

<b>Pentwater Lake Improvement Board</b>		
<u>Goals</u>	<u>2021 Workplans</u>	<u>Objectives</u>
	[B]Lake Improvement Board, [P] Progressive, [A] Lake Association	
1. Increase native shoreline	1a. Partner with PLA to survey lakeshore types. [A] 1b. Encourage people to add native shoreline materials in front of seawalls. (Provide funding?) [B]	1a1. Increase % of natural shoreline. [B] 1b1. Limit the herbicide treatment of the lake vegetation to 15% of the shoreline or less. [P] 1b2. Limit the mechanical harvesting of lake vegetation to 50% of the shoreline or less. [P]
2. Maximize native aquatic plants	2a. Conduct lake surveys of native plants every other year [P] 2b. Manage invasive species in a way that improves conditions for native plants [P]	2a1. Conduct survey in August. [P] 2a2. Native plants are a higher percentage in the lake surveys from year to year. [P] 2a3 Create map of plant communities [P]
3. Reduce organic muck buildup in shoreline areas. (Reduces the nutrient load available for aquatic invasive plants and blue-green and filamentous algae to grow)	3a. Partner with PLA to monitor phosphorus/oxygen/temperature levels at 10 foot intervals in the river and lake using appropriate quantifiable methods. [B/A] 3b. Partner with PLA to communicate to riparians on the impact of fertilizers on the lake. [A] 3c. Partner with PLA to communicate to riparians the impact of raking leaves into the lake. [A]	3a1. Take phosphorus samples monthly in spring and late fall. [B/A] 3a2. Reduce the phosphorus levels each year. [B]
4. Control Hybrid Eurasian Water Milfoil from becoming a recreational deterrent.	4a. Conduct lake surveys for AIS [P] 4b. Allow native plants and Starry Stonewort to control the amount naturally. [P] 4c. Utilize herbicides in select areas to control. [P]	4a1. Conduct 3 surveys annually in June, July, and August. [P] 4bc1. Maintain Milfoil to 20% density or less of surveyed area. [P] 1b1. Limit the herbicide treatment of the lake vegetation to 15% of the shoreline or less. [P]
5. Eliminate Cabomba.	4a. Conduct lake surveys for AIS [P] 4c. Utilize herbicides in select areas to control. [P]	4a1. Conduct 3 surveys annually in June, July, and August. [P] 5a1. Prevent Cabomba from getting a foothold in the lake. [P] 1b1. Limit the herbicide treatment of the lake vegetation to 15% of the shoreline or less. [P]
6. Control Starry Stonewort from becoming a recreational deterrent.	4a. Conduct lake surveys for AIS [P] 6a. Utilize mechanical harvesting to clear areas for recreational use only. (around docks) [P]	4a1. Conduct 3 surveys annually in June, July, and August. [P] 1b2. Limit the mechanical harvesting of lake vegetation to 50% of the shoreline or less. [P] 6a1 Effectively clear areas around docks [P]

<p>7. Control European Frogbit from establishing a foothold in Pentwater Lake, being transmitted to new locations, and becoming a recreational deterrent.</p>	<p>4a. Conduct lake surveys for AIS [P]  7a. Partner with EGLE and CISMA to contain Frogbit in the marsh. [B]  7b. Partner with PLA to educate lake users on the existence of Frogbit and the necessity to clean, drain, and dry. Use of signs and annual launch blitz event. [A]  7c. Utilize chemical treatment to eliminate from Pentwater Lake on shore areas. [P]  7d. Partner with EGLE to install boom at Longbridge Road bridge [B]  7e. Remove floating vegetation in lake by non-chemical means. [B]  7f. Remove Frogbit from boom by backhoe if necessary [B]  7g. Partner with Little River Band of Ottawa Indians</p>	<p>4a1. Conduct 3 surveys annually in June, July, and August. [P]  7a1. Have no Frogbit in Pentwater Lake [P]  7b1. Conduct annual launch blitz. [A]  7c.1 Limit the herbicide treatment to on shore areas [P]  7d1. Install boom in July and remove in Oct. [B]  7e1. Eliminate recreational deterrents and spread. [B]</p>
<p>8. Control Curly-leaf Pondweed</p>	<p>4a. Conduct lake surveys for AIS [P]  8a. Utilize mechanical harvesting to clear areas for recreational use only (around docks) prior to native plant growth (instead of June herbicide treatment) [P]</p>	<p>4a1. Conduct 3 surveys annually in June, July, and August. [P]  1b2. Limit the mechanical harvesting of lake vegetation to 50% of the shoreline or less. [P]  6a1 Effectively clear areas around docks [P]</p>
<p>9. Control native aquatic plants from becoming a recreational deterrent in commercial and public areas.</p>	<p>4a. Conduct lake surveys for AIS [P]  6a. Utilize mechanical harvesting to clear areas for recreational use only. (around docks) [P]  4c. Utilize herbicides in select areas to control. [P]</p>	<p>4a1. Conduct 3 surveys annually in June, July, and August. [P]  1b1. Limit the herbicide treatment of the lake vegetation to 15% of the shoreline or less. [P]  1b2. Limit the mechanical harvesting of lake vegetation to 50% of the shoreline or less. [P]</p>
<p>10. Control floating vegetation from becoming a recreational deterrent.</p>	<p>7e. Remove floating vegetation in lake by non-chemical means. [B]</p>	<p>7e1. Eliminate recreational deterrents. [B]</p>
<p>11. Improve fishery</p>	<p>11a. Follow the DNR Fishery Biologist recommendation for no spraying in two prime lake fish spawning areas. [P]</p>	<p>11a. Do not spray Calico Bay along Monroe Road and the delta area in front of the Pentwater River outlet. [P]</p>
<p>12. Assure successful implementation of workplans to achieve goals</p>	<p>12a. Conduct annual review of the contract deliverables and meeting the objectives with lake manager [B]</p>	<p>12a1. Lake manager fulfills contract obligations and meets 90% of objectives [P]</p>
<p>13. Education of the public on activities of the Lake Improvement Board</p>	<p>13a. Publish vision, mission, values, goals, workplans, and objectives on the PLIB website.  13b. Partner with PLA to include also in the State of the Lake Report [B/P/A]</p>	<p>13a Update yearly [P]</p>

- Sand Load

- More effective harvesting

- Pentwater Watershed Management plan, storm water run-off

- Evaluate new technologies, and work method alternatives

- Make harvested starry available as a fertilizer