

Critical Habitat Area Wisconsin 13 – State Park Bays

This Critical Habitat Area encompasses approximately 6800 feet of shoreline and the small state park bay, extending out to the 8-ft depth contour (Figure 6, 11). The site includes deep marsh and shallow marsh habitats that support important near-shore terrestrial habitat, shoreline habitat and shallow water habitat (Figure 12-14). The shoreline at this Critical Habitat Area is dominated by wooded cover with some camp and park development.

Large woody cover from fallen trees is common in the shallow water. This woody cover provides important habitat for fish cover and wildlife resting areas.

This site was selected for its fishery and wildlife values, its aquatic and shoreline vegetation and its natural scenic beauty. It provides visual and audible buffers from shoreline structures and boat and road noise.

The Plant Community:

17 species of aquatic plants occur at this Critical Habitat site.

The emergent plant community is composed of rice-cut grass, cattails and soft stem bulrushes.

Floating-leaf vegetation, white water lilies, greater duckweed and small duckweed, dampen wave action and provide important fish habitat.

A diverse submergent plant community provides many fish and wildlife benefits (Table 6). Slender naiad, elodea, coontail, water stargrass and wild celery occur. The pondweed family is an important food source for fish and waterfowl and is represented at this site by long-leaf pondweed, clasping-leaf pondweed, ribbon-leaf pondweed and northern spiral-fruited pondweed. Turf-forming vegetation (creeping spikerush) colonizes the lake bottom, anchoring the substrate at this site. The exotic, invasive species, Eurasian watermilfoil, is common at this site.

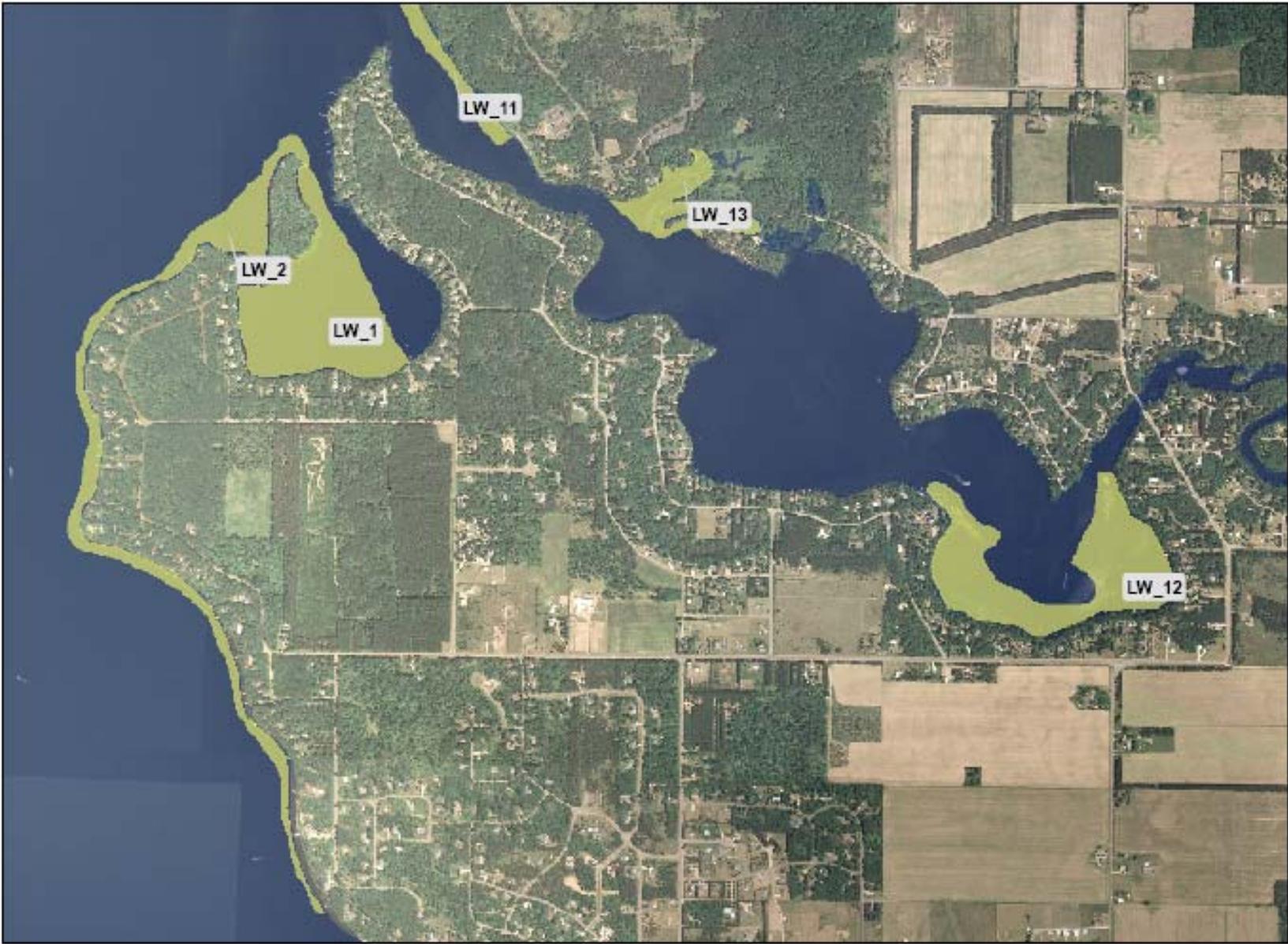


Figure 11. Location of Critical Habitat Areas #1, #2, #12, #13



Figure 12. Lake Wissota Critical Habitat Area #13; State Park Bay: east shore of bay; east point of bay; west shore of bay.



Figure 13. Eagle in State Park Bay



Figure 14. Beaver Lodge in State Park Bay

Table 6. Wildlife and Fish Uses of Aquatic Plants in Critical Habitat Area 13

Aquatic Plants	Fish	Water Fowl	Song and Shore Birds	Upland Game Birds	Muskrat	Beaver	Deer
<u>Submergent Plants</u>							
<i>Ceratophyllum demersum</i>	F, I*, C, S	F(Seeds*), I, C			F		
<i>Eleocharis acicularis</i>	S	F			F		
<i>Elodea canadensis</i>	C, F, I	F(Foliage) I					
<i>Myriophyllum spicatum</i>	F, C						
<i>Najas flexilis</i>	F, C	F*(Seeds, Foliage)	F(Seeds)				
<i>Potamogeton epihydrus</i>	F, I, S*, C	F*(All)			F*	F	F
<i>Potamogeton nodosus</i>	F, I, S*, C	F*(Seeds)			F*	F	F
<i>Potamogeton richardsonii</i>	F, I, S*, C	F*(All)			F*	F	F
<i>Potamogeton spirillus</i>		F(Seeds)	F		F	F	F
<i>Vallisneria americana</i>	F*, C, I, S	F*, I	F		F		
<i>Zosterella dubia</i>	F, C, S	F(Seeds)					
<u>Floating-leaf Plants</u>							
<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
<i>Spirodela polyrhiza</i>	F	F		F			

Aquatic Plants	Fish	Water Fowl	Song and Shore Birds	Upland Game Birds	Muskrat	Beaver	Deer
<u>Emergent Plants</u>							
<i>Leersia oryzoides</i>		F			F		
<i>Scirpus validus</i>	F, C, I	F (Seeds)*, C	F(Seeds, Tubers), C	F (Seeds)	F	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**

*Current knowledge as to plant use. Other plants may have uses that have not been determined.

After Fassett, N. C. 1957. A Manual of Aquatic Plants. University of Wisconsin Press. Madison, WI

Nichols, S. A. 1991. Attributes of Wisconsin Lake Plants. Wisconsin Geological and Natural History Survey. Info. Circ. #73

Wildlife Habitat

The bay at the boat landing is excellent waterfowl (including wood ducks) and shorebird habitat and good songbird habitat. Eagles frequent this area. Emergent vegetation, floating-leaf vegetation, shoreline shrubs and brush, snag and perch trees and fallen logs provide this critical habitat. This site provides:

- 1) shelter, cover and feeding areas for otters and great blue heron
- 2) shelter, cover, nesting and feeding areas for beavers, mink, ducks, eagles songbirds, frogs, toads, salamanders, turtles and snakes.

Fish Habitat

Large woody cover, emergent vegetation, submerged vegetation and floating-leaf vegetation at this site provide critical fish habitat. This site provides:

- 1) feeding areas for walleye and catfish
- 2) year-round nursery areas, feeding areas and protective cover for northern pike, musky, bluegill and yellow perch

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) provides a physical buffer that protects the shoreline against erosion

Recommendations for Area 13

Recommendations for the terrestrial shoreline buffer:

- 1) Maintain wildlife habitat at this site
- 2) Maintain snag trees and trees with cavity nesting
- 3) Maintain and increase naturally vegetated wildlife corridor on shore
- 4) Install nest boxes
- 5) Minimize removal of any shoreline vegetation.
- 6) Do not use lawn chemicals or fertilizers.
- 7) Zoning compliance issues occur at this site. Structures within the 35 buffer zone need storm water management. Cabins close to the shore need eaves that discharge to rain gardens
- 8) Erosion occurs at the private camp. Shoreline and bank vegetation needs to be restored in some areas through revegetation of the native vegetation and in other areas requires allowing the native vegetation to come back on its own. Revegetate eroded areas and establish a no-mow zone next to the shore.
- 9) No bank grading

Recommendations for the aquatic habitat below the Ordinary High Water Mark

- 10) Maintain current protection of area for fish habitat
- 11) Do not remove fallen trees along the shoreline
- 12) Do not alter the littoral zone except for improvement of spawning habitat
- 13) Maintain and minimize removal of 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.
- 14) Protect emergent vegetation.
- 15) Chemical treatment of aquatic vegetation limited to early-season, selective control of Eurasian watermilfoil. Goal of treatment is to eliminate this exotic species and restore native vegetation.
- 16) No permit approval for pea gravel beds or sand blankets, except for DNR fishery or wildlife approved projects.
- 17) No dredging or lake bed removal or modifications.
- 18) Pier placement by permit only to minimize number of piers and their size and disturbance; require light-penetrating pier material such as metal grating.
- 19) No additional boat ramp placement.
- 20) No recreational floating devices to be permitted.