

# Long Lake Aquatic Plant Management Plan – Lake User Survey

Technical assistance by  
White Water Associates, Inc.

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We are writing to inform you about the Long Lake planning process that will have important outcomes for Long Lake and how you use and enjoy it. Please assist by completing this questionnaire and conveying your ideas. Please respond as soon as possible.

An aquatic plant survey will be conducted the summer of 2022 and will provide substantial information on plant presence and distribution in the lake. Long Lake currently has a diverse community of native aquatic plants and does not harbor any aquatic invasive plant species except Purple Loosestrife and Narrow-leaved cattail.

An aquatic plant bed is often termed a “weed bed.” In fact, many aquatic species have “weed” as part of their names (e.g., duckweed, pondweed, musky weed). This usage is not meant to disrespect aquatic plants, but unfortunately “weed” also connotes an unwanted plant. Such is not the case for the vast majority of native plants in lakes. In fact, aquatic plants are a vital part of a lake ecosystem. They provide habitat for fish and other animals, filter runoff, stabilize the shoreline against erosion, offer fish spawning areas, produce oxygen, absorb nutrients (making them less available for nuisance algae), provide food for many animals, and make it difficult for aquatic invasive plant species to become established.

In lakes that receive an overabundance of nutrients (particularly from excessive fertilizers or leaking septic tanks), plant growth can become too lush and dominated by only a few species. This process of accelerated lake plant growth (often caused by human influences) can give aquatic plants a bad name. Aquatic invasive plant species (non-native plants) can become established in a lake and even dominate a lake to the exclusion of native species.

Aquatic invasive species (AIS) are non-native plants and animals that are introduced into our lakes and streams and can upset the natural balance of the ecosystem and decrease recreational opportunities. AIS examples include zebra mussels, carp, white perch, rusty crayfish, round goby, spiny water flea, Chinese mystery snail, Eurasian water milfoil, purple loosestrife, and curly-leaf pondweed. Visit this helpful link: <http://dnr.wi.gov/lakes/invasives/>

This Long Lake survey will help establish the foundation to conduct plant management should the need arise (for example if an aquatic invasive plant species is detected). An Aquatic Plant Management Plan is required by the Wisconsin Department of Natural Resources prior to any plant management and Long Lake is in the process of creating such a plan. Public input is needed to refine the plant management goals and formulate reasonable management methods. Completing this survey will help guide the plan development and implementation. Please complete and return this form by August 15, 2022 to the address provided on page 6.

1. Please circle the response(s) that describes your affiliation with Long Lake and the community. (Circle all that apply)

- A. Shoreline home/cottage/apartment owner
- B. Shoreline home/cottage/apartment renter
- C. Shoreline vacant landowner
- D. Shoreline year-round resident
- E. Shoreline seasonal resident
- F. Nearby offshore resident (year-round)
- G. Nearby offshore resident (seasonal)
- H. Area business owner
- I. Tourist or vacationer
- J. Other (specify) \_\_\_\_\_

2. How many years of experience do you have with Long Lake? (If less than one year please enter 1) \_\_\_\_\_

3. Please circle the activities that you do on Long Lake. (Circle all that apply)

- A. Open water fishing
- B. Ice fishing
- C. Waterskiing/tubing
- D. Personal watercraft
- E. Swimming
- F. Pontoon boating
- G. Sailing
- H. Pleasure boating
- I. SCUBA
- J. Canoeing & kayaking
- K. Nature viewing
- L. Enjoyment of scenery
- M. Hunting
- N. Snorkeling
- O. Other \_\_\_\_\_
- P. None of the above (please skip to question 9)

4. Please rank the four activities that are most important to you on Long Lake. (Use "1" for the most important, "2" for your next choice and so on)

- |                           |                         |
|---------------------------|-------------------------|
| ___ Open water fishing    | ___ Ice fishing         |
| ___ Waterskiing           | ___ Canoeing & kayaking |
| ___ Personal water craft  | ___ Nature viewing      |
| ___ Swimming              | ___ Scenery             |
| ___ Pontoon boating       | ___ Hunting             |
| ___ Sailing               | ___ Snorkeling          |
| ___ Pleasure boating      | ___ SCUBA               |
| ___ Other (specify) _____ |                         |

5. Overall, how satisfied are you with your recreational experiences on Long Lake? (Circle only one)

- A. Very satisfied
- B. Fairly satisfied
- C. Not too satisfied
- D. Not at all satisfied

6. In a typical month during the summer (between Memorial Day and Labor Day), about how many days do you recreate on Long Lake? (Please just provide your best estimate with a single number for a typical summer month.) \_\_\_\_\_

7. What types of watercraft(s) do you use on Long Lake? (Check all that apply)

- Do not use watercraft (please skip to question 9)
- Paddleboat
- Sailboat
- Canoe
- Rowboat
- Kayak
- Motorboat with 25 hp or less
- Motorboat with greater than 25 hp
- Pontoon
- Jet Ski (personal watercraft)

8. Do you use your watercraft(s) on waters other than Long Lake? (Check all that apply)

- No, only on Long Lake
- I use my watercraft on other water bodies in Wisconsin
- I use my watercraft on waters outside of Wisconsin

9. From the list below, please rank your top four (1, 2, 3, and 4) concerns for Long Lake. Write a 1 for your primary (most important) concern.

- Water quality
- Human-caused noise
- Shoreline erosion
- Storm drain runoff
- Near-shore human development
- Boat traffic
- Boating safety
- Water level
- Quality of fish habitat
- Aquatic plant growth
- Algae growth
- Aquatic Invasive Species (AIS) introduction
- Human development on the greater watershed
- Shoreline vegetation removal
- Other (explain \_\_\_\_\_)

10. Considering the lake issues in question 9, what is your evaluation of the overall water quality of Long Lake? (Circle one)

- A. Excellent      B. Good      C. Fair      D. Poor      E. Unsure

11. During the years you've been familiar with Long Lake, what changes, if any, have you seen in the aquatic plants (including algae)? (Circle all that apply)

- A. No dramatic changes – about the same as always.
- B. More aquatic plants than in the past.
- C. Fewer aquatic plants than in the past.
- D. More algal blooms than in the past.
- E. Fewer algal blooms than in the past.
- F. Other (describe : \_\_\_\_\_)

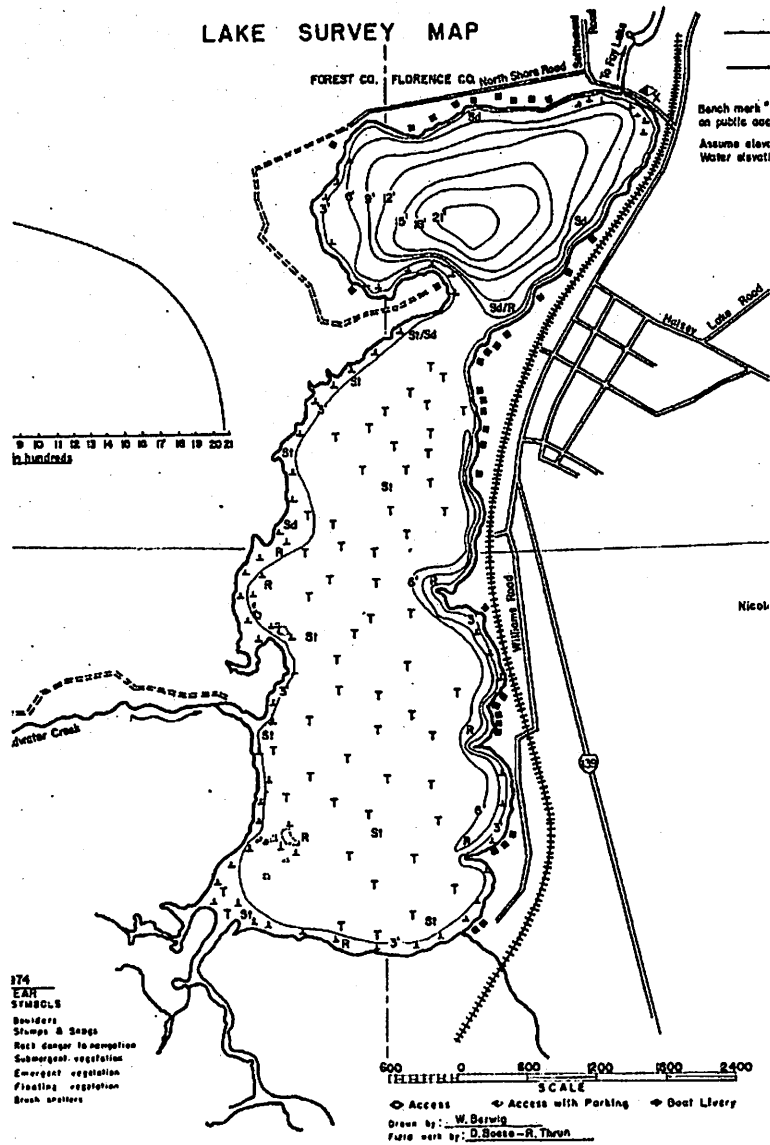
12. In the summer months (Memorial Day through Labor Day), how often does aquatic plant growth (including algae) negatively affect your use of Long Lake? (Circle only one)

- A. Always      B. Most of the time      C. Sometimes      D. Rarely      E. Never

13. Do you believe that aquatic plant management is needed on Long Lake? (Circle only one)

- A. Yes      B. No (please skip to question 15)      C. Unsure (please skip to question 15)

14. If you answered "Yes" to question 13, please describe the problem on Long Lake that you believe requires aquatic plant management. Label on the map (if appropriate) where you have observed plant problems with an "X" and a description in the box provided.



**Describe perceived aquatic plant problem here:**

15. Education is a fundamental component of Aquatic Plant Management (APM) planning projects. Please use the following scale to rank your understanding of the AIS topics listed below. (For example if you have no knowledge about methods of AIS transport, place a 4 next to that choice)

- |       |                                   |                                      |
|-------|-----------------------------------|--------------------------------------|
| Scale | 1. Very good knowledge of subject | 3. Limited knowledge of subject      |
|       | 2. Good knowledge of subject      | 4. No knowledge of subject           |
|       | ___ AIS present in the County     | ___ Effects of AIS on recreation     |
|       | ___ Methods of AIS transport      | ___ Long term results of AIS control |
|       | ___ Effects of AIS on ecosystem   | ___ Methods of AIS control           |
|       | ___ Methods of AIS prevention     | ___ Able to identify AIS             |

16. How interested would you be in receiving information about aquatic invasive species? (Circle one)  
 A. Very interested    B. Somewhat interested    C. Not too interested    D. Not at all interested

17. Have you ever taken the time to look specifically for aquatic invasive species in Long Lake?  
 A. No  
 B. Yes, but no more than once  
 C. Yes, but no more than once a month  
 D. Yes, about weekly  
 If you circled yes (that is, circled B, C, or D), please describe what you were looking for and how.

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18. Below are several methods used by professionals to manage aquatic invasive plant species. Using the following scale, please indicate your level of support or opposition for each control method.

- A. Definitely support    B. Probably support    C. Unsure    D. Probably oppose    E. Definitely oppose
- \_\_\_ Do nothing  
 \_\_\_ Hand pulling and raking – use of SCUBA or snorkeling  
 \_\_\_ Mechanical harvesting – use of a machine to eliminate invasive aquatic plants  
 \_\_\_ Biological controls (native weevils) – placed in the lake to naturally control Eurasian watermilfoil  
 \_\_\_ Aquatic herbicides – applying herbicides to the AIS to control them

19. The Aquatic Plant Management (APM) Plan can have several goals. We would like to know where you think the Plan should place its emphasis. Rank the following list of APM Plan goals (“1” being the most important and “6” being the least important).

- \_\_\_ Monitor Long Lake for changes in native plant composition and distribution.  
 \_\_\_ Protect native plant species.  
 \_\_\_ Prevent the introduction of Aquatic Invasive Species.  
 \_\_\_ Provide education to Long Lake stakeholders regarding the plant community.  
 \_\_\_ Monitor recreational users to minimize introduction of Aquatic Invasive Species.  
 \_\_\_ Other \_\_\_\_\_

20. There are opportunities for citizens to help in Aquatic Plant Management Plan implementation. From the list below, please identify which activities, if any, you would be interested in helping with. (Select all that apply) Your answers are not a commitment but only an indication of interest.

A. Lake Aquatic Invasive Species Monitor (training can be provided) – possibilities might include

1. Placing a zebra mussel sampler off your dock and monitor for presence/absence
2. Looking for Eurasian watermilfoil, curly-leaf pondweed, or purple loosestrife
3. Scanning the shoreline for any unusual snails or mussels
4. Observing the water for presence of the spiny water fleas
5. Observing for the presence of the rusty crayfish
6. Report fish that have abnormalities or are a different species than you have seen.
7. Use SCUBA to look for Aquatic Invasive Species (early detection monitoring)
8. Snorkeling to look for Aquatic Invasive Species (early detection monitoring)

B. Grant writing – help in finding money for planning and management on the lake

C. Citizen Lake Water Quality Monitor

1. Collecting water samples
2. Using a Secchi disk (white and black disc dropped into the water to see how far down you can see determining the water clarity) – currently being done on Long Lake
3. Temperature/dissolved oxygen profile (using a meter to determine temperature and dissolved oxygen at various depths in the water column)
4. Use of your boat by scientists or volunteers for water quality monitoring activities.

D. Clean Boats Clean Waters – educate the boaters on AIS and inspect boats

E. Volunteer Coordinator – organize volunteers for specific tasks on the lake

F. Other (specify : \_\_\_\_\_ )

G. Do not wish to volunteer

NOTE: If you circled any of the volunteer opportunities or would like more information on AIS, please provide your contact information if you choose.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

21. Please list any additional suggestions that you would like to see incorporated into the APM plan on a separate piece of paper and attach it to the survey.

**Thank you for taking time to complete this survey. Return completed survey by 8/15/22 to:  
Lake Association of Long Lake**

**Joe Hurst  
PO Box 125  
Long Lake, WI 54542**

*Help stop aquatic hitchhikers:  
<http://dnr.wi.gov/lakes/invasives/>*