

RAINBOW AND MIDDLE LAKES
LAKE IMPROVEMENT BOARD MEETING
June 6, 2023

A meeting of the Rainbow and Middle Lakes, Lake Improvement Board was held at the Montcalm County Drain Commission, 211 W. Main Street, Stanton, Michigan on the 6th day of June 2023 at 9:00 A.M.

The meeting was called to order by Doug at 9:00 a.m.

PRESENT: Doug Smith – Chairperson
Bill Cretens – Abutting Property Owner's Representative
Don Cichon – Pine Township Representative
Todd Sattler – Secretary/Montcalm County Drain Commissioner

ABSENT: Pat Carr – Board of Commissioner's Representative

ALSO

PRESENT: Anne Gaylord - MCDC

A motion was made by Bill and seconded by Todd to approve the agenda. Motion carried.

A motion was made by Todd and seconded by Don to approve the minutes from May 10, 2023, as presented. Motion carried.

Public Comment

No public comment.

Treatment Update

The lake was treated on May 25th and looks good. Mark is doing a great job.

Financial Update

Todd provided a financial update to the board, including a current balance of \$37,113.32. He noted that we received the first treatment invoices for the season with a cost of \$2,790.00 for Middle Lake and \$10,395.00 for Rainbow Lake.

Public Hearing

Doug noted that Paul Ostrander was missing from the assessment. He had bought property from his dad but was not listed as a property owner. Anne checked the up-to-date information on the GIS maps and added that it was updated on the current map and will be updated before the roll is put on the taxes. Todd stated that he would like the roll to be based on deeded access and not on assumptions or how the property has historically been used. He also added that Spicer is able to do the parcel research to determine what parcels have deeded access. Todd mentioned again that he would like to remove the

contiguous lot factor. Doug stated that having two lots does not give him anymore use of the lake, so the contiguous lot factor should stay on the roll. Todd added that the residents that are concerned about the contiguous lot factor can easily combine their lots. Doug stated that he is concerned that his taxes will skyrocket if he combines his lots. Bill noted that he recently combined his parcels and it did not drastically change his property taxes. Todd added that splits and combines can happen at anytime and can be updated yearly with the assessment roll while changes to property factors cannot change within the terms of the current cycle without holding another public hearing. Don added that he had talked to an assessor and was told that it takes a whole year for splits and combines to catch up with the assessment roll. The drain office will connect with the assessor for the township to clarify. Todd stated that he spoke with a lawyer regarding assessments for the DNR boat launch and learned that there is currently legislation in process to charge the DNR for boat launches, but not mechanism to charge them at the moment. Bill asked about the possible cost to have Spicer research parcels. Todd said that the cost can vary depending on the amount of research needed, so he recommends setting a not to exceed amount. The Board decided that the parcels on Phillips Drive require research to know how to assess. The Board is open to removing the contiguous lot factor but would like to see rolls with and without that factor. Don and Bill are in favor of removing the contiguous factor to spread the burden more evenly to all residents. Todd will reach out to Spicer for research and ask that they provide the updated rolls in time for the next meeting on Tuesday, June 27 at 9:00 am. The Board discussed the parcels owned by the Main Family on the NW side of the lake and whether or not they should be included. The Board would like Todd to speak to the Mains to see if they are interested or able to combine parcels. The Board discussed to budget for the next five years and noted that Clearwater indicated a cost increase due to inflation. The Board would like to increase the yearly budget from \$35,000 to \$38,500 which is a 10% increase from the last program.

A motion was made by Bill and seconded by Don to direct Todd to authorize Spicer to complete parcel research at a cost not to exceed \$1,500.00 and provide an updated assessment roll. Motion Carried.

Other Business

No other business.

There being no further business to come before the Lake Board, a motion was made by Bill and seconded by Don to adjourn the meeting at 10:42 a.m. Motion carried.

Todd Sattler, Secretary
Rainbow and Middle Lakes, Lake Board

State of Michigan }
County of Montcalm }

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Rainbow and Middle Lakes, Lake Improvement Board, Montcalm County, Michigan held on June 6, 2023, and that said minutes are on file in the office of the Montcalm County Drain Commissioner and are posted on the website at www.montcalm.us and are available to the public.

I further certify that notice of the meeting was posted at least 18 hours before the meeting at the office of the Montcalm County Drain Commissioner, which is the principal office of the Rainbow and Middle Lakes, Lake Improvement Board.

A handwritten signature in blue ink, appearing to read "Todd R. Sattler".

Todd R. Sattler
Montcalm County Drain Commissioner

**RAINBOW/MIDDLE LAKE
LAKE IMPROVEMENT BOARD
MEETING**

**June 6, 2023
9:00 A.M.**

MONTCALM COUNTY DRAIN COMMISSION

211 W. Main Street
Stanton, Michigan

Agenda

- Call to Order
- Approval of Agenda
- Approval of Minutes
 - May 10, 2023
- Public Comments
- Weed Control Program
- Financial Update
- Public Hearing
 - Benefit Factors
 - Budget
- Other Business
- Adjourn

If you cannot attend, please call 989-831-7322 at least two days prior to the meeting.

Board Members:

Todd Sattler, Secretary/Treasurer, Montcalm County Drain Commissioner
Bill Cretens, Abutting Property Owners Representative
Doug Smith, Chair
Pat Carr, Board of Commissioners Representative
Don Cichon, Pine Township Representative

Rainbow & Middle Lakes Finance Sheet 2019 - 2023 (84010)

Tuesday, June 6, 2023

Date	Vendor	Description	Check Numbers	Expenses	Revenue	Balance
10/1/2018		Beginning Balance				\$ 30,470.69
5/21/2019	Clearwater Lake Management Inc	TREATMENT MIDDLE LAKE	145735	\$ 2,150.00		\$ 28,320.69
5/31/2019	MONTCALM COUNTY TREASURER	2018 TAX COLLECTION			\$ 35,000.00	\$ 63,320.69
6/6/2019	Clearwater Lake Management Inc	INVOICE # 1261 WEED TREATMENT RAINBOW LAKE	146175	\$ 11,350.00		\$ 51,970.69
7/3/2019	Clearwater Lake Management Inc	INVOICE #1328 WEED TREATMENT RAINBOW LAKE	146773	\$ 10,900.00		\$ 41,070.69
7/11/2019	Clearwater Lake Management Inc	INVOICE #1330 WEED TREATMENT & WATER TEST	146820	\$ 2,235.00		\$ 38,835.69
8/8/2019	Clearwater Lake Management Inc	INVOICE #1384 ALGAE & INVASIVE WEED CONTROL	147284	\$ 1,225.00		\$ 37,610.69
8/15/2019	Clearwater Lake Management Inc	INVOICE #1390 16 AC SYSTEMIC TREATMENT RAINBOW LAKE	147618	\$ 6,000.00		\$ 31,610.69
10/3/2019	Clearwater Lake Management Inc	Invoice #1439 Lily Pad treatment Middle Lake	148648	\$ 500.00		\$ 31,110.69
1/16/2020	State of Michigan	Invoice #2558 Permit fee for Rainbow	150934	\$ 800.00		\$ 30,310.69
1/16/2020	State of Michigan	Invoice 2558-1 Permit fee for Middle	150935	\$ 400.00		\$ 29,910.69
5/31/2020	MONTCALM COUNTY TREASURER	2019 Settlement			\$ 35,000.00	\$ 64,910.69
6/4/2020	Clearwater Lake Management Inc	ALGAE / WEED / SYSTEMIC TREATMENT RAINBOW	153385	\$ 8,200.00		\$ 56,710.69
6/4/2020	Clearwater Lake Management Inc	ALGAE / WEED TREATMENT MIDDLE	153385	\$ 2,050.00		\$ 54,660.69
6/25/2020	Clearwater Lake Management Inc	ALGAE & WEED TREATMENT RAINBOW LAKE	153758	\$ 9,480.00		\$ 45,180.69
7/16/2020	Daily News	Publication	154042	\$ 215.40		\$ 44,965.29
7/22/2020	Clearwater Lake Management Inc	WEED TREATMENT FOR MIDDLE LAKE & WATER SA	154113	\$ 1,235.00		\$ 43,730.29
7/22/2020	Clearwater Lake Management Inc	WEED TREATMENT FOR MIDDLE LAKE & WATER SA	154113	\$ 300.00		\$ 43,430.29
7/30/2020	Clearwater Lake Management Inc	MIDDLE LAKE WEED TREATMENT	154326	\$ 1,085.00		\$ 42,345.29
8/13/2020	Clearwater Lake Management Inc	RAINBOW LAKE WEED TREATMENT	154542	\$ 5,890.00		\$ 36,455.29
9/30/2020	Montcalm County	Allocations		\$ 348.36		\$ 36,106.93
1/28/2021	STATE OF MICHIGAN	EGLE PERMIT FEE MIDDLE LAKE	157500	\$ 400.00		\$ 35,706.93
10/29/2020	SPICER GROUP	ACCOUNTS SUPPORT	156014	\$ 50.00		\$ 35,656.93
1/28/2021	STATE OF MICHIGAN	EGLE PERMIT FEE RAINBOW LAKE	157499	\$ 800.00		\$ 34,856.93
3/31/2021	Rainbow & Middle Lakes	Interest			\$ 84.96	\$ 34,941.89
4/30/2021	Montcalm County	2020 Delinquent Settlement			\$ 2,709.74	\$ 37,651.63
5/1/2021	Montcalm County	2020 Collected Settlement			\$ 32,290.26	\$ 69,941.89
5/18/2021	Clearwater Lake Management Inc	Algae & Weed Treatment Middle Lake	159395	\$ 2,420.00		\$ 67,521.89
5/25/2021	Clearwater Lake Management Inc	Algae & Weed Treatment Rainbow Lake	159573	\$ 12,005.00		\$ 55,516.89
6/17/2021	Clearwater Lake Management Inc	Algae & Weed Treatment Middle Lake	159916	\$ 1,525.00		\$ 53,991.89
8/5/2021	Clearwater Lake Management Inc	Algae & Weed Treatment Rainbow Lake	160820	\$ 5,945.00		\$ 48,046.89
8/5/2021	Clearwater Lake Management Inc	Algae & Weed Treatment Middle Lake	160820	\$ 1,015.00		\$ 47,031.89
8/19/2021	Clearwater Lake Management Inc	Algae & Weed Treatment Rainbow Lake	161082	\$ 8,700.00		\$ 38,331.89
12/9/2021	Fahey, Schultz Burzich Rhodes PLC	Legal	163179	\$ 133.00		\$ 38,198.89
2/10/2022	Clearwater Lake Management Inc	2022 EGLE Permit Fee - Rainbow Lake	164285	\$ 875.00		\$ 37,323.89
2/10/2022	Clearwater Lake Management Inc	2022 EGLE Permit Fee - Middle Lake	164285	\$ 450.00		\$ 36,873.89
5/23/2022	Montcalm County	2021 Collected Settlement			\$ 32,465.16	\$ 69,339.05
5/23/2022	Montcalm County	2021 Delinquent Settlement			\$ 2,534.84	\$ 71,873.89
5/26/2022	Clearwater Lake Management Inc	Algae & Weed Treatment Middle Lake	166653	\$ 2,790.00		\$ 69,083.89
6/9/2022	Clearwater Lake Management Inc	Algae & Weed Treatment Rainbow Lake	166922	\$ 9,810.00		\$ 59,273.89
6/23/2022	Clearwater Lake Management Inc	Algae & Weed Treatment Middle Lake	167118	\$ 1,680.00		\$ 57,593.89
7/7/2022	Clearwater Lake Management Inc	Algae & Weed Treatment Rainbow Lake	167378	\$ 28,685.00		\$ 28,908.89
7/7/2022	SPICER GROUP	ACCOUNTS SUPPORT	167408	\$ 32.80		\$ 28,876.09
7/7/2022	SPICER GROUP	ACCOUNTS SUPPORT	167408	\$ 41.75		\$ 28,834.34
8/4/2022	Clearwater Lake Management Inc	07/28/2022 Weed & Algae Treatment Middle Lake	167869	\$ 2,695.00		\$ 26,139.34
8/11/2022	Clearwater Lake Management Inc	07/28/2022 Weed & Algae Treatment Rainbow Lake	168121	\$ 8,660.00		\$ 17,479.34
9/22/2022	Clearwater Lake Management Inc	Emergent Treatment Middle Lake	168853	\$ 1,150.00		\$ 16,329.34
1/31/2023	Huntington Bank	Interest Income			\$ 36.75	\$ 16,366.09
2/28/2023	Huntington Bank	Interest Income			\$ 61.72	\$ 16,427.81
3/31/2023	Huntington Bank	Interest Income			\$ 48.32	\$ 16,476.13
3/14/2023	State of Michigan	2023 Permit Fee - Rainbow Lake	172556	\$ 875.00		\$ 15,601.13
3/14/2023	State of Michigan	2023 Permit Fee - Middle Lake	172556	\$ 450.00		\$ 15,151.13
5/2/2023	Montcalm County	2022 Delinquent Settlement			\$ 3,299.11	\$ 18,450.24
5/8/2023	Montcalm County	2022 Collected Settlement			\$ 31,700.89	\$ 50,151.13
5/31/2023	Huntington Bank	Interest Income			\$ 147.19	\$ 50,298.32
6/8/2023	Clearwater Lake Management Inc	Weed & Algae Treatment Middle Lake		\$ 2,790.00		\$ 47,508.32
6/8/2023	Clearwater Lake Management Inc	Weed & Algae Treatment Rainbow Lake		\$ 10,395.00		\$ 37,113.32
		Remaining Balance				\$ 37,113.32

RAINBOW & MIDDLE LAKES
LAKE IMPROVEMENT BOARD MEETING

June 6, 2023

9:00 AM

Drain Commissioner's Office

ATTENDANCE RECORD

Name	Any Change in Telephone # or Email address
1. <u>Anne Gaylord- MCIX</u>	
2. <u>Bill Creteens</u>	
3. <u>Don Cichon</u>	
4. <u>Doug Smith</u>	
5. <u>Todd Sattler</u>	
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5-23-23

Rainbow/Middle Lake Association
Montcalm County Drain Commissioner
211 W. Main
Stanton, MI 48888

Management Program for Rainbow/Middle Lake

The main focus of the lake management program in Rainbow and Middle Lake is to control the spread of invasive/exotic plants (Eurasian Watermilfoil, Curly Leaf Pondweed), while keeping other aquatic vegetation from reaching nuisance levels. The treatment area will vary from year to year depending on weather conditions. Clear Water Lake Management, Inc. will work in coordination with the lake board and report all necessary information back to them in a timely manner.

2023 Unit Costs:

Rainbow Lake DEQ Permit Fee	\$875.00
Middle Lake DEQ Permit Fee	\$450.00
Weed Treatments: 2-3 Treatments per year	
Diquat- Contact Herbicide to control EWM & Various Pondweeds	\$220.00/acre
Aquathol K- Contact Herbicide to control Pondweeds	\$205.00/acre
Algaecides- Control of Algae	\$50.00/acre
Algaecides- Control of Chara	\$65.00/acre
Navigate 2,4-D- Systemic herbicide to control Eurasian Watermilfoil	\$575.00/acre
Triclopyr- Liquid systemic herbicide to control EWM	\$395.00/acre
ProcellaCOR	\$110.00/PDU
Lily Pad Control	\$75.00/lot

Estimated Annual Budget (2019-2023):

DEQ Permits:	\$1,325.00
Nuisance Aquatic Plant Control:	\$33,000.00
Consulting Fee (Mapping, Water sampling, etc.):	\$4,500.00
Administration and Contingency (postage, mailings, copies, etc.):	\$2,500.00
Total:	\$41,325.00

Optional Services

Muck Treatment using MuckAway:

MuckAway is designed to decrease levels of organic sediment in lakes and ponds while reducing odors and improving water clarity. The pellets sink quickly, targeting 'muck' on the bottom. MuckAway does not contain pathogenic bacteria and it is fish and wildlife friendly. Contains 3 billion CFU/gram (Colony-forming units)

Zero Gravity Aerial Mapping (Best Mapping Option):

Aerial survey for aquatic vegetation to map out native and non-native aquatic plants. Complete macrophyte study available.

Water Quality Program: Water quality program consists of lake samples taken and sent to an independent laboratory (Prein & Newhof). The samples can be tested for a variety of things including; fecal bacteria (E. coli), dissolved oxygen, conductivity, total dissolved solids, pH and alkalinity. Primarily E. coli is the focus.

Clear Water Lake Management, Inc.

PO Box 842 Rockford, MI 49341 Office: (616) 874-1569 Fax: (616) 874-1571

www.clearwaterlakemanagement.com



CLEAR WATER LAKE MANAGEMENT, INC. of P.O. Box 842, Rockford, Michigan 49341 and Rainbow/Middle Lake Board of Montcalm County, Michigan agree:

Clear Water Lake Management will provide a professional aquatic program for the control of weeds and/or algae in **Rainbow/Middle Lake**. The program will consist of the following:

Management program for 2024:

Products to be used include restrictive herbicides such as Diquat, Aquathol K, Hydrothol 191, 2,4-D, Clipper, Triclopyr and Glyphosate, as well as nonrestrictive products such as Copper Sulfate, Cutrine Plus, Cutrine Ultra, EarthTec, Greenclean, Pond Dye, Muck Pellets, among other products approved by the MDEQ. Algae treatments should occur monthly to prevent existing growth and prevent re-growth. Surrounding conditions (i.e. sunlight, temperature, nutrient concentration, etc...) may require additional treatments.

Cost per Acre:

Navigate: Granular systemic 2,4-D herbicide to control Eurasian Watermilfoil	\$ 575.00
Triclopyr: Liquid systemic herbicide to control EWM	\$ 395.00
Diquat: Liquid herbicide to control EWM, Curlyleaf, and Pondweeds	\$ 220.00
Aquathol K-Hydrothol 191: Liquid herbicide to control Pondweeds	\$ 205.00
Algaecides: Granular products to control Chara	\$ 65.00
Algaecides: Granular and liquid products to control algae	\$ 50.00
ProcellaCOR	\$ 110.00/PDU
Water Quality Program (optional):	\$ 50.00/sample
Lily Pad Control	\$ 75.00 /lot

Description and Optional Services:

Weed Treatment: Milfoil, Curly-leaf, Coon-tail, Chara, and various pondweed treatments applying restrictive products such as granular Navigate (2,4-D), Aquathol K, Hydrothol 191, Reward, Renovate, Komeen, Glyphosate, and Cygnet Plus.

Algae treatment: Non-water restrictive algaecides such as Copper Sulfate, Curtain-Plus, Cutrine-Ultra, Chelated Copper, Earthtech, Greenclean, and shade as a tracer. Treatments should occur monthly to prevent existing growth and prevent re-growth. Surrounding conditions (i.e. sunlight, temperature, nutrient concentration, etc...) may require additional treatments.

Muck/Enzyme Treatment: Designed to decrease levels of organic sediment in lakes and ponds while reducing odors and improving water clarity. The pellets sink quickly, targeting 'muck' on the bottom. Mukk Busster does not contain pathogenic bacteria and it is fish and wildlife friendly. Contains 3 billion CFU/gram (Colony-forming units).

Water Quality Program: Water quality program consists of lake samples taken and sent to an independent laboratory (Prein & Newhof). The samples can be tested for a variety of things including; fecal bacteria (E. coli), dissolved oxygen, conductivity, total dissolved solids, pH and alkalinity. Primarily E. coli is the focus.



- Specific treatment dates will be set by Clear Water Lake Management, in cooperation with Rainbow/Middle Lake Board Rep.
- Please be aware Clear Water Lake Management can only treat weeds and algae present at the time of treatment. We have no control over future weed or algae growth based on the current chemicals registered for aquatic use in Michigan.
- Unless otherwise stated in the program, all other aquatic pest control will require a separate program (i.e. cattails, duckweed, largeleaf pondweed, lily pads, purple loosestrife, watermeal, etc...)

Posting & Notifications of Treatment Areas:

Clear Water Lake Management will obtain the DEQ permit and post restriction signs as required. It is your association's/group's responsibility to notify each resident within one hundred (100) feet of the treatment area at least seven (7) days in advance of the first treatment that chemicals will be applied. This notification requirement must be provided to every property owner who has consented to have their property treated. Lake boards and townships who assess the lake property owners are exempt from individual consent documentation. The property owner is responsible for removing any restriction signs ten (10) days after the conclusion of water use restrictions.

Insurance & Liability:

Clear Water Lake Management is responsible for carrying liability insurance and workman's comp for duration of the contract. Clear Water Lake Management is not responsible for fish loss due to low oxygen levels caused by warm water conditions. Certificates of insurance will be provided upon request.

Permits:

Clear Water Lake Management is responsible for completing and submitting the ANC Permit applications to the MDEQ, if necessary. Please make the check payable to the "State of Michigan" and mail to our office with your signed contract. Please notify our office of any inlets or outlets or if the waterbody is being used for irrigation, swimming, bathing and/or livestock watering.

Invoicing & Payments:

Clear Water Lake Management will submit an invoice following treatment. Payment in full is due within ten (10) days of each application. Any amount remaining unpaid when due shall accrue a penalty of 1.5% per month.

Contract Period:

As an incentive to establish a multiple year agreement we will treat your lake or pond at the same price structure as 2024 for 2025! The remaining year (2026-28) will subject to cost increases of three percent per year or less. If total chemical costs exceeds 10% from the previous year a new agreement will have to be mutually acceptable. If during the life of the contract the DNR or other regulatory agencies significantly change the approved treatment procedures or the client finds the manner in which the work is performed less than satisfactory, either party may terminate this agreement upon giving ninety (90) days advance written notice thereof.

All materials utilized by Clear Water Lake Management shall be of the highest quality and are registered with the U.S. Environmental Protection Agency and the Michigan Department of Agriculture.



Contract:

For Rainbow/Middle Lake Representative:

Program Option for Rainbow/Middle Lake:

One (1) Year Program- _____

Three (3) Year Program- _____

Five (5) Year Program- _____

(Just initial your choice)

Name (Print) _____

Title _____

Signature

Address: _____

Phone: _____

Date

(Day): _____

email: _____

(Eve): _____

Clear Water Lake Management, Inc.

By: Mark Harrison
President

Signature

Date



May 30, 2023

Rainbow & Middle Lake Improvement Board
Montcalm County Drain Commissioner
211 W. Main
Stanton, MI 48888

Thank you for allowing PLM to submit a proposal to work on the Rainbow Lake. I am confident that the service you will receive will exceed your expectations. Please feel free to contact any of our references to gain more insight on the services available by PLM. PLM Lake & Land Management Corp. is a Michigan based company with a specific focus of lake management in Montcalm County. We have numerous offices throughout Michigan to serve our customers with the fastest response time and a highly educated and experienced staff with the latest technologies available in aquatics.

The following proposal is for your review for Rainbow Lake for the 2024-2028 seasons with a variety of services available. To highlight a few of the advantages to working with PLM: All billings are post service/treatment with itemized billing details. Reports and follow up information are readily available following service. In addition to any scheduled service, PLM is always available via phone or email for treatment/lake evaluation if something changes unexpectedly. Please review the following proposal and if any changes, additions, or modifications are required to suite your specific program needs, please contact me without hesitation.

Management program for 2024: The primary goal of aquatic plant management in the Rainbow Lake is the control of exotic aquatic plants. The exotic plant species, Eurasian watermilfoil, Curlyleaf pondweed and Starry stonewort (if found), should be controlled throughout the lake. The abundance of these species should be reduced to the maximum extent possible, and efforts should be made to reduce their recovery after treatment.

PLM recommends using a combination of the systemic herbicide ProcellaCOR (new technology) and the contact herbicide Diquat for Eurasian watermilfoil control. This combination has proven to be less costly on an acre basis versus historical systemic herbicides, more effective and will control two invasive species (EWM and Curlyleaf pondweed). Utilizing an effective systemic herbicide like ProcellaCOR will decrease milfoil populations overtime which will in turn reduce associated cost.

Aquatic plant management should preserve species diversity and cover of native plants sufficient to provide habitat for fish and other aquatic organisms. Native plants should be managed to encourage the growth of plants that support the Rainbow Lake fishery (by creating structure and habitat) provided that they do not excessively interfere with recreational uses of the lake (e.g., swimming and fishing) in high-use areas. Where they reach recreational nuisance levels, management techniques that reduce the stature of native plants without killing them (e.g., harvesting, contact herbicides) should be used whenever possible. Specific areas should be set aside where native plants will not be managed, to provide habitat for fish and other aquatic organisms.

Management will also include performing surveys (AVAS surveys when required), pre/post treatment surveys, water quality analysis and algae treatments if required.

Products to be applied: Restrictive products such as Diquat, Renovate, Aquathol K, ProcellaCOR, Flumioxazin, AquaStrike and nonrestrictive products such as copper sulfate, chelated copper products, shade and any new products approved and permitted for use through EGLE.

Unit Cost per acre:

Contact Herbicides:

Diquat	\$180.00 (exotics)
Diquat	\$220.00 (hybrid/natives)
Aquathol K	\$195.00 (exotics)
AquaStrike	\$425.00
Nautique (Eel Grass)	\$385.00
Flumioxazin 100ppb w/Contacts	\$425.00

Systemic Herbicides:

Renovate 3 (liquid)	\$390.00
Renovate OTF (120lb/ac)	\$515.00
ProcellaCOR	\$100.00/PDU

Algaecides:

Chelated copper (max rates)	\$125.00
Copper sulfate/Chelated copper	\$50.00
Copper sulfate, macroalgae	\$65.00
SeClear, filamentous algae	\$200.00
SeClear G, SSW Control	\$375.00

PLM Consulting Services:

Cost per hour of harvesting:	\$300.00 (minimum \$4,000.00)
Vegetation AVAS Survey:	\$450.00 (Optional or biennially)
Spring & Mid-summer, brief check:	No Charge
Water Quality Program	\$650.00
Lake Management Plan Update	\$750.00 (Once every 5 years) (An initial LMP will be drafted after the 2024 season at no charge)
EGLE Permit Fee	\$1,325.00 (both lakes)

Estimated Budget for Rainbow & Middle Lake: Current challenges in our economy have significantly impacted the cost of herbicides for 2024. 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.

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

Type of Management	Estimated Cost
Exotic Plant Control	\$25,000.00 to \$35,000.00
Algae Control (Optional)	\$3,000.00 to \$6,000.00
AVAS Survey	\$450.00
Water Quality Program	\$650.00
Lake Management Plan Update (once every 5 years)	\$750.00
EGLE Permit Application	\$1,325.00

Annual Budget Grand Total: \$31,175.00 to \$44,175.00

Note: This budget is an estimate and can be adjusted to meet the needs of the residents of Rainbow Lake. Any management tool listed is an option and is the suggestion of PLM to meet those expectations. You will only be charged for the actual amount of control required, at the unit per acre prices listed above. The goal of the program would be to reduce the budget over time by successfully managing the Eurasian watermilfoil with systemic herbicides (ProcellaCOR/Diquat combo). All treatments are pending the approval of the Department of Environment, Great Lakes & Energy (EGLE). If native plant control is requested or recommended through the use of herbicides or mechanical harvesting, a new budget may need to be established.

Optional Harvesting Program:

Mechanical harvesting is best suited for nuisance native plant species. Mechanical harvesting can be used to provide relief from native plant species if they are causing a recreational nuisance. Harvesting does not kill the plants, but simply reduces its stature, leaving lower growth for fish habitat and sediment stabilization.

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. Expenses of an unsuitable launch site will be the responsibility of the lake. A representative of the client will be required to periodically evaluate workmanship.

Description of Technical Management Services:

On-site Lake Evaluations: Each time a PLM representative is on Rainbow Lake, to perform a survey, WQ testing, treatment, etc., the following will typically occur: Pre-notice to Lake Representative of schedule (i.e email 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 sampling the deep hole of the lake twice a season, spring and late summer. Parameter 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 tropic status of your lake. The program also tests your water for Fecal bacteria (E. Coli), in mid-summer at three separate locations, which can determine the condition of your lake and if the water is safe for swimming. Reports will be issued annually in the fall.

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 a fall AVAS survey 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 association upon completion with a breakdown of what the survey indicates.

Meeting Attendance/Presentation: A representative of PLM is available to attend association/board meetings upon request. This request has to be made prior to meeting to allow for conflict in representative's 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.

Contract Period:

Multiple Year Treatment Program 2024-2028: As an incentive to establish a multiple year agreement, the unit cost per acre will increase by 5% or less per year. If total chemical cost increases 10% from the previous year, PLM will only pass on the percentage over 10%. If during the life of the contract, EGLE or other regulatory agencies significantly change the approved treatment procedures, either party may terminate this agreement upon giving ninety (90) days advance written notice thereof.

One Year Treatment Program: Pricing is based on the type and the amount of vegetation or algae present at the time of treatment, as well as, the products applied. Unlike the multiple year program, an agreeable price structure is not contracted into a one-year program. Therefore, an increase in the cost of products, labor, or changes made by EGLE or other regulatory agencies may have a drastic effect on the pricing for following years.

Permit Fee: PLM Lake & Land Management Corp. is responsible for completing and submitting aquatic nuisance permit applications. PLM Lake & Land Management Corp. will send an invoice for the yearly EGLE permit application fee. It is your responsibility to send a check made out to the "State of Michigan" to our office prior to the due date. We must include this check with the EGLE permit application. Waterbodies less than 10 acres, with no outlet and single ownership, may be subject to "permit by rule" conditions, therefore not incurring an actual permit fee.

Posting of Treatment Areas: Posting of shoreline treatment areas is the responsibility of PLM Lake & Land Management Corp. and will be conducted according to EGLE regulations. Due to EGLE guideline changes and specific residential concerns, posting fees may apply. Signs will be attached to thick barked trees, posts or other suitable fixtures already on site. If homeowners wish to have signs posted in designated areas or on specific fixtures they must notify PLM Lake & Land Management Corp., providing lake address, location of property, and where the signs are to be posted. Pictures are the most informative way to relay this information. Notification of alternate posting must be made at least 14 days prior to treatment and additional fees may apply. The removal of posting signs after the restrictions have expired is the responsibility of the homeowner.

Notification of Treatments: It is your responsibility to notify each resident within **100 feet** of the treatment area **at least seven days** in advance, **but no more than forty-five days** prior to the first treatment date, that products will be applied to the lake (with a provided list of addresses from the lake board). This notification requirement **must** be administered to each and every property owner within 100 feet of any treatment area. PLM Lake & Land Management Corp. will provide a tentative treatment schedule and the **Notice** of proposed products to be used during the spring of each year.

Non-Target Species: Please be aware that we only control specific weeds and algae **present** at time of treatment. Emergent vegetation (cattails, bulrush, purple loosestrife, lily pads) and beneficial native plants will not be addressed unless specifically mentioned in the management program. We have no control over future weed or algae growth based on the current chemicals registered for aquatic

use in Michigan.

Electronic Treatment Notification: In addition to the above-required notification procedures, the Department of Agriculture allows for electronic notification i.e. email with the contracting entity. Therefore, if the contracting entity is a township, lake board, or municipality, you will also receive the same information that is being distributed to each resident (Posting Sign) prior to the treatment. By signing this agreement with PLM Lake & Land Management Corp and providing us the contracting entity email address, we can legally implement the electronic notification procedure.

Text Message Pre-Treatment Notification: In an attempt to enhance our communication, similar to the electronic notification procedure, PLM can provide pre-treatment communication via text message to contracting entities as well as lake residents prior to treatments. This notification will simply reference the proposed treatment date and will not accept reply text messages. This communication option will only be implemented if the client provides PLM with text message number. Text messaging fees may apply.

Invoicing and Payments: PLM Lake & Land Management Corp. will submit an invoice following treatment that will include the following information; lake and/or pond(s) treated, date of treatment and type of treatment or acres treated. Monies will be due net thirty (30) days after each treatment. The invoice may be subject to a fuel surcharge of up to 3% of the total treatment cost. Interest of 1.25% may be added to your bill for each additional sixty (60) days that payment is not received.

Liability Issues:

We are responsible for workman's compensation and liability insurance for the duration of the contracted period. PLM Lake & Land Management Corp. is not responsible for fish loss due to low oxygen levels caused by winter turnover or during warm water conditions.

Please sign, check multiple or one-year program and return one copy of this proposal as our contract October 15,2023.

For further clarification or modifications please contact.



Jaimee Desjardins, Environmental Scientist
West MI Regional Manager
PLM Lake & Land Management Corp.
616-891-1294 ext 2005

For: Rainbow/Middle Lake Improvement Board

Multiple Year Program _____

One-Year Program _____

Print Name _____

Date _____

Signature _____

Email Address _____