



PLM Lake & Land Management Corp.

Northern Division

P.O. BOX 424 Ewart, MI 49631
800-382-4434 ext. 2200 (o) 231-372-5900(f)
www.plmcorp.net

On-Site Lake Evaluation Record

Lake Name: Big Bass Lake

County: Lake

Evaluated by: Sal Adams

Reviewed by: Bre Grabill

Date: September 2019

Purpose of evaluation: End of Season Survey, Review

Evaluations Performed

Aquatic Vegetation Evaluation

- ☒ Aquatic vegetation survey
- ☐ Aquatic vegetation brief check

Vegetation evaluation methods

- ☒ Visual evaluation
- ☒ Sample collection with rake
- ☒ Sonar profiling
- ☐ GPS-mapped sample locations

x Water quality sampling

- ☒ On-site (Temperature, DO, Secchi disk)
- ☒ Water samples collected for
_____TP, TN_____ analysis

x GPS data collection

- ☒ Depth survey
- ☐ Shoreline mapping
- ☐ Reference point location

☐ Other _____

Overall Condition of Lake

- ☐ Excellent (no problems or developing problems noted)
- ☒ Very good (no immediate action required)
- ☐ Fair (Continue Management Program)
- ☐ Poor (management needed as soon as possible)
- ☐ Very poor (management action past due—IMMEDIATE response required)

Problems Noted

- ☒ Growth of exotic plants (mark locations on map)
 - ☒ Eurasian watermilfoil
 - ☐ Curlyleaf pondweed
 - ☐ other _____
- ☐ Excessive growth of native plants
- ☐ Excessive filamentous algae growth
- ☐ Poor water clarity
- ☐ Blue-green algal blooms



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Recommendations

- X Monitoring Program: Continue Program Next Season
Continue Monitoring Next Year: ☐ urgent, ☒ serious, ☐ moderate, ☐ slight
- X Herbicide application: Continue Program Next Season
Need for herbicide treatments next season: ☐ urgent, ☒ serious, ☐ moderate, ☐ slight
- ☐ Algaecide application: Continue Program Next Season
Need for algae treatments next season: ☐ urgent, ☐ serious, ☐ moderate, ☐ slight

Notes

Big Bass Lake was surveyed and treated throughout 2019 for EWM. The end of summer survey, done in September, is attached for reference. During 2019, treatments were performed on 5/29, 6/26, 7/31 and 9/6, 2019. Approximately 55 acres of EWM was treated throughout the season using a combination of systemic products (Renovate OTF, Renovate 3 and Sculpin) as well as minimal contact herbicides (Diquat). The goal was to keep the lake navigable and open for recreation, while controlling exotic plants, which was achieved with the treatment program. Growing seasons and changing weather patterns is prolonging the growing season in our area and treatment programs have to be responsive to the growth present. Our end of summer survey showed your program achieved that well.

The AVAS Survey found 13 submersed and emergent native plants in and around Big Bass Lake. This is a very promising sign for Big Bass Lake and the greater the diversity moving forward, the better. Native plant diversity is key to promoting a healthy lake ecosystem, from promoting a healthy fishery to sediment stabilization. Native plants are vital to the overall health of the ecosystem but bombarding residents is not the goal either. At no time should all vegetation be removed from the lake. Residents are encouraged to rake their beaches and remove any floating weeds/debris. Management/treatments can be explored in the future, if needed; but the current and most pressing issue is non-native plant growth.

It is recommended to continue your EWM management program next season including reviewing possible whole lake Sonar A.S treatments in the future. It is important to continue to monitor/survey the lake regularly as well.

Plant Tread graphs are not available yet; but will be in future years, once additional plant data is collected annually.

If you are interested in participating in a water quality monitoring program, please contact me for details.

Please contact me with questions or concerns.

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