

**MUSKELLUNGE LAKE
LAKE IMPROVEMENT BOARD MEETING
July 21, 2022**

A meeting of the Muskelunge Lake, Lake Improvement Board was held at the Montcalm County Drain Commission, 211 W. Main Street, Stanton, Michigan on the 21st day of July 2022 at 3:30 P.M.

The meeting was called to order by Bob at 3:31p.m.

PRESENT: Bob Pickel – Chairman
Harvey Stark – Abutting Property Owner’s Representative
Todd Sattler – Secretary, Montcalm County Drain Commissioner

ABSENT: Sandy Tiffany – Maple Valley Township Representative
Kathy Bresnahan – Board of Commissioner’s Representative

ALSO

PRESENT: Rick Buteyn – Progressive A&E
Ashley Wrobel – Progressive A&E
Anne Gaylord, Montcalm County Drain Commission
Heather Williams – Montcalm County Drain Commissioner
Estelle Stark - Resident

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

A motion was made by Todd and seconded by Harvey to approve the minutes from August 13, 2020, as presented. Motion carried.

Public Comment

No public comment.

Weed Program Update

Rick provided a treatment update to the board. Two treatments have been completed so far this year. The budget was spent on two treatments this year, but surplus from prior year’s balances will cover the overages in costs. Rick advised that the ProCellacore is doing a good job at controlling and keeping the weeds down. Harvey asked if the lake was seeing multi-year benefits from the ProCellacore as was promised by the manufacturer when they switched to this chemical. Rick stated that the manufacturer originally offered a three-year guarantee but have since stopped since the that has proven to be untrue. Rick is happy with how well it is working compared to the straight Diquat. The lake should only need one more algae touch-up this season.

Financial Update

Todd provided a financial update to the board including a current balance of \$42k. We are still waiting on an invoice for 12k for an algae treatment and an invoice for \$1,625 for the 4th quarter lake consultant fee.

Public Hearing

Rick presented a budget of \$30k to the board. Harvey asked why the budget went from 28k to 30k and how Rick got those numbers. Rick advised that the budget was increased to keep up with rising costs all around and that he came to this number from experience with the applicators. Bob added that he believes that the budget should be increased more to allow for a larger contingency. Rick advised that increasing the budget to 30k is already a 20% increase. Harvey asked about decreasing the budget in future years if too much of a balance is built up. Todd and Rick advised that the budget is set at the beginning of a five-year program and can be decreased in later years, if needed. Harvey asked if the board is happy with the work performed by PLM. Rick stated that he is very happy with their work. They will be increasing chemical prices by 15% this year. The board discussed increasing the budget by an additional 2k for more of a contingency. This would bring the yearly budget to \$32,200.00, which is a 29% increase from the prior budget.

A motion was made by Harvey and seconded by Todd to increase the yearly budget to \$32,200.00. Motion carried

There being no further business to come before the Lake Board, a motion was made by Todd and seconded by Harvey to adjourn the meeting at 4:16 p.m. Motion carried.



Todd Sattler, Secretary
Muskellunge Lake, Lake Board

State of Michigan }
 } ss:
County of Montcalm }

I hereby certify that the foregoing is a true and complete copy of the minutes of a meeting of the Muskellunge Lake, Lake Improvement Board, Montcalm County, Michigan held on July 21, 2022, 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 Muskellunge Lake, Lake Improvement Board.



Todd R. Sattler
Montcalm County Drain Commissioner

MUSKELLUNGE LAKE
LAKE IMPROVEMENT BOARD
MEETING
July 21, 2022
3:30 P.M.

MONTCALM COUNTY DRAIN COMMISSION
211 W. Main Street
Stanton, Michigan

AGENDA

1. Call to Order
2. Approve Agenda
3. Approve Minutes
May 3, 2022
4. Weed Program Update
5. Financial Update
6. Public Hearing
7. Public Comment
8. Adjourn

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

Board Members:
Todd Sattler, Montcalm County Drain Commissioner
Harvey Stark, Abutting Property Owners Representative
Sandy Tiffany, Maple Valley Township Representative
Kathy Bresnahan, Board of Commissioners Representative
Bob Pickel, Chairperson

Muskellunge Lake Finance Sheet 2018 - 2022 (84020)

Thursday, July 21, 2022

Date	Vendor	Description	Expenses	Revenue	Date
10/1/2017		Beginning Balance			\$ 12,322.59
2/1/2018	Progressive AE	Invoice # 166025 4th Quarter Lake Consultants	\$ 1,875.00		\$ 10,447.59
4/12/2018	State of Michigan	2018 Permit Application Fee	\$ 800.00		\$ 9,647.59
4/26/2018	Progressive AE	1st Quarter Lake Consultant	\$ 1,875.00		\$ 7,772.59
5/1/2018	Montcalm County Treasurer	2017 Tax Collection		\$ 25,100.00	\$ 32,872.59
7/19/2018	PLM Lake Management	Algae, Weed & Clipper Treatment	\$ 11,556.95		\$ 21,315.64
7/19/2018	Progressive AE	2nd Quarter Lake Consultant	\$ 1,875.00		\$ 19,440.64
8/23/2018	Montcalm County Treasurer	2018 Annual Administration - Lakes	\$ 1,000.00		\$ 18,440.64
8/23/2018	PLM Lake & Land Management	Algae, Weed & Clipper Treatments 7/19	\$ 2,218.94		\$ 16,221.70
10/4/2018	PLM Lake & Land Management	Weed Treatment 8/23	\$ 1,595.00		\$ 14,626.70
10/18/2018	Progressive AE	4th Quarter Lake Consulting Fee	\$ 1,875.00		\$ 12,751.70
11/15/2018	PLM Lake & Land Management	2018 Permit Application Fee	\$ 800.00		\$ 11,951.70
2/21/2019	PLM Lake & Land Management	2019 DEQ Permit Application Fee	\$ 800.00		\$ 11,151.70
2/28/2019	Progressive AE	1st Quarter Lake Consultant	\$ 1,875.00		\$ 9,276.70
4/18/2019	Progressive AE	2nd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 7,401.70
5/30/2019	Montcalm County Treasurer	2018 Tax Collection		\$ 25,100.00	\$ 32,501.70
6/27/2019	PLM Lake & Land Management	Invoice #194895 Weed Treatment	\$ 798.86		\$ 31,702.84
7/11/2019	Progressive AE	3rd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 29,827.84
7/25/2019	PLM Lake & Land Management	Invoice #195638 Weed Treatment	\$ 10,569.15		\$ 19,258.69
10/3/2019	PLM Lake & Land Management	Innvice #196886 Algae & Milfoil treatment	\$ 2,007.53		\$ 17,251.16
10/10/2019	Progressive AE	4th Quarter Lake Consulting Fee	\$ 1,875.00		\$ 15,376.16
1/17/2020	PLM Lake & Land Management	Reimbursement For Permit Application Fee	\$ 800.00		\$ 14,576.16
1/6/2020	Progressive AE	1st Quarter Lake Consultant	\$ 1,875.00		\$ 12,701.16
3/30/2020	Progressive AE	2nd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 10,826.16
5/28/2020	PLM Lake & Land Management	Weed & Algae Treatment	\$ 2,978.96		\$ 7,847.20
5/31/2020	Montcalm County Treasurer	2019 Tax Collection		\$ 25,100.00	\$ 32,947.20
6/24/2020	PLM Lake & Land Management	Weed & Algae Treatment	\$ 9,562.94		\$ 23,384.26
7/2/2020	PLM Lake & Land Management	3rd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 21,509.26
7/20/2020	PLM Lake & Land Management	Weed & Algae Treatment	\$ 452.21		\$ 21,057.05
8/27/2020	PLM Lake & Land Management	Weed Treatment	\$ 2,173.84		\$ 18,883.21
8/28/2020	Progressive AE	4th Quarter Lake Consulting Fee	\$ 1,875.00		\$ 17,008.21
9/11/2020	Spicer Group	Accounts Support	\$ 50.00		\$ 16,958.21
9/30/2020	Montcalm County Treasurer	Allocations	\$ 348.36		\$ 16,609.85
1/19/2021	Progressive AE	1st Quarter Lake Consultant	\$ 1,875.00		\$ 14,734.85
2/22/2021	State of Michigan	2021 Permit Fee	\$ 800.00		\$ 13,934.85
3/31/2021	Muskellunge Lake	Interest		\$ 67.61	\$ 14,002.46
4/8/2021	Progressive AE	2nd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 12,127.46
4/30/2021	Montcalm County	2020 Delinquent Settlement		\$ 1,176.17	\$ 13,303.63
5/1/2021	Montcalm County	2020 Collected Settlement		\$ 23,923.83	\$ 37,227.46
6/24/2021	PLM Lake & Land Management	06/02/2021 Weed Treatment	\$ 5,087.10		\$ 32,140.36
7/6/2021	Progressive AE	3rd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 30,265.36
7/27/2021	PLM Lake & Land Management	06/22/2021 Algae & Weed Treatment	\$ 1,659.81		\$ 28,605.55
8/27/2021	PLM Lake & Land Management	07/29/2021 Algae & Weed Treatment	\$ 2,836.98		\$ 25,768.57
9/2/2021	PLM Lake & Land Management	08/24/2021 Algae & Weed Treatment	\$ 285.37		\$ 25,483.20
10/7/2021	Progressive AE	4th Quarter Lake Consulting Fee	\$ 1,875.00		\$ 23,608.20
3/3/2022	PLM Lake & Land Management	2022 Permit Application Fee	\$ 875.00		\$ 22,733.20
3/24/2022	Progressive AE	1st Quarter Lake Consultant	\$ 1,875.00		\$ 20,858.20
4/7/2022	Progressive AE	2nd Quarter Lake Consultant	\$ 1,875.00		\$ 18,983.20
5/23/2022	Montcalm County	2021 Collected Settlement		\$ 23,207.84	\$ 42,191.04
5/23/2022	Montcalm County	2021 Delinquent Settlement		\$ 1,892.16	\$ 44,083.20
7/7/2022	Spicer Group	Accounts Support	\$ 32.80		\$ 44,050.40
7/7/2022	Spicer Group	Accounts Support	\$ 41.75		\$ 44,008.65
7/14/2022	Progressive AE	3rd Quarter Lake Consulting Fee	\$ 1,875.00		\$ 42,133.65
		Remaining Balance			\$ 42,133.65

**MUSKELLUNGE LAKE IMPROVEMENT PROGRAM
PROPOSED ANNUAL BUDGET
2023 – 2027**

Improvement	Annual Cost
Aquatic Plant Control	\$20,000
Lake Management Consulting	\$8,000
Administration and Contingency	\$2,000
Total Annual Cost	\$30,000

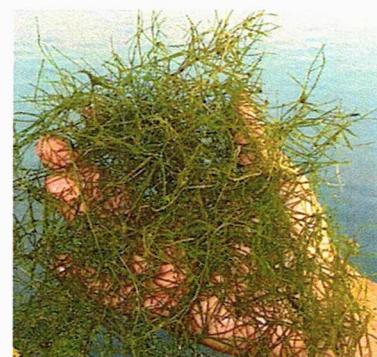
The Muskellunge Lake improvement program will include the select use of aquatic herbicides. The program will focus primarily on invasive species such as Eurasian milfoil, curly-leaf pondweed and starry stonewort.



Eurasian milfoil



Curly-leaf pondweed



Starry stonewort

Lake management services would be provided by the Muskellunge Lake Improvement Board's consultant. The consultant would be responsible for preparing contract documents for the plant control program, conducting GPS-guided surveys of the lake to determine the scope of work to be performed by the plant control contractors, and conducting follow-up surveys to evaluate contractor performance. The consultant would report to the lake board and maintain a written record of the timing, scope, and cost of plant control activities. Consultant administrative services would include periodic attendance at meetings, the review and processing of contractor invoices, and assistance with public hearing proceedings.

Project administration and contingency would be used for lake board administrative expenses, unforeseen project-related expenses, and any direct costs incurred by the Muskellunge Lake Improvement Board.

**MUSKELLUNGE LAKE
MAPLE VALLEY TOWNSHIP
NUISANCE AQUATIC PLANT CONTROL PROGRAM
PROPOSED ANNUAL BUDGET 2023 - 2027
(ASSESSMENT ROLL 2022 - 2026)**

IMPROVEMENT	Annual Cost
Nuisance Aquatic Plant Control	\$20,000
Plant Control Coordination/Field Evaluations	\$ 8,000
Administration and Contingency	<u>\$ 2,000</u>
Total Annual Budget	\$30,000

The primary focus of the plant control program in Muskellunge Lake is to prevent the spread of invasive, exotic plant species with the select use of herbicides. The amount of herbicide use in any given year will depend on the type and distribution of aquatic plants in Muskellunge Lake and Department of Environmental Quality permit conditions.

Plant control activities are proposed to be coordinated under the direction of the lake board's environmental consultant. The consultant would be responsible for preparing bid documents and/or contract extensions for the plant control program, assisting the lake board with the selection of the plant control contractors, conducting GPS-guided surveys of the lake to determine the scope of work to be performed by plant control contractors, and performing follow-up inspections to ensure work is performed in a satisfactory manner. The consultant would report to the lake board regarding the performance of the plant control contractors and would make recommendations to the lake board regarding payment to the contractors.

Project administration would include costs related to legal notices and hearing proceedings, Drain Office Administration, postage, copies, mailings, and meetings. In accordance with Part 309 of the Natural Resources and Environmental Protection Act, Act 451 of 1994, a lake board may add not less than 10% or more than 15% of the total project cost for contingent expenses.

BENEFIT FACTORS

The Special Assessment District for Muskellunge Lake includes all properties which border the lake and back lots which have deeded or dedicated lake access. Special assessments for the project are proposed to be apportioned in the following manner:

<u>Use Factors</u>	<u>Units</u>	<u>Annual Amount</u>
Lakefront lots	1	\$250.53
Back lots with dedicated/deeded access	.5	\$125.26
Trailer condominium site	.5 per unit	\$125.26
Back lots with lagoon frontage	.25	\$ 62.63
Back lots with 5 foot public walkway access	.25	\$ 62.63

Note: Contiguous lots in common ownership are proposed to be assessed as a single parcel provided only one dwelling exists on the parcel. Single parcels with more than one dwelling will be assessed per dwelling.

Project Work Journal
Muskellunge Lake

2022**Beginning Balance: \$16,000.00**

Date	Type	Results
1/3/2022	Permit	2022 Permit Authorization

Application Date	Type	Target Species	Qty	Dose Rate	Cost	Remaining Balance
1/11/2022	Permit Fee		1.00 each		\$875.00	\$15,125.00
				Invoice 3004919	\$875.00	\$15,125.00
				Total		

5/23/2022 Survey Plentiful milfoil and curly, some algae spots. Water: 65 degrees

Treatment Date	Type	Target Species	Qty	Dose Rate	Cost	Remaining Balance
6/2/2022	Flumioxazin and contacts	Curly-leaf Pondweed Eurasian Milfoil	5.75 acre(s)	100.00 ppb	\$2,443.75	\$12,681.25
6/2/2022	Diquat dibromide @ 1 gal/acre	Curly-leaf Pondweed	1.50 acre(s)		\$270.00	\$12,411.25
6/2/2022	Diquat dibromide @ 1 gal/acre + 4 PDU ProcellaCOR	Curly-leaf Pondweed Eurasian Milfoil	2.00 acre(s)		\$1,200.00	\$11,211.25
6/2/2022	Algae control (chelated copper only)		1.00 acre(s)		\$110.00	\$11,101.25
6/2/2022	Diquat dibromide @ 1 gal/acre + 6 PDU ProcellaCOR	Curly-leaf Pondweed Eurasian Milfoil	13.00 acre(s)		\$10,790.00	\$311.25
				Invoice 3005691	\$14,813.75	\$311.25
				Total		

6/28/2022 Survey LJA Survey. Found algae along most of the developed shoreline. Water: 73 degrees.

Treatment Date	Type	Target Species	Qty	Dose Rate	Cost	Remaining Balance
6/30/2022	Algae control (chelated copper only)	Filamentous or Planktonic Algae	10.98 acre(s)		\$1,207.80	(\$896.55)
				Invoice 3006285	\$1,207.80	(\$896.55)
				Total		

MUSKELLUNGE LAKE
MONTCALM COUNTY, MICHIGAN
MAY 23, 2022 TREATMENT MAP

Treatment

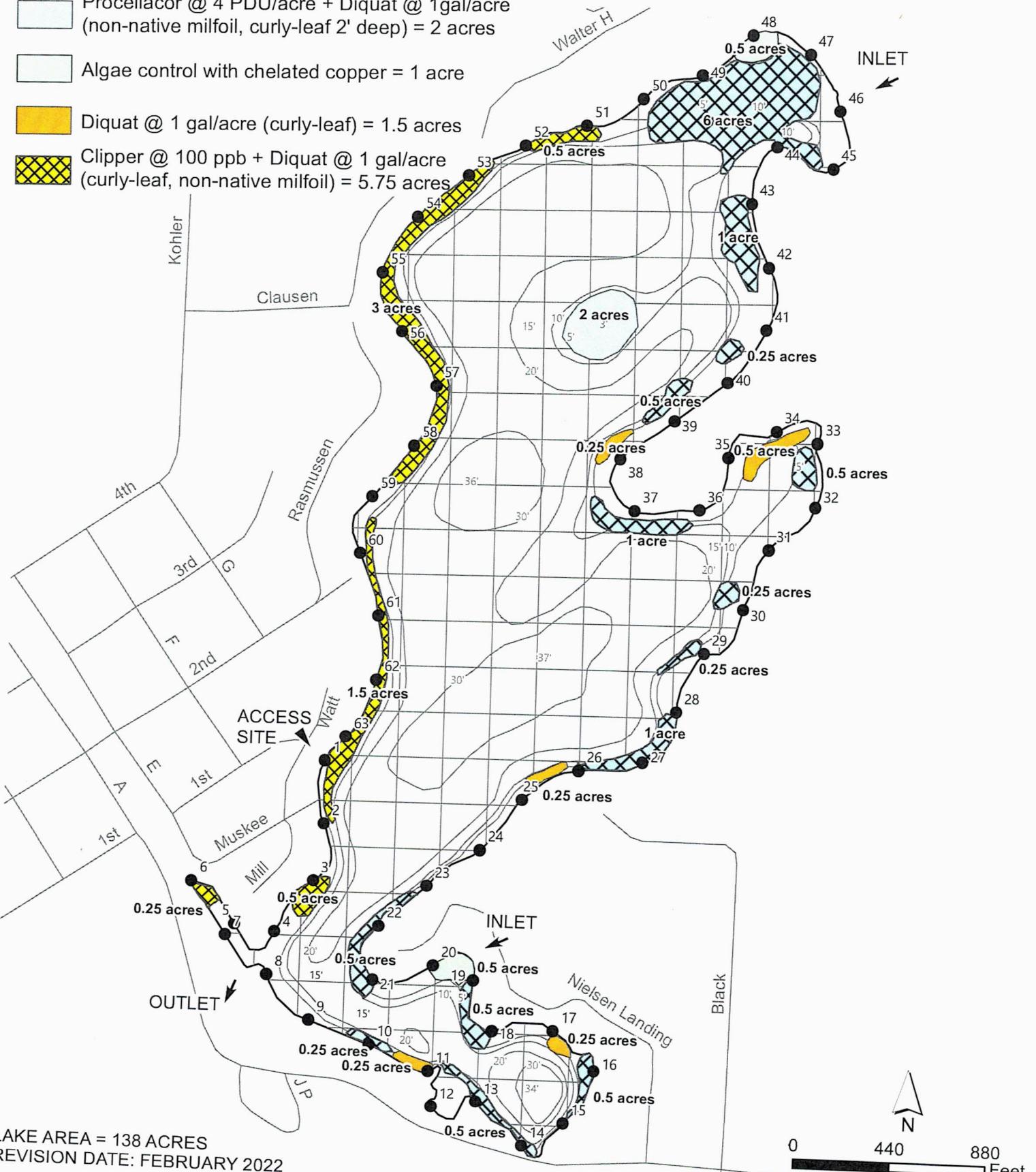
 Procellacor @ 6 PDU/acre + Diquat @ 1gal/acre
(non-native milfoil, curly-leaf) = 13 acres

Procellacor @ 4 PDU/acre + Diquat @ 1gal/acre
(non-native milfoil, curly-leaf 2' deep) = 2 acres

Algae control with chelated copper = 1 acre

Diquat @ 1 gal/acre (curly-leaf) = 1.5 acres

 Clipper @ 100 ppb + Diquat @ 1 gal/acre
(curly-leaf, non-native milfoil) = 5.75 acres



LAKE AREA = 138 ACRES

REVISION DATE: FEBRUARY 2022

The applicator shall make adjustments, if needed, to comply with EGL E permit requirements.

progressive | ae