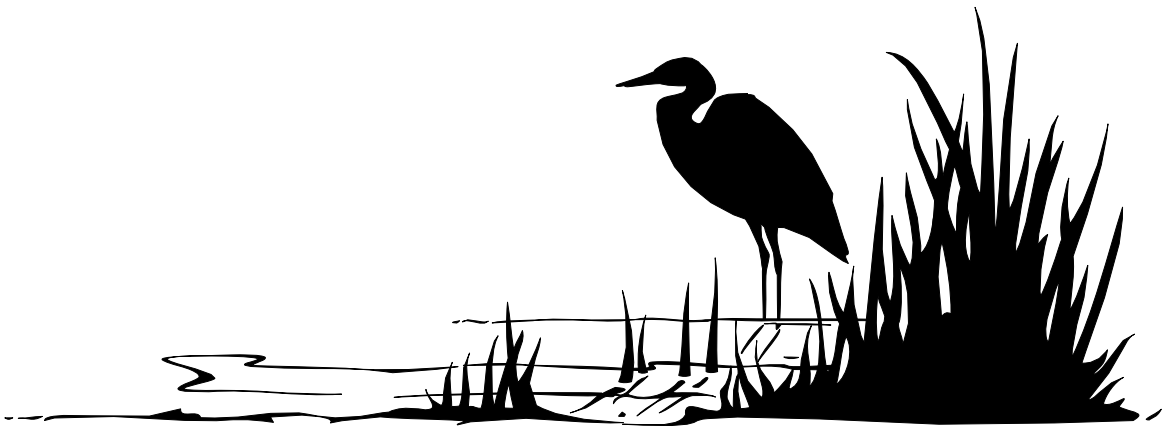
GULL LAKE
SENSITIVE AREA SURVEY REPORT
AND MANAGEMENT GUIDELINES



This document is to be used
with its companion document
"Guidelines for protecting, maintaining,
and understanding lake sensitive areas"

Gull Lake (Washburn Co.)
Integrated Sensitive Area Survey Report

Date of Survey: 5 September 2001 Number of Sensitive Areas: 4

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Lake Sensitive Area Survey results identified four areas that merit special protection of the aquatic habitat. These areas of aquatic vegetation on Gull Lake offer critical or unique fish and wildlife habitat. These habitats provide the necessary seasonal or life stage requirements of the associated fisheries, and the aquatic vegetation offers water quality or erosion control benefits to the body of water.

During this survey there were no documented occurrences of Purple Loosestrife. However, the threat of Purple Loosestrife is always a concern and should be dealt with immediately. Methods for control are to remove the entire plant before it produces seeds or by cutting the flower head and spraying with and approved herbicide. You should contact the Department before any of these methods are implemented.

The reader should consider that any buffer that does not extend back from the waters edge at least 35' is not providing adequate protection for water quality and should be expanded to at least 35'. Local zoning ordinances and lakes classification systems have tried to provide better guidelines pertaining to buffer widths and set backs based on lake type. Landowners are encouraged to go beyond the minimum requirements laid out by zoning and consider extending buffer widths to beyond 35' and integrating other innovative ways to capture and reduce the runoff flowing off from their property while improving critical shoreline habitat. Berms and low head retention areas can greatly increase the effective capture rate from developed portions in addition to that portion captured within the buffer.

Site conditions may dictate that a buffer has to be much wider than 35' to be effective at capturing the sediments and nutrients running off the developed portions of the shoreline. If the shoreline is steeply sloped (>7%slope) greater widths should definitely be used.

No mowing should take place within the buffer area (with the exception of a narrow access trail and small picnic area), and trees and shrubs should not be cut down even when they become old and die; because they provide important woody debris habitat within the buffer zone as well as aquatic habitat when they fall into the lake.

The following is a brief summary of the Gull Lake sensitive area sites and the management guidelines. Also, the "Guidelines for Protecting, Maintaining, and Understanding Sensitive Areas" provides management guidelines and considerations for different lake sensitive areas (Attached).

I. Aquatic Plant Sensitive Areas

Sensitive areas A, B, C and D contain aquatic plant communities, which provide important fish and wildlife habitat as well as important shoreline stabilization functional values. Sensitive areas provide important enough habitat for the Gull Lake ecosystem that conservation easements, deed restrictions, or zoning should be used to protect them. Management guidelines for aquatic plant sensitive areas are (unless otherwise specifically stated):

1. Limit aquatic vegetation removal to navigational channels no greater than 25 feet wide where necessary, the narrower the better. These channels should be kept as short in length as possible and it is recommended that people do not completely eliminate aquatic vegetation within the navigation channel; but instead only remove what is necessary to prevent fouling of propellers to provide access to open water areas. Chemical treatments should be discouraged and if a navigational channel must be cleared, pulling by hand is preferable over mechanical harvesters where practical.
2. Prohibit littoral zone alterations covered by Wisconsin Statutes Chapter 30, unless there is clear evidence that such alterations

would benefit the lake's ecosystem. Rock riprap permits should not be approved for areas that already have a healthy native plant community stabilizing the shoreline and property owners should not view riprap as an acceptable alternative in these situations.

3. Leave large woody debris, logs, trees, and stumps, in the littoral zone to provide habitat for fish, wildlife, and other aquatic organisms.
4. Leave an adequate shoreline buffer of un-mowed natural vegetative cover and keep access corridors as narrow as possible (preferable less than 30 feet or 30% of any developed lot which ever is less).
5. Prevent erosion, especially at construction sites. Support the development of effective county erosion control ordinances. The proper use of Best Management Practices (BMP's) will greatly reduce the potential of foreign materials entering the waterway (i.e. silt, nutrients).
6. Strictly enforce zoning ordinances and support development of new zoning regulations where needed.
7. Eliminate nutrient inputs to the lake caused by lawn fertilizers, failing septic systems, and other sources.
8. Control exotic species such as purple loosestrife.

Resource Value of Site A

Sensitive area A is located along the eastern shore of Gull Lake. This area includes approximately 1,500 feet of shoreline extending out 500 feet from shore.

This area provides important habitat for centrarchid (bass and panfish) and esocid (northern pike) spawning and nursery areas. This area also provides important habitat for forage species. Wildlife also are reliant upon this area for habitat. Eagles, loons, herons, waterfowl, songbirds, furbearers, turtles, and amphibians benefit from this valuable habitat.

The emergent, floating and submergent plant community structure of Sensitive area A includes: **Emergents;** tamarack (Larix lonicera), grass leaved arrowhead (Sagittaria graminea), cattail (Typha sp.) and common bur-reed (Sparganium sp.). **Floating;** spadderdock (Nuphar variegta) and white

water lily (Nymphaea odorata). **Submergents;** elodea, coontail (Ceratophyllum demersum), common bladderwort (Utricularia vulgaris), wild celery (Vallisneria americana), fern leaf pondweed (Potamogeton robbinsii), large leaf pondweed (P. amplifolius) and flat stem pondweed (P. zosteriformis)

Chemical treatments and/or mechanical harvesting are strongly discouraged. Historical chemical treatments and mechanical harvesting should be limited to navigational channels only. All other interests in chemical treatments and mechanical harvesting should be scrutinized.

Resource Value of Site B

Sensitive area B encompasses the entire northern end of Gull Lake. This area covers approximately 4,200 feet of shoreline, extending out 300 feet from shore.

This area provides important habitat for centrarchid (bass and panfish) and esocid (northern pike) spawning and nursery areas. This area also provides important habitat for forage species. Wildlife also are reliant upon this area for habitat. Eagles, loons, herons, waterfowl, songbirds, furbearers, turtles, and amphibians benefit from this valuable habitat.

The emergent, floating and submergent plant community structure of Sensitive area B includes: **Emergents;** speckled alder (Alus incana), tamarack (Larix lonicera), cattail (Typha sp.) and hardstem bulrush (Scirpus acutus). **Floating;** spadderdock (Nuphar variegata), white water lily (Nymphaea odorata) and watershield (Brasenia schreberi). **Submergents;** elodea, wild celery (Vallisneria americana), northern water milfoil (Myriophyllum sibiricum), bushy pondweed (Najas flexis), floating leaf pondweed (Potamogeton natans), fern leaf pondweed (P. robbinsii), large leaf pondweed (P. amplifolius), white stem pondweed (P. praelongus) and flat stem pondweed (P. zosteriformis).

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to navigational channels only. All other interests in chemical treatments and mechanical harvesting should be scrutinized.

Resource Value of Site C

Sensitive area C is a small bay located along the southwestern end of Gull Lake. This area covers approximately 300 feet of shoreline, extending out 150 feet from shore.

This area provides important habitat for centrarchid (bass and panfish) and esocid (northern pike) spawning and nursery areas. This area also provides important habitat for forage species. Wildlife also are reliant upon this area for habitat. Eagles, loons, herons, waterfowl, songbirds, furbearers, turtles, and amphibians benefit from this valuable habitat.

The floating and submergent plant community structure of Sensitive area C includes: **Floating;** spadderdock (Nuphar variegata) and white water lily (Nymphaea ordorata). **Submergents;** muskgrass (Chara sp.), wild celery (Vallisneria americana), bushy pondweed (Najas flexis), dwarf water milfoil (Myriophyllum tenellum), large leaf pondweed (Potamogeton amplifolius) and illinois pondweed (P. illinoensis).

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Resource Value of Site D

Sensitive area D encompasses the entire southern end of Gull Lake. This area covers approximately 7,000 feet of shoreline, extending out 150 feet from shore.

This area provides important habitat for centrarchid (bass and panfish) and esocid (northern pike) spawning and nursery areas. This area also provides

important habitat for forage species. Wildlife also are reliant upon this area for habitat. Eagles, loons, herons, waterfowl, songbirds, furbearers, turtles, and amphibians benefit from this valuable habitat.

The emergent, floating and submergent plant community structure of Sensitive area D includes: **Emergents:** soft stem bulrush (Scirpus validus), rushes (Juncus sp.), speckled alder (Alnus incana), tamarack (Larix lonicera), cattail (Typha sp.), common bur-reed (Sparganium sp.) and hardstem bulrush (Scirpus acutus). **Floating**; spadderdock (Nuphar variegata) and white water lily (Nymphaea odorata). **Submergents;** water marigold (Bidens beckii), crowfoot (Ranunculus sp.), coontail (Ceratophyllum demersum), wild celery (Vallisneria americana), northern water milfoil (Myriophyllum sibiricum), bushy pondweed (Najas flexis), sago pondweed (Potamogeton pectinatus), fern leaf pondweed (P. robbinsii), large leaf pondweed (P. amplifolius), white stem pondweed (P. praelongus) and flat stem pondweed (P. zosteriformis).

Chemical treatments and/or mechanical harvesting are strongly discouraged. Historical chemical treatments and mechanical harvesting should be limited to navigational channels only. All other interests in chemical treatments and mechanical harvesting should be scrutinized.