

### **Critical Habitat Area Wissota 10 – Northeast River Stretch**

This area is approximately 4.5-acres and 1750 feet of shoreline in the riverine portion north of the main lake body. The area extends out to the 5-foot depth contour (Figure 2). The bay includes shallow marsh wetlands and supports important near-shore terrestrial habitat, shoreline habitat and littoral zone habitat composed of mostly herbaceous and forest growth with some shrub cover and developed properties (Figure 3). About 40% of the shoreline is wetland, 40% is wooded and the rest in ongoing development. Some large woody cover is present for habitat.

This site was selected for its aquatic plant community and for the valuable fish and wildlife habitat it provides.

#### **The Plant Community:**

This site supports 15 species of aquatic plants.

Emergent vegetation: arrowhead and cattails protect the shoreline and provide important food sources, cover and fish spawning habitat.

Floating-leaf vegetation: small duckweed and white water lilies dampen wave action and provide important fish cover.

A diverse submerged plant community provides many important habitat components for the fish and wildlife community (Table 1). Elodea, coontail, wild celery and water stargrass are present. A macrophytic algae, stonewort, occurs here. The pondweed family, which is an important food source for waterfowl and fish, is represented by long-leaf pondweed, small pondweed, clasping-leaf pondweed, curly-leaf pondweed and flat-stem pondweed all occur at this site. Small rosette species colonize the bottom, anchoring the sediments: arrowhead rosettes are present at this site.

***Lake Wissota Critical Habitat Designation  
(Upriver Sites: 8, 9, and 10)***



**Figure 2. Location of Critical Habitat Areas #8 #9 and #10.**



**Figure 3. Lake Wissota Critical Habitat Area #10, west to east.**

**Table 1. Wildlife and Fish Uses of Aquatic Plants in Critical Habitat Area 10**

<b>Aquatic Plants</b>	<b>Fish</b>	<b>Water Fowl</b>	<b>Song/ Shore Birds</b>	<b>Upland Birds</b>	<b>Muskrat</b>	<b>Beaver</b>	<b>Deer</b>
<b><u>Submergent Plants</u></b>							
<i>Ceratophyllum demersum</i>	F,I*, C, S	F(Seeds*), I, C			F		
<i>Elodea canadensis</i>	C, F, I	F(Foliage) I					
<i>Nitella</i> sp.		F, I*					
<i>Potamogeton crispus</i>	F, C, S	F(Seeds, Tubers)					
<i>Potamogeton nodosus</i>	F, I, S*,C	F*(Seeds)			F*	F	F
<i>Potamogeton pusillus</i>	F, I, S*,C	F*(All)			F*	F	F
<i>Potamogeton richardsonii</i>	F, I, S*,C	F*(All)			F*	F	F
<i>Potamogeton zosteriformis</i>	F, I, S*,C	F*(Seeds)			F*	F	F
<i>Vallisneria americana</i>	F*, C, I, S	F*, I	F		F		
<i>Zosterella dubia</i>	F, C, S	F(Seeds)					
<b><u>Floating-leaf Plants</u></b>							
<i>Lemna minor</i>	F	F*, I	F	F	F	F	
<i>Nymphaea odorata</i>	F,I, S, C	F(Seeds)	F		F	F	F
<b><u>Emergent Plants</u></b>							
<i>Sagittaria latifolia</i>		F, C	F(Seeds), C	F	F	F	
<i>Sagittaria rigida</i>		F (tubers, seeds)			F	F	
<i>Typha latifolia</i>	I, C, S	F(Entire), C	F(Seeds), C, Nest	Nest	F* (Entire), C*, Lodge	F	

F=Food, I= Shelters Invertebrates, a valuable food source C=Cover, S=Spawning \*=Valuable Resource in this category

### Wildlife Habitat

Emergent vegetation, floating-leaf vegetation, shoreline shrubs and brush, snag and perch trees provide critical habitat at this site. The best habitat is on the east end of this site.

This site provides:

- 1) shelter, cover and feeding areas for otter
- 2) shelter, cover, nesting and feeding areas for mink, songbirds, frogs, toads, salamanders, turtles and snakes
- 3) feeding areas for ducks, and eagles

### Fish Habitat

Submergent vegetation, large woody cover, rock substrate along the shoreline and the sand/silt flats at this site provide critical fish habitat. This site provides:

- 1) feeding areas for walleye, northern pike, musky, smallmouth bass, and crappie
- 2) year-round nursery areas and feeding areas for lake sturgeon

### Water Quality

The aquatic plant community at this site:

- 1) provides a nutrient buffer, the plants at the shore and in the water acting as a nutrient sink, absorbing nutrients and reducing algae blooms
- 2) provides a biological buffer, reducing the possibility of invasions by exotic species
- 3) stabilizes the sediments, holding the sediments to reduce the resuspension by waves and other disturbances
- 4) is within an area where cold water river inflows provide temperature gradients that provide for higher diversity

## **Recommendations for Area 10**

### **Recommendations for the terrestrial shoreline buffer:**

- 1) Maintain wildlife habitat
- 2) Maintain snag trees and trees with cavity nesting
- 3) Maintain and increase naturally vegetated wildlife corridor on shore
- 4) Minimize removal of any shoreline vegetation. Allow removal of a maximum corridor width of 30 feet perpendicular to the shore.
- 5) Maintain shore and emergent vegetation to control nutrient run-off and protect water quality
- 6) Protect shoreland corridor with conservation easements
- 7) Bank protection and restoration for shoreline erosion control needed. Restore bank vegetation.
- 8) No lawn fertilizers should be used
- 9) No bank grading.

### **Recommendations for the aquatic habitat below the Ordinary High Water Mark**

- 10) Maintain wildlife habitat
- 11) Maintain current protection of area for fish habitat
- 12) Do not remove fallen trees along the shoreline
- 13) Do not alter the littoral zone except for improvement of spawning habitat
- 14) Maintain the aquatic vegetation (emergent, floating-leaf and submergent) in an undisturbed condition for wildlife habitat, fish cover and as a buffer for water quality protection. Permits required for any vegetation removal.
- 15) Protect emergent vegetation.
- 16) Maintain shore and emergent vegetation to control nutrient run-off and protect water quality
- 17) No permit approval for pea gravel beds or sand blankets, except for DNR fishery or wildlife approved projects.
- 18) No dredging or lake bed removal or modifications.
- 19) Pier placement by permit only to minimize number of piers and their size and disturbance; require light-penetrating pier material such as metal grating.
- 20) No boat ramp placement.
- 21) Permit required for recreational floating devices.