

**BALDWIN LAKE
LAKE IMPROVEMENT BOARD
ANNUAL MEETING
SEPTEMBER 20, 2021**

The annual meeting of the Baldwin Lake Improvement Board was held at the Eureka Township Hall, Greenville, Michigan on the 20th day of September 2021.

The meeting was called to order by Chairman Don Gibbs at 7:00 p.m.

PRESENT: Donald Gibbs, Chairman
 City of Greenville Representative

 Linda Weger, Member
 Eureka Township Representative

 Scott Painter, Member
 Board of Commissioners Representative

 Donald Burns, Member
 Abutting Property Owners Representative

 Todd Sattler, Secretary
 Montcalm County Drain Commissioner

ALSO Jaimee Desjardins, PLM
PRESENT:

The minutes of the previous annual meeting minutes held on September 21, 2020, had been previously distributed by email. They were approved as written.

The minutes of the Public Hearings of last year for Practicability and Apportionment has been previously distributed by email. They were approved as written.

Treasurers Report

Todd provided a financial update including the current balance in the Baldwin Lake Improvement fund. Don Gibbs presented the most recent bill from PLM for payment in the amount of \$1,099.50, resulting in a starting balance of \$29,709.39 for 2022.

A motion was made by Linda and seconded by Don Burns to approve the most recent bill from PLM for payment. Motion carried.

OLD BUSINESS

Review of 2021 Season – Jaimee

Jaimee provided an overview of the treatment season. She advised that there had been five treatments this season, mostly targeting exotic growth. Chara growth was very heavy this year, as well as the thin leaf pond weed. Lily pads were treated twice during the season. The water quality report, Lake Check, was reviewed and explained in detail by Jaimee. There are two water quality surveys done each year, one in early May and one in August which inform on various indices critical to lake health. The water quality report will be available for review in December 2021 for the second testing. There have been no high E. Coli levels on the lake as long as testing has been completed. Moderate levels of high phosphorus are very typical for lakes of this area as it comes from organic material.

NEW BUSINESS

PLM Recommendations for 2022

PLM will continue using Lake Check twice a year at a cost of \$530.00/yr. Jaimee recommends using Sonar in 2022 due to a large amount of EWM and Curley Leaf Pondweed found especially in the West bay. Sonar was last used in 2016 so we have been able to extend the normal 5 year window. PLM will continue with regular algae and lily pad treatments throughout next season. Jaimee also stated that they have recently incurred the largest chemical cost increases they have seen and those will be passed on to us. She would expect that to result in about a \$2,000 increase for like treatments. Our Sonar years are typically the most expensive in the 5 year Plan. State of Michigan permitting fees are also expected to increase modestly. The Board will use current Treasury surplus to fund these extra charges.

Budget and tax roll assessment (\$13,860)

The board was provided with a draft assessment roll for next year.

A motion was made by Don and seconded by Linda to accept the assessment roll of \$13,860 for next year. Motion carried.

Additional New Business

There is a dam on Manoka Lake that is affecting the lake level on Baldwin Lake. The dam is possibly private. Todd will investigate the issue for possible corrective action.

Disc golf is causing erosion on the northeast shore, east of the boat launch. Don is to communicate with the City of Greenville regarding the issue.

PUBLIC COMMENTS

No public comments at this time.

The meeting was adjourned by Chairman Don Gibbs at 7:57 p.m.



PLM
LAKE & LAND
MANAGEMENT CORP

September 20, 2021

Baldwin Lake Board
Attn: Don Gibbs
301 Manoka Lake Drive
Greenville, MI 48838

PLM Lake & Land Management Corp. will provide a professional aquatic plant management program for the control of weeds and/or algae for Baldwin Lake for the 2022 season.

Management program for 2022: Aggressively controlling the exotic plant Eurasian watermilfoil throughout Baldwin Lake utilizing the systemic herbicide, Sonar A.S. Management will also include performing AVAS surveys, pre/post treatment surveys, water quality analysis and algae treatments if required.

April/May of 2022: Weed treatment of entire lake, applying restrictive product Sonar A.S. (fluridone) for the control of exotic plant species. Sonar dose will be determined using the actual thermocline at the time of the treatment. Based on past water quality observations, the thermocline will be at approximately 15 feet.

The treatment will use the thermocline depth at the time of treatment to calculate accurate fluridone amounts instead of an approximate depth of 10 feet (standard treatment). In the spring, many times the thermocline is actually much deeper (12 – 15 feet) therefore, product is lost and the target rate is not obtained. The proposed Sonar A.S. treatment should provide longer-term control of EWM (compared to standard Sonar A.S. 6 bump 6 ppb treatment) by obtaining and holding the target concentration rate of 6 ppb.

Cost of Fluridone treatments at 6 ppb: \$8,220.00

If a bump up treatment is required, then the cost will be \$1,370.00 per additional ppb. (ppb=parts per billion)

Additional fees will be required based on EGLE policy when using Fluridone. The EGLE requires: permit fees, Fastest (measurements of ppb of Fluridone in the water body throughout the year), water quality monitoring, lake management plan, and vegetation surveys. Cost per fastest: \$185.00 Cost per survey: \$260.00 Permit fee: ~\$800.00. Lake Management Plan: \$775.00, Water Quality: \$530.00.

Suggested budget for 2022 using Sonar A.S. (~15 ft Thermocline): \$14,000.00 to \$20,000.00

Note: We estimate that the cost to monitor and treat your lake will fall within these ranges. Please note that the budget is an estimate. You will only be charged for the actual amount of control required, at the unit prices listed above.

Current challenges in our economy have significantly impacted the cost of herbicides for 2022. However, through advancements in our technologies, competitive buying power and PLM always working to have the lowest price structures available, we have been able to limit increases to our customers for next season. PLM will continue to work with all manufacturers/distributors directly to ensure your lake is provided the best unit rates available in the industry.

Unit cost per acre (if Sonar is not used)

Systemic Herbicides:

Navigate granular:	\$350.00
Sculpin G (120lb/ac):	\$390.00
Renovate 3:	\$400.00
Renovate OTF (120lb/ac):	\$470.00
ProcellaCOR (per PDU):	\$125.00

Contact Herbicides:

Aquathol K, exotics:	\$195.00
Aquathol K, natives:	\$285.00
Diquat, exotics:	\$190.00
Diquat, natives:	\$285.00
AquaStrike:	\$425.00
Clipper & Diquat Combo:	\$450.00
Clipper 200ppb:	\$600.00
Nautique:	\$450.00
Komeen Crystals:	\$500.00

Additional Services:

Algaecides, filamentous:	\$47.00
Algaecides, chara:	\$60.00
Algaecides, SeClear (algae):	\$125.00
Algaecides SeClear G (SSW):	\$350.00
Lily Pad Control (swim area)	\$150.00
Cost per AVAS survey:	\$260.00
Water Quality Program:	\$530.00

All budgets are comprised using the unit costs per acre listed above and approximate acreages. All treatments will be preapproved prior to application.

Technical Management Services:

On-site Lake Evaluations: Each time a PLM representative is on Baldwin Lake, to perform a survey, WQ testing, treatment, etc, the following will typically occur: Pre-notice to Lake Representative of schedule (i.e Phone call the week before of estimated date). Following the service, a follow up evaluation to Lake Representative of services provided, condition of lake, future recommendations are made. Arrangement can be made to send information via email or voicemail. This is standard as part of our program to keep Lake Board/Association aware and involved in all decision making and serves as a checks and balances of lake management.

Water Quality Program: The water quality program consists of two samplings, occurring in the spring and late summer each season. Parameters such as secchi disc, pH, D.O., conductivity, alkalinity and nutrient sampling of nitrates and total phosphorus give us the ability to monitor lake trends more efficiently. This information will enable us to include the trophic status of your lake. Reports are issued annually in the fall. E.coli testing will be done during the summer months, consisting of three samples for an overall lake average. A total of three sites will be sampled for E.coli and results will be included in the annual report if levels are not out of normal range. If results are elevated, immediate contact will be made and actions can be taken at that time.

Mechanical Harvesting: *\$250.00 per hour for harvester based on a minimum of \$3,000.00 per cutting.*
We will cut down to a maximum depth of five (5) feet and require a minimum of 18 inches of water depth for harvester flotation. Harvested vegetation will be dumped at a predetermined location designated by the client within a ten (10) mile radius of the lake. Any cost associated with the disposing of vegetation is the responsibility of the client, i.e., landfill disposing costs. There will be no set-up or breakdown fees of our equipment if a suitable access site is available. A representative of the client will be required to periodically evaluate workmanship. The representative will also be required to sign a "release form" at the conclusion of each harvest to verify that the harvest has been completed according to expectations.

Surveys: Performing surveys is a vital part of any lake management program. PLM surveys a lake in the spring and fall as well as surveying for pre/post treatments. Lake representatives are welcome to arrange joining PLM for a survey. Depending on the type of survey performed, a cost may apply. An AVAS survey is a more specific survey performed for specific reasons. Performing spring and fall AVAS surveys of the lake will allow for all vegetation within the lake, native and exotic, to be recorded along with density. This data is important in determining management plans and treatment areas. A full understanding of the vegetation growing within the lake can indicate problems within an aquatic environment. Surveys will be supplied to the lake association upon completion with a break down of what the survey indicates.

Meeting Attendance/Presentation: A representative of PLM is available to attend lake association/board meetings upon request. Request has to be made prior to meeting to allow for conflict in representatives schedule. If conflict in meeting time does arise, alternative dates and times need to be determined between representative and board. Residential concerns can always be brought to the lake association/board and then to PLM or directly to PLM by calling our office.

I look forward to the challenge of controlling the algae and weed growth in **Baldwin Lake** and working with you next summer.

Information regarding tentative treatment dates will be sent in the spring of 2022.

Sincerely,

A handwritten signature in cursive script that reads "Jaimee Desjardins".

Jaimee Desjardins, Environmental Scientist
West MI Regional Manager
PLM Lake & Land Management Corp.