

# 9353 Hill Road • Swartz Creek, MI 48473 (810) 635-4400 • Fax (810) 635-4404

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Van Etten Lake, Iosco County

October 27<sup>th</sup>, 2023

## **2023 Lake Management Report**

2023 was the third year of the current Special Assessment District (SAD) for Van Etten Lake. Oscoda Township retained LakePro as the lake manager. Our lake management strategy was a continuation of our overall plan for the lake. The main goals were:

- 1. Locate and aggressively treat any Eurasian Milfoil
- 2. Locate and treat any other invasive species, such as Curly-Leaf Pondweed
- 3. Promote native plant growth, while keeping it below nuisance levels

In the spring, LakePro solicited bids for the herbicide treatments and PLM Lake & Land Management Corp. was awarded the contract.

The following is a summary of lake management activities that took place in 2023:

#### June 14th Lake Vegetation Survey #1, Herbicide Treatment #1

LakePro surveyed the aquatic plants in the lake. During this survey we did not find any Eurasian Milfoil, but native plant growth was present in a few shoreline areas of the lake. Growth was sparse compared to previous years at this time. The North-West Bay by the North inlet has a regular issue with weeds and was being treated this day as well. The treatment cost \$5,141.50. LakePro was present on the waterbody, supervising the treatment and after the fact, Bio Basing/surveying the lake.

#### July 13<sup>th</sup> Lake Vegetation Survey #2

LakePro surveyed the aquatic plants in the lake. On this survey, we were joined by Tim O'Harran, VELA Representative, to observe the survey and discuss any topics regarding the lake. Our first objective was to check the previous treatment areas, and the treatment was successful in controlling the native plants. We also looked for any invasive species and found a small patch of Eurasian Milfoil in the northernmost section of the lake. We then noted all the new areas of native plant and algae growth that were at or approaching nuisance conditions. Based on the results of this survey, we designed a custom treatment plan for review and approval by the Weed Committee.

#### July 24<sup>th</sup> Pre-Treatment Posting

This was the first time we requested the applicator to pre-post the lake a day prior to treatment. This was done in effort to give riparian's more time if they were unaware of the scheduled treatment.





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#### July 25<sup>th</sup> Herbicide Treatment #2

PLM applied herbicides around the majority of the lakeshore for algae and native plants. The herbicide treatment included 152 acres with contact herbicides and 122 acres for algicides. The total cost of the treatment was \$32,730.00. LakePro was also on the lake to ensure the treatment took place according to the plan and the lake postings were done correctly the day before.

### August 16<sup>th</sup> Lake Vegetation Survey #3

LakePro surveyed the aquatic plants in the lake. On this survey, we were joined by Leonard Brockhahn, VELA Representative, to observe the survey and discuss any topics regarding the lake. This survey highlighted an issue with algal growth throughout the lake. Though this is a common occurrence, it was at a moderately high level as it was uniform through the lake. Due to this fact and the mobility of the algal species, LakePro built a Recommendation of Service whilst noting that algal treatments would likely not be effective due to its high potential to move, likely causing the treatment to be ineffective. No invasives were found and native species were seen to be at a normal level. The North-West Bay was seen to have a slight increase in native weed growth.

### Sept. 9<sup>th</sup> VELA Annual Meeting

Devin Hudecek, Michael Smith, from LakePro, attended the VELA Annual Meeting to discuss the lake management strategy for the summer and answer any questions regarding the lake management.

#### Sept. 14<sup>th</sup> Phragmite Treatment

PLM applied herbicides at two sections along the west shoreline near the summer camp and neighborhood on Pine Street. The treatment included 0.75 acres with contact herbicides. The total cost of the treatment was \$1,020.94. Posting was done during the same day.





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#### **Summary**

2023 marked the first year in a decent period to host invasive species in the lake. LakePro observed this happenstance and swiftly made efforts to rectify the situation. After treatment, Eurasian Milfoil was no longer identified.

For the first survey, LakePro surveyed the littoral zone of the lake and did not find any invasive Eurasian Milfoil or Curly-Leaf Pondweed. So, we marked the areas of nuisance algae and native plants for treatment. As well as our survey, we inspected PLM's treatment in the North-West Bay as well. This treatment was approved prior to PLM and LakePro coming onsite and totaled 11.3 acres at \$5,141.50. This treatment included the application of Flumioxazin, an algicide and herbicide paired with Aquathol-K, an herbicide, to the entire treatment area, 11.3 acres. The use of these products was used specifically for the intent to reduce pondweed growth and surface algae that was accumulated within that area.

Approximately one month after treatment, LakePro conducted another lake vegetation survey. The previous treatment was successful in controlling the nuisance pondweeds in the treatment area. However, due to an extended period of time between Survey 1 and Treatment 1, new native plant growth had reached nuisance levels along the majority of the shoreline of the lake as well as a microcosm of Eurasian milfoil growth near the northernmost point of the lake. So, based upon the survey results we planned another custom treatment for review and sent it to the VELA Weed Committee. Upon approval, we scheduled a treatment with Clarke for 152 acres, targeting the areas of densest plant & algae growth around the lake.

The 2023 lake management was successful. We met the primary goals of monitoring for Eurasian Milfoil, watching for other invasive species, and suppressing nuisance plants. The only challenge that remained was the cyanobacteria bloom. Through discussion and analyzing events within the lake, we concluded earlier treatments help in degrading excess nutrients and halt nutrient loading momentarily to reduce the algal bloom seen at the end of each year. Other factors can play into algae blooms such as water temps and weather, throughout the season. As discussed at the fall meeting, in 2024 all documentation, bids, permit application and approval should be on track for an earlier treatment.

The management of aquatic plants on Van Etten Lake is making good progress, but it's an ongoing process that has not yet concluded. Sustaining your efforts is crucial to maintaining the lake in the excellent condition observed most of the summer until the late algal bloom. It is imperative to remain vigilant in detecting any potential new invasive species and to persist in controlling the growth of native plants to ensure that boating, swimming, and fishing continue to improve for all those who enjoy the lake.

Thanks for another great summer on your lake,

Michael Smith
Assistant Lake Manager – LakePro, Inc.





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## **2023 Lake Management Expenditures**

LakePro, Inc.	Lake Management Consulting	\$ 8,240.00
EGLE	Aquatic Nuisance Control Permit	\$ 1,600.00
PLM	Treatment #1	\$5,141.50
PLM	Treatment #2	\$32,730.00
PLM	Phragmite Treatment	\$1,020.94

2023 Lake Management Total: \$48,732.44

# **Historical Lake Management Expenditures**

2023	\$48,732.44
2022	\$50,370.50
2021	\$54,967.50
2020	\$54,292.50
2019	\$31,315.00
2018	\$40,030.00
2017	\$20,404.00
2016	\$39,510.00
2015	\$38,120.00
2014	\$65,601.92
2013	\$38,897.50
2012	\$37,254.50
2011	\$58,475.25

