

Lobdell Lake Management Update

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Since 1991, Lobdell Lake has occasionally executed fall herbicide treatments to provide, substantial benefits in the following year. As the winters have become milder in recent years, weedy conditions have emerged earlier in May. Unfortunately, conditions have worsened before the Memorial Day holiday relative to most years. For reasons related to water column thermodynamics the effectiveness of herbicide treatments is seriously diminished if applied too early. Plants drop more slowly from the water column and sometimes the effect is muted to the point that some weeds survive. Perhaps the biggest impact is on watermilfoil emergence in the latter part of the summer season. By waiting for optimal treatment times and delaying application by only days or a week, weed-free conditions can be maintained for a month to six weeks at the end of the growing season. During most years, but not all, weeds emerge randomly in places in the lake in August and these are dutifully targeted for treatment. This is a difficult time of the year to apply aquatic herbicides because there are lake use restrictions applied to permits and because August is part of the core lake use season. Furthermore, water temperatures can lead to unwanted fish kills, and State regulations which can restrict access to the best treatment options. These are all compelling reasons why one of the key objectives of the typical June herbicide treatment is to provide, to the greatest degree possible, reasonably weed-free conditions until at least the Labor Day holiday. After Labor Day, ecological risks can be diminished with lowering water temperatures. The onset of dormancy of desirable plants can mitigate undesirable ecosystem impacts. And in some cases some of the onerous restrictions on State permits may be relaxed. The Lobdell Lake management team has been evaluating fall treatments to diminish the severity of the bloom of weeds the following spring and possibly delay the onset of noxious weed blooms as long as possible into June. Again, the objective is execute the June treatment when conditions are optimal to avoid the need for August treatments. It is a sad fact that watermilfoil will return to infested lakes in the late season and even until ice forms on the lake. However, if two treatments are needed (as is very typical) it is better to do the second treatment as late in the season as possible to fortify the impact on and suppression of watermilfoil and provide the greatest benefit for the next year. This makes sense from regulatory, ecological, and fiscal perspectives.

The limited use of fall treatments in 2024 seemed to provide benefits in 2025 by delaying the onset of extreme nuisance conditions and also reducing the number of acres that needed to be treated in June 2025. The obvious value proposition supported continued review of this strategy in 2025 and 2026. Some areas of the lake did require treatment in August 2025 to insure good conditions for the Labor Day holiday but again, the scope of the fall 2024 treatments were limited. The water clarity in Lobdell Lake has reached record levels of transparency with testing

results reaching levels that have not been seen in the lake for several decades. This clear water allowed light penetration to unprecedented depths and encouraged the growth of watermilfoil around, but especially after the Labor Day Holiday. The control agent combos allowed by State permit coupled with the expansive nature of the post Labor Day watermilfoil bloom would have been astronomically expensive. The Lobdell Lake management team agreed that a permit amendment be requested from the State to allow the use of products that were much more affordable, and just as effective (based on prior testing). The management team was not at all optimistic that the amendment would be approved but was surprised and delighted when the unexpected amendment was granted by the State. The nuisance watermilfoil was rapidly approaching a time of peak sensitivity to herbicides when the amendment was issued. Furthermore, watermilfoil can grow 2 inches or more in a single day so it typically can go from Inconspicuous to full-blown nuisance in a week. It was critical that the treatment be timed to coincide with the maximum expansion of acres covered when the treatment occurs. (Note: there are numerous reasons not addressed here, but why this is another critical element in providing successful treatment outcomes). The team moved as quickly as possible to execute an agreed upon treatment would potentially provide the greatest impact and value. The lake resident member of the management team, AJ Faught has surveyed "the damage" and reports that the treatment impact is profound! The weedy nuisance watermilfoil has responded quickly and significantly to exposure to the management combo applied to the lake. Now we wait. The success of the strategy will depend to a very critical degree on what happens this winter. Hopefully the objectives will be achieved with this fall treatment and the onset of extreme nuisance conditions will be delayed until optimum times for the June treatment and the lake will remain relatively weed-free for the core 2026 use season. This has happened in the past. But again, this will depend on winter weather and the effect of the treatment could be diminished by unfavorable weather conditions. However, given the extreme value proposition and potentials to manage weed conditions in Lobdell Lake in a much better and reasonable way this approach merited this testing. Now, if someone could figure out how to manage Michigan weather?