptor 1 | Nesting              | E/E |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Mar-Jul | -       | -       | -    |
| 200    | Wading     | American bittern    | General Distribution | C/E |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | May-Aug | -       | -       | -    |
|        | Wading     | Least bittern       | General Distribution | T/C |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
| 201    | Diving     | Pied-billed grebe   | Nesting              | T/E |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Passerine  | Marsh wren          | Nesting              |     |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Aug | -       | -       | -    |
|        | Shorebird  | Spotted sandpiper   | General Distribution | -/C |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | May-Sep | -       | -       | -    |
|        | Wading     | Sora                | Nesting              |     |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
| 202    | Diving     | Pied-billed grebe   | Nesting              | T/E |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Passerine  | Marsh wren          | Nesting              |     |   | 12 Pairs      |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Aug | -       | -       | -    |
|        | Passerine  | Swamp sparrow       | Nesting              |     |   | 4 Pairs       |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Shorebird  | Wilson's snipe      | Nesting              |     |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Aug | -       | -       | -    |
|        | Wading     | Sora                | Nesting              |     |   | 2 Pairs       |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Wading     | Virginia rail       | Nesting              |     |   | 3 Pairs       |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
| 203    | Raptor     | Northern harrier    | Migration            | T/E |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-Apr | Sep-Nov | -    |
|        | Raptor     | Osprey              | Migration            | C/- |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Apr-May | Sep-Nov | -    |
|        | Shorebird  | Shorebirds          | Migration            |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-May | -       | -    |
|        | Wading     | Hérons              | Migration            |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-Apr | Sep-Nov | -    |
|        | Waterfowl  | Waterfowl           | Migration            |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-Apr | Oct-Nov | -    |
| 204    | Shorebird  | Shorebirds          | Migration            |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-May | -       | -    |
|        | Wading     | American bittern    | Migration            | C/E |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-May | Sep-Nov | -    |
|        | Wading     | Great blue heron    | Concentration Area   | -/C |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | -    |
|        | Wading     | King rail           | Migration            | T/- |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-May | Sep-Nov | -    |
|        | Wading     | Least bittern       | Migration            | T/C |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-May | Sep-Nov | -    |
|        | Waterfowl  | Waterfowl           | Migration            |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Mar-Apr | Oct-Nov | -    |
| 205    | Shorebird  | Spotted sandpiper   | General Distribution | -/C |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | May-Sep | -       | -       | -    |
| 206    | Passerine  | Marsh wren          | Nesting              |     |   | 29 Pairs      |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Aug | -       | -       | -    |
|        | Passerine  | Swamp sparrow       | Nesting              |     |   | 17 Pairs      |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Passerine  | Willow flycatcher   | Nesting              |     |   | 11 Pairs      |                  |   |   |   |   |   |   |   |   |   |   |   | May-Aug | -       | -       | -    |
|        | Wading     | Least bittern       | Nesting              | T/C |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |

**BIRDS (continued)**

| Map ID | Subelement | Species       | Mapping Qualifier | S   | F | Concentration | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Nest    | Mig.(S) | Mig.(F) | Molt |
|--------|------------|---------------|-------------------|-----|---|---------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|---------|------|
|        |            |               |                   |     |   |               | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |         |      |
| 207    | Wading     | Sora          | Nesting           |     |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Wading     | Virginia rail | Nesting           |     |   | 1 Pair        |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|        | Raptor     | Bald eagle    | Roosting          | T/- |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | -    |
|        | Raptor     | Osprey        | Migration         | C/- |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | Apr-May | -       | -    |

**FISH**

| Map ID | Subelement        | Species            | Mapping Qualifier    | S   | F | Concentration | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Spawn   | Eggs    | Larvae  | Juveniles | Adults  |
|--------|-------------------|--------------------|----------------------|-----|---|---------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|---------|-----------|---------|
|        |                   |                    |                      |     |   |               | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |         |           |         |
| 420    | Diadromous        | Alewife            | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Alewife            | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Diadromous        | Blueback herring   | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Blueback herring   | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
| 423    | Diadromous        | American shad      | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | American shad      | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
| 426    | Estuarine Nursery | White perch        | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jul | Apr-Jul | -       | -         | Apr-Jul |
| 429    | Diadromous        | American shad      | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | American shad      | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Diadromous        | Anadromous fish    | Concentration Area   |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | -         | Apr-Jun |
| 430    | Diadromous        | Alewife            | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Alewife            | Spawning Area        |     |   | Known Run     |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Diadromous        | American eel       | Concentration Area   |     |   | High          |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | Jan-Dec   | -       |
|        | Diadromous        | Blueback herring   | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Blueback herring   | Spawning Area        |     |   | Known Run     |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
| 431    | Diadromous        | Alewife            | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Alewife            | Spawning Area        |     |   | Known Run     |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Diadromous        | Blueback herring   | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Blueback herring   | Spawning Area        |     |   | Known Run     |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Estuarine Nursery | White perch        | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jul | Apr-Jul | -       | -         | Apr-Jul |
|        | Freshwater        | Largemouth bass    | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | Jun-Aug | Jan-Dec   | -       |
|        | Freshwater        | Largemouth bass    | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | May-Jun | May-Jul | -       | -         | May-Aug |
|        | Freshwater        | Smallmouth bass    | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | Jun-Aug | Jan-Dec   | -       |
|        | Freshwater        | Smallmouth bass    | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | May-Jun | May-Jul | -       | -         | May-Aug |
| 432    | Diadromous        | Alewife            | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Alewife            | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Diadromous        | Blueback herring   | Nursery Area         |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | May-Jun | Jun-Oct   | -       |
|        | Diadromous        | Blueback herring   | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | -       | -         | Apr-Jun |
|        | Estuarine Nursery | White perch        | Spawning Area        |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jul | Apr-Jul | -       | -         | Apr-Jul |
| 433    | Diadromous        | Atlantic sturgeon  | General Distribution | -/E | E | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | May-Oct   | May-Jul |
| 434    | Diadromous        | Shortnose sturgeon | General Distribution | E/E | E | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Mar-May | Mar-May | May-Jul | Jul-Sep   | Mar-Sep |

## HABITATS & RARE PLANTS

| Map ID | Subelement | Species                | Mapping Qualifier     | S   | F | Concentration | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   |
|--------|------------|------------------------|-----------------------|-----|---|---------------|------------------|---|---|---|---|---|---|---|---|---|---|---|
|        |            |                        |                       |     |   |               | J                | F | M | A | M | J | J | A | S | O | N | D |
| 520    | Plant      | Endangered plant       | Vulnerable Occurrence | E/E |   | -             |                  |   |   |   |   |   |   |   |   |   |   | - |
| 523    | Plant      | Threatened plant       | Vulnerable Occurrence | T/- |   | -             |                  |   |   |   |   |   |   |   |   |   |   | - |
| 525    | Plant      | Rare plant             | Vulnerable Occurrence | C/C |   | -             |                  |   |   |   |   |   |   |   |   |   |   | - |
| 530    | Wetland    | Rare wetland community | Vulnerable Occurrence |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   | - |
| 536    | Wetland    | Vernal pool            | Vulnerable Occurrence |     |   | -             |                  |   |   |   |   |   |   |   |   |   |   | - |

## REPTILES & AMPHIBIANS



| Map ID | Subelement | Species               | Mapping Qualifier    | S   | F | Concentration | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Nest    | Hatch   | Internest | Juveniles | Adults  |
|--------|------------|-----------------------|----------------------|-----|---|---------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|-----------|-----------|---------|
|        |            |                       |                      |     |   |               | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |           |           |         |
| 584    | Amphibian  | B. spotted salamander | General Distribution | C/E |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | Mar-Apr | Apr-May | -         | Apr-Jul   | Mar-Apr |
|        | Turtle     | Spotted turtle        | General Distribution | C/C |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -         | Mar-Nov   | Mar-Nov |
| 585    | Turtle     | Wood turtle           | General Distribution | C/T |   | -             |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -         | Mar-Nov   | Mar-Nov |

## INVERTEBRATES





| Map ID | Subelement | Species          | Mapping Qualifier  | S | F | Concentration | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Spawn   | Eggs    | Larvae  | Juveniles | Adults  |
|--------|------------|------------------|--------------------|---|---|---------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|---------|-----------|---------|
|        |            |                  |                    |   |   |               | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |         |           |         |
| 657    | Bivalve    | Alewife floater  | Concentration Area |   |   | .01-0.1/M2    |                  |   |   |   |   |   |   |   |   |   |   |   | Aug-Sep | Aug-May | May-Jun | Jan-Dec   | Jan-Dec |
|        | Bivalve    | Eastern elliptio | Concentration Area |   |   | 10-20/M2      |                  |   |   |   |   |   |   |   |   |   |   |   | Aug-Sep | Aug-May | May-Jun | Jan-Dec   | Jan-Dec |
|        | Bivalve    | Tidewater mucket | Concentration Area |   |   | .01-0.1/M2    |                  |   |   |   |   |   |   |   |   |   |   |   | Aug-Sep | Aug-May | May-Jun | Jan-Dec   | Jan-Dec |

## ALSO PRESENT IN MAPPED AREA (GENERAL DISTRIBUTION)


## BIRDS

| Subelement  | Species             | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Nest    | Mig.(S) | Mig.(F) | Molt |
|---|---------------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|---------|------|
|   |                     | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |         |      |
|  Wading     | American woodcock   |                  |   |   |   |   |   |   |   |   |   |   |   | Mar-Aug | -       | -       | -    |
|   | Green heron         |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Sep | -       | -       | -    |
|  Waterfowl | American black duck |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Aug | -       | -       | -    |
|   | Mallard             |                  |   |   |   |   |   |   |   |   |   |   |   | Mar-Sep | -       | -       | -    |

## FISH

| Subelement  | Species          | Monthly Presence |   |   |   |   |   |   |   |   |   |   |   | Spawn   | Eggs    | Larvae  | Juveniles | Adults  |
|---|------------------|------------------|---|---|---|---|---|---|---|---|---|---|---|---------|---------|---------|-----------|---------|
|   |                  | J                | F | M | A | M | J | J | A | S | O | N | D |         |         |         |           |         |
|  Diadromous         | Alewife          |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | May-Jun | Jun-Oct   | Apr-Jun |
|   | American eel     |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | Jan-Dec   | Sep-Nov |
|   | American shad    |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | May-Jun | Jun-Oct   | Apr-Jun |
|   | Blueback herring |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | May-Jun | Jun-Oct   | Apr-Jun |
|   | Striped bass     |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jun | Apr-Jun | May-Jul | Jul-Oct   | Mar-Oct |
|   | Striped bass     |                  |   |   |   |   |   |   |   |   |   |   |   | -       | -       | -       | Jul-Oct   | Mar-Oct |
|  Estuarine Nursery  | White perch      |                  |   |   |   |   |   |   |   |   |   |   |   | Apr-Jul | Apr-Jul | Apr-Jul | Jan-Dec   | Jan-Dec |
|  Estuarine Resident | Killifish        |                  |   |   |   |   |   |   |   |   |   |   |   | May-Aug | May-Aug | May-Aug | Jan-Dec   | Jan-Dec |
|   | Silversides      |                  |   |   |   |   |   |   |   |   |   |   |   | May-Aug | May-Aug | May-Aug | Jan-Dec   | Jan-Dec |
|  Freshwater         | Largemouth bass  |                  |   |   |   |   |   |   |   |   |   |   |   | May-Jun | May-Jul | Jun-Aug | Jan-Dec   | Jan-Dec |
|   | Smallmouth bass  |                  |   |   |   |   |   |   |   |   |   |   |   | May-Jun | May-Jul | Jun-Aug | Jan-Dec   | Jan-Dec |

## FISH (continued)

|  | <i>Subelement</i> | <i>Species</i>  | <i>Monthly Presence</i> |          |          |          |          |          |          |          |          |          |          |          | <i>Spawn</i> | <i>Eggs</i> | <i>Larvae</i> | <i>Juveniles</i> | <i>Adults</i> |
|--|-------------------|-----------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|-------------|---------------|------------------|---------------|
|  |                   |                 | <i>J</i>                | <i>F</i> | <i>M</i> | <i>A</i> | <i>M</i> | <i>J</i> | <i>J</i> | <i>A</i> | <i>S</i> | <i>O</i> | <i>N</i> | <i>D</i> |              |             |               |                  |               |
|  |                   | Walleye         |                         |          |          |          |          |          |          |          |          |          |          |          | Mar-Apr      | Mar-May     | Apr-Jul       | Jan-Dec          | Jan-Dec       |
|  |                   | Yellow perch    |                         |          |          |          |          |          |          |          |          |          |          |          | Apr-Jun      | Apr-Jun     | Apr-Jun       | Jan-Dec          | Jan-Dec       |
|  | Marine Benthic    | Atlantic tomcod |                         |          |          |          |          |          |          |          |          |          |          |          | Dec-Mar      | Dec-Mar     | Dec-Jun       | Jan-Dec          | Oct-Apr       |






## REPTILES & AMPHIBIANS

|  | <i>Subelement</i> | <i>Species</i>    | <i>Monthly Presence</i> |          |          |          |          |          |          |          |          |          |          |          | <i>Nest</i> | <i>Hatch</i> | <i>Internest</i> | <i>Juveniles</i> | <i>Adults</i> |
|--|-------------------|-------------------|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|--------------|------------------|------------------|---------------|
|  |                   |                   | <i>J</i>                | <i>F</i> | <i>M</i> | <i>A</i> | <i>M</i> | <i>J</i> | <i>J</i> | <i>A</i> | <i>S</i> | <i>O</i> | <i>N</i> | <i>D</i> |             |              |                  |                  |               |
|  |                   | Common map turtle |                         |          |          |          |          |          |          |          |          |          |          |          | -           | -            | -                | Apr-Oct          | Apr-Oct       |
|  |                   | Painted turtle    |                         |          |          |          |          |          |          |          |          |          |          |          | -           | -            | -                | Mar-Nov          | Mar-Nov       |














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

## SHORELINE RESOURCES

### ESI POLYGON HABITAT TYPES

|  | <i>ESI Rank</i> | <i>Habitat Classification</i> | <i>Area (Acres)</i> | <i>Area (Sq. Miles)</i> |
|--|-----------------|-------------------------------|---------------------|-------------------------|
|  | 10B             | Freshwater Marshes            | 261.61              | 0.41                    |
|  | 10C             | Swamps                        | 778.82              | 1.22                    |
|  | 10D             | Scrub and Shrub Wetlands      | 179.04              | 0.28                    |
|  | 9A              | Sheltered Tidal Flats         | 157.24              | 0.25                    |
|  | 7               | Exposed Tidal Flats           | 8.08                | 0.01                    |

### ESI SHORELINE HABITAT TYPES

|  | <i>ESI Rank</i> | <i>Shoreline Habitat Classification</i> | <i>Length (Meters)</i> | <i>Length (Miles)</i> | <i>% of ESI Shoreline</i> |
|--|-----------------|---|------------------------|-----------------------|---------------------------|
|  | 10B             | Freshwater Marshes                      | 9,662.22               | 6.00                  | 5%                        |
|  | 10C             | Swamps                                  | 16,105.49              | 10.01                 | 9%                        |
|  | 10D             | Scrub and Shrub Wetlands                | 1,694.95               | 1.05                  | 1%                        |
|  | 9A              | Sheltered Tidal Flats                   | 22,011.54              | 13.68                 | 12%                       |
|  | 9B              | Vegetated Low Banks                     | 106,586.62             | 66.23                 | 56%                       |
|  | 8A              | Sheltered, Impermeable, Rocky Shores    | 464.46                 | 0.29                  | < 1%                      |
|  | 8B              | Sheltered, Solid Man-Made Structures    | 6,396.28               | 3.97                  | 3%                        |
|  | 8C              | Sheltered Riprap                        | 18,160.05              | 11.28                 | 10%                       |
|  | 7               | Exposed Tidal Flats                     | 1,304.65               | 0.81                  | 1%                        |
|  | 6B              | Riprap                                  | 23.09                  | 0.01                  | < 1%                      |
|  | 5               | Mixed Sand and Gravel Beaches           | 6,235.99               | 3.87                  | 3%                        |
|  | 4               | Coarse Grained Sand Beaches             | 336.39                 | 0.21                  | < 1%                      |
|  | 1A              | Exposed, Rocky Shores                   | 165.54                 | 0.10                  | < 1%                      |

|                      |            |                      |        |
|----------------------|------------|----------------------|--------|
| Total ESI Shoreline: | 189,147.27 | Total ESI Shoreline: | 117.53 |
| Total Shoreline:     | 120,480.23 | Total Shoreline:     | 74.86  |

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

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

