FOREST LAKE PROPERTY OWNERS' ASSOCIATION
BOARD OF DIRECTORS
MEETING MINUTES
January 27, 2024

I. CALL TO ORDER

Daniel LeFevre/President called the meeting of the Forest Lake Property Owners Association ("FLPOA") Directors to order at 9:00 a.m.

II. ROLL CALL

Board Members Present: Daniel LeFevre ("LeFevre"), Ron Swagman ("Swagman"), James Kelly ("Kelly"), Tracy Reitzloff ("Reitzloff"), Gene Ross ("Ross"), Vito Manzella ("Manzella"), Debra Wojie ("Wojie"), Pat Gordon ("Gordon"), Matthew Winberg ("Winberg")
Board Members Absent: None

III. REVIEW OF PREVIOUS MEETING MINUTES

Moved by Ross, seconded by Kelly, motion carried to approve the December 9, 2023, Meeting Minutes as presented.

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

IV. DIRECTOR REPORTS

Welcome Larry Davis and Sally Mrozinkski.

A. Dam Safety (LeFevre)

i. January 27, 2024, Spillway Report attached hereto – January 9, 2024, meeting, Arenac County Board of Commissioners unanimously rescinded the October 2023 Resolution and re-established the authority/responsibility previously granted to the lake level board. Phase 1 (demolition), Katterman Construction, awaiting Permit. Katterman approved to begin staging area/access road. Phase 2, awaiting bids, asked for one (1) more week. One bidder out of Traverse City was disqualified due to lack of experience, one (1) qualified bidder remaining. Manzella asks if the disqualified bidder could handle the job despite lack of experience. Fisher contracting bid due February 2, 2024. Engineering estimate for construction costs approximately $6,777,000.00, of which $200,000.00 allocated for Phase 1. Upon receipt of Fisher bid, Spicer Group and FLLAB intend to submit request for a grant increase to USDA-NRCS. Current FA grant is $2,822,000.00, based on engineering estimate an additional $1,456,000.00 could be eligible for grant funding. EGLE continues its review of Phase 2 design and a permit as expected Spring/2024. The plan remains to begin Phase 2 spillway reconstruction project upon issuance of a permit and completed by the end of August 2024. Two design issues are being reviewed. GEI indicated $700,000.00 additional funds needed for a filter blanket system at the base of the dam. There is evidence of seepage that could originate from the earthen dam or from ground water from natural springs. To identify the source five (5) monitoring wells were installed at a cost of $70,000.00. The information gathered from these wells may mitigate the need to install the filter blanket and lead to significant project savings or it may substantiate the

need for the filter blanket. GEI raises concerns with water buildup during excavation of the toe of spillway, monitoring wells installed in this area and data will be reviewed.

Larry Davis responds, it must be shown sent out to bid, and reasons provided why was/was not accepted before we can get money. Every month we pay $35,000.00 for the siphon system. A chain must be followed, $475,000.00 /MEDC funds not yet received. Mr. Davis is here today to let the Board know where the project stands, submissions are still necessary, until money coming in, none can go out.

Project Cash Flow – Discussion as to the FLLAB Cash Flow Forecast (attached), total funding sources if there is a $10,500,000.00 budget. Total sources of funding sources $10,800,000.00. Looking into all additional grant funding possibilities. Filter blanket and de-watering could be potential huge expenses. Larry Davis states, looking at $3,500,000.00, we save a lot in interest if we get the SAD tax roll done and placed on to winter taxes this year instead of next. Discussion as to off-water lots versus waterfront lots and property values. 319 waterfront parcels, 1,666 off-water parcels. Full benefit on waterfront lots, ¼ benefit off water lots. Larry Davis believes assessments should be based on acreage, assessing equally for all. Reitzloff expresses concern over a per parcel assessment, as being extremely unfair/burdensome on many. Swagman states the purpose of dam/spillway is a safety issue protecting those downstream/Rifle River. Meaning not only Forest Lake but also the watershed (outside Forest Lake), why are we not including these properties which feed the lake and receive its discharge, why is Forest Lake bearing entire burden? Larry Davis responds because the Rifle River is a natural river, and our Lake was created by developers, making it our responsibility to maintain its safety. Mr. Davis reminds the Board that the government has more than stepped up with grants, as has the county. LeFevre states that the SAD has been legally created and FLLAB held numerous meetings, provided plenty of opportunity to offer input on the creation of the SAD, notices were also mailed, etc. Larry Davis gives examples of assessments and discussion as to potential tax appeals which we want to avoid as they would cause delays. Mr. Davis suggests using acreage calculation with at least 2 classifications 1. waterfront; 2. off lake/back lots, and states this needs to be decided upon as soon as possible to be placed on Winter taxes (providing a year of interest savings). This decision will need to be posted and letters sent to property owners, 10 day period for appeal. Sally Mrozinkski ("SM") believes we should hold a meeting asking for property owner input.

ii. Sample SAD Calculator

iii. Invoices

Moved by Ross, seconded by Kelly, motion carried to approve the following (FLLAB) invoices:
Fisher Contracting, Invoice No. 60682/6 - $31,609.76
Yeo & Yeo, Invoice No. 585635 - $215.00
GEI, Invoice No. 5020371 - $78,517.00
Fisher Contracting, Invoice No. 60744/7 - $29,656.79
FSBR Invoice No. 16884 - $6,587.00
Clark Hill Invoice No. 1392071 - $6,920.00
Yeo & Yeo Invoice No. 586533 - $645.00
GEI Invoice No. 5020686 - $81,548.10

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

Moved by LeFevre, seconded by Wojie, motion carried to approve payment of the following invoices:
Rhoades McKee Invoice No. 404895 - $1,120.00 (FLPOA member response/SAD)
Rhoades McKee Invoice No. 406563 - $1,412.45 (FLPOA member response/SAD)
Rhoades McKee Invoice No. 406929 - $6,375.00 (Lake Level Board/Part 307)

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

Moved by LeFevre, seconded by Winberg, motion carried to publish the FLPOA membership Annual Dues/SAD delinquency list onto the FLPOA website by February 9, 2024

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

B. Legal, Lake Ecology, Fish Stocking, Insurance (Swagman) – Forest Lake 2024 Lakes Management Proposal prepared by Savin Lake Services (attached hereto). Total Invoice - $6,900.00, one-half due now. Includes weed control treatment (to be determined). Propose an open meeting with Savin Lake Services to hold a Q&A. Water quality tested 3 times a year (pollutants/nutrients). Years ago, higher levels of bacteria, currently not an issue and tested regularly.

Moved by Gordon, seconded by Kelly, motion carried to approve payment in the amount of $3,450.00 to Savin Lake Services.

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

C. Campground, Office, Activities (Kelly)

i. SBA loan update: fraud matter, police report filed.

The FLPOA rental property tenant is 10 months delinquent in in payments, a payment plan has been agreed upon. Discussions as to selling the rental property.

D. Parks & Recreation (Reitzloff)

i. Dock Rental Guidelines/Survey – Reviewed FLPOA Boating Guidelines and updating the Dock Rental Application. Dock committee: Reitzloff, Winberg, Kelly. Swagman states Ringneck Park drive/road is in poor condition. Parks survey approved. Parks require minor maintenance issues (playground/picnic table painting at Crane/Whippoorwill).

E. Maintenance (Ross)

Moved by LeFevre, seconded by Manzella, motion carried to approve the expenditure of up to $2,000.00 for Equinox/Dodge Truck tires.

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

F. Security, Communications (Manzella) – Manzella asks if the County is responsible for clearing storm debris left from the cutting/removal of downed trees/branches by FLPOA property owners. Amazing FLPOA community support/assistance during the storm.

G. Refuse, Merchandise (Wojie) - See report attached hereto. Merchandise inventory. Wojie asks as to status of clubhouse rental contract edits, Gordon will inquire. Wojie inquires as to a non-profit raffle license, fund distribution, Kelly has confirmed procedure with the State. Wojie asks if ice fishing participants sign any waiver, consideration of same.

H. Liens & Foreclosures (Winberg) – Ice Fishing Tournament cancelled due to ice conditions; chili cook off will be held February 17, 2024, at 2:00 p.m. in the Clubhouse. Approximately $7,000.00 in past dues have been collected as a result of collection efforts and a parcel being turned over.

I. Clubhouse, Storage Area (Gordon) – Clubhouse served as a warming station, etc. during the storm. Need to determine who will be contacted/notified, holds keys, etc.

V. NEW BUSINESS

A. Feedback from Rhoades McKee letter addressing the legality of the July 2021 Special Assessment.

B. Annual Dues Vote.

i. Written Notice to all Members – Ballot mailing to go out with cover letter.

Moved by LeFevre, seconded by Gordon, motion carried to approve mailing the letter/ballot notice to every FLPOA property owner.

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

ii. Update on total votes received to date - 267 ballots received totaling 560 votes, 69.46% in favor.
iii. Timing of the ballots cast and final count.
iv. Campaign to encourage voter participation. Finished phone campaign for January and will do it again in February.

C. FLPOA Board of Director Terms (for reference only)

i. Expiring 7/2024: Swagman, Wojie, LeFevre, Gordon and Winberg.
ii. Expiring 7/2025: Reitzloff, Manzella
i. Expiring 7/2026: Ross and Kelly
ii. BOD Nominations for 2024 Annual Meeting open from 4/1/2024 – 4/14/2024
iii. BOD Nominees must accept by 5/1/2024

VI. SCHEDULE OF UPCOMING MEETINGS:

a. February 10, 2024 at 9:00 a.m. (changed to February 17, 2024)

b. March 9, 2024 at 9:00 a.m. (open to all members)
c. April 13, 2024 at 9:00 a.m.
d. May 11, 2024 at 9:00 a.m. (open to all members)
e. June 8, 2024 at 9:00 a.m.
f. July 13, 2024 at 9:00 a.m. (Annual Meeting)
g. July, 2024, newly elected Board organization meeting TBD)

Moved by LeFevre, seconded by Manzella, motion carried to approve retaining attorney Patrick Drueke/Rhoades McKee as FLPOA counsel going forward.

Voting Yes: LeFevre, Swagman, Kelly, Reitzloff, Ross, Manzella, Wojie, Gordon, Winberg
Voting No: None

VII. ADJOURNMENT

Adjourned at 12:38 p.m.

Tracy L. Reitzloff, Secretary
Approved: March 9, 2024

Forest Lake Spillway Report
January 27, 2024
By: Dan LeFevre

- **FLLAB:** On January 9, 2024 the Arenac County Board of Commissioners unanimously passed motions to rescind the October 24, 2023 resolution (which caused a great deal of confusion and concern) and re-established the authority and responsibility previously granted to the lake level board. A huge thank you goes out to the large group of concerned parties that acted on the behalf of the parcel owners in the Special Assessment District. We are back in business!
- **Phase 1 Status:** Katterman Construction has been retained by FLLAB to clear debris from the damaged section of the spillway and stabilize the flow of runoff water through the Wells Creek basin toward the Rifle River. They have begun mobilizing equipment and establishing a staging area. EGLE is finalizing administrative review of the downstream runoff HECRAS model, and issuance of a work permit is expected shortly thereafter. Once started, the work is expected to be completed in approximately 60 days.
- **Phase 2 Status:** The Fisher Contracting construction bid is due February 2nd. The engineering estimate for construction costs was $6.777 million, of which about $200,000 was for phase 1. Upon receipt of the Fisher bid, Spicer Group and FLLAB intend to submit a request for a grant increase to USDA-NRCS. The current FA grant is $2.822 million. Based on engineering estimates an additional $1.456 million could be eligible for grant funding. The requested increase will be finalized upon receipt of the Fisher bid. Concurrently, EGLE continues their review of the Phase 2 design, and a permit is expected in the spring. The plan remains to start the Phase 2 spillway reconstruction project upon issuance of a permit and complete by the end of August 2024

  Two substantive design issues are actively being reviewed. First, several weeks ago GEI introduced the possible need for a ~$700k filter blanket system at the base of the dam on the non-lakefront side. There is evidence of seepage in this area that could originate from the earthen dam or from ground water from natural springs. To identify the source five monitoring wells were installed at a cost of ~$70,000. The information gathered from these wells may mitigate the need to install the filter blanket and could lead to a significant project savings or substantiate the need for the filter blanket. Secondly, GEI raised concerns with water buildup during excavation of the toe of the spillway. Monitoring wells were also installed in this area and the data from all of the wells are actively being reviewed. The water issues are complex, but we have had productive dialogue, and we are working toward the most appropriate solution.

Forest Lake Board Report

1-26-2024

D. Wojie

Refuse: Nothing new to report

Merchandise: I will be doing a physical inventory of all the merchandise soon. I will also be putting in an order for summer merchandise too. I am hoping to get something the has the spillway rebuilding dates on it.

Additional Questions:

1. Where do we stand with the clubhouse rental contract.
2. Did your lawyer ever weigh in on where Forest Lake can use its nonprofit status to take out a raffle license and then give the funds to an individual?

Sample SAD Calculator
FLLAB

1/26/2024

SAD Amount	$ 2,840,000
Bond Interest Rate	4.00%
Bond Term (Years)	20

Only change these two inputs, and the bond amount on the Bond Amortization tab

Parcel Type	Number of Parcels	Benefit Factor	Contributing Parcels in Whole #'s	Base Assessment	Total Assessment per Parcel	Annual Assessment per Parcel	Aggregate Assessments from Parcel Type
Water Front	337	1.00	337	$3,640	$3,640	**$268**	$1,226,632
Off Water	1,773	0.25	443	$3,640	$910	**$67**	$1,613,368
	2,110		780				**$2,840,000**

Other Prospective Factors

Any impact of one owner with multiple parcels?

Any impact for vacant off water parcels?

Any impact for homestead/non-homestead?

Forest Lake Level Authority Board

Cash Flow Forecast

WORKING DRAFT - updated 1/15/2024 - w/out NRCS increase

Actual and Forecast

	Commitment/ Budget	Actual thru September	Actual October	Actual November	Actual December	January	February	March	April	May	June	July	August	September	Total Project	Actual vs Committed/ Budget
	Actual 2023					Forecast 2024										
Deposits																
Forest Lake POA	$ 654,946.00	$ 654,946.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 654,946.00	$ -
MEDC Grant - $800,000	800,000.00	400,000.00	-	-	-	-	-	400,000.00	-	-	-	-	-	-	800,000.00	400,000.00
EGLE Grant - $2,320,000	2,320,000.00	-	-	-	-	-	-	-	-	359,398.00	964,054.50	844,402.05	-	-	2,320,000.00	2,320,000.00
NRCS/USDA - Financial - $2,822,963	2,822,963.00	436,732.55	-	220,995.00	-	-	-	-	137,625.00	100,125.00	752,539.50	752,539.50	122,346.45	-	2,822,963.00	2,195,175.45
NRCS/USDA - Technical - $376,395	376,395.00	376,395.00	-	-	-	-	-	-	-	-	-	-	-	-	376,395.00	-
Chippewa Indian Tribe Grant - $50,000	50,000.00	-	-	-	-	-	-	-	50,000.00	-	-	-	-	-	50,000.00	50,000.00
FL Special Assessment Bond - proposed	3,500,000.00	-	-	-	-	-	-	-	3,500,000.00	-	-	-	-	-	3,500,000.00	3,500,000.00
MI Department of Treasury PA 166	288,042.00	182,491.22	-	29,431.00	-	-	-	-	74,119.78	-	-	-	-	-	286,042.00	74,119.78
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total deposits	10,810,346.00	2,050,624.77	-	250,426.00	-	-	-	400,000.00	3,761,744.78	459,523.00	908,051.50	1,360,591.00	1,497,038.50	122,346.45	10,810,346.00	8,569,295.23
Disbursements																
Phase I - downstream stabilization	317,000.00	-	-	-	-	-	153,500.00	133,500.00	-	-	-	-	-	-	317,000.00	317,000.00
Phase II - NRC eligible *	5,413,542.00	-	-	-	-	-	-	-	400,000.00	1,003,386.00	1,003,386.00	1,003,386.00	1,003,386.00	1,000,000.00	5,413,542.00	5,413,542.00
Phase II - NRC ineligible **	360,000.00	-	-	-	-	-	-	-	-	72,000.00	72,000.00	72,000.00	72,000.00	72,000.00	360,000.00	360,000.00
Engineering design and permit	810,636.25	429,205.90	-	181,144.00	200,602.40	(45,315.75)	15,000.00	15,000.00	15,000.00	-	-	-	-	-	810,636.25	(115.75)
Engineering and construction observation	721,693.00	-	-	-	-	-	-	-	120,282.00	120,282.00	120,282.00	120,282.00	120,282.00	120,283.00	721,693.00	721,693.00
Contingency	1,443,386.00	-	-	-	-	-	10,000.00	10,000.00	259,398.00	285,205.00	285,205.00	285,204.00	285,204.00	23,170.00	1,443,386.00	1,443,386.00
Siphon system - repair	853,343.40	853,343.40	-	-	-	-	-	-	-	-	-	-	-	-	853,343.40	-
Siphon system - rental	451,568.67	144,860.93	-	29,265.00	31,114.26	27,882.34	27,882.34	27,882.34	27,882.34	27,882.34	27,882.34	27,882.34	27,882.34	23,267.75	451,568.67	246,326.48
Pre-phase I and II engineering	197,068.22	197,068.22	-	-	-	-	-	-	-	-	-	-	-	-	197,068.22	-
Accounting Fees	25,000.00	-	-	1,720.00	5,268.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,012.00	25,000.00	18,012.00
Bond expense	28,800.00	-	-	-	12,800.00	-	-	-	3,000.00	3,000.00	-	-	-	-	28,800.00	16,000.00
Legal Fees	72,542.43	18,542.43	775.00	14,872.00	11,809.50	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	2,443.50	72,542.43	24,443.50
Total disbursements	10,494,577.97	1,443,020.58	775.00	227,101.00	261,594.16	(12,433.41)	241,382.34	199,382.34	835,562.34	1,513,755.34	1,513,755.34	1,513,753.34	1,513,753.34	1,243,176.26	10,494,577.97	8,947,061.23
Net cash flow surplus (deficit)	$ 315,768.03	$ 607,604.19	$ (775.00)	$ 23,325.00	$ (261,594.16)	$ 12,433.41	$ (241,382.34)	$ 200,617.66	$ 2,926,182.44	$ (1,054,232.34)	$ (605,703.84)	$ (153,162.34)	$ (16,714.84)	$ (1,120,829.81)	$ 315,768.03	
Beginning cash balance		$ -	$ 607,604.19	$ 606,829.19	$ 630,154.19	$ 368,560.03	$ 380,993.44	$ 139,611.10	$ 340,228.76	$ 3,266,411.20	$ 2,212,178.86	$ 1,606,475.02	$ 1,453,312.68	$ 1,436,597.84		
Net cash flow surplus (deficit)		607,604.19	(775.00)	23,325.00	(261,594.16)	12,433.41	(241,382.34)	200,617.66	2,926,182.44	(1,054,232.34)	(605,703.84)	(153,162.34)	(16,714.84)	(1,120,829.81)		
Ending cash balance, excluding $150,000 PA 166 advance		$ 607,604.19	$ 606,829.19	$ 630,154.19	$ 368,560.03	$ 380,993.44	$ 139,611.10	$ 340,228.76	$ 3,266,411.20	$ 2,212,178.86	$ 1,606,475.02	$ 1,453,312.68	$ 1,436,597.84	$ 315,768.03		

Notes:

* *NRC eligible costs*

General conditions	$ 525,000.00
Site Preparation and Restoration	1,575,000.00
Demolition of Existing Structures	11,500.00
New Discharge Chute	2,541,692.00
Discharge Channel	760,350.00
Total Phase II - NRC eligible	$ 5,413,542.00

** *NRC ineligible costs*

Modifications to Existing Inlet Structure	$ 350,000.00
Fish Barrier	- *not included, to be determined if necessary, if so, then $735,000*
Total Phase II - NRC ineligible	$ 350,000.00

Forest Lake Level Authority Board

Cash Flow Forecast

WORKING DRAFT - updated [illegible] - with NRCS [illegible]

	Commitment/ Budget	Actual thru September (2023)	Actual October (2023)	Actual November (2023)	Actual December (2023)	January (2024 Forecast)	February	March	April	May	June	July	August	September	October	November	Total Project	Actual vs Committed Budget
Deposits																		
Forest Lake POA	$ [illegible]	$ [illegible]	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ [illegible]	$ -
[illegible] Grant - $[illegible]	[illegible]	[illegible]	-	-	-	-	-	400,000.00	-	-	-	-	-	-	-	-	[illegible]	[illegible]
[illegible] Grant - $[illegible]	2,320,000.00	-	-	-	-	-	-	-	-	[illegible]	[illegible]	[illegible]	[illegible]	-	-	-	[illegible]	[illegible]
NRCS/USDA - Financial - $[illegible]	[illegible]	[illegible]	-	[illegible]	-	-	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
NRCS/USDA - Technical - $[illegible]	[illegible]	[illegible]	-	-	-	-	-	-	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]
Chippewa Indian Tribe Grant - $[illegible]	[illegible]	-	-	-	-	-	-	-	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]
FL Special Assessment Bond - proposed	[illegible]	-	-	-	-	-	-	-	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]
[illegible] Department of Treasury PA [illegible]	[illegible]	[illegible]	-	[illegible]	-	-	-	-	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]
Interest income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total deposits	[illegible]	2,050,[illegible]	-	250,[illegible]	-	-	-	400,000.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	752,534.75	[illegible]	[illegible]	[illegible]
Disbursements																		
Phase I - [illegible]	[illegible]	-	-	-	-	-	183,500.00	[illegible]	-	-	-	-	-	-	-	-	[illegible]	[illegible]
Phase II - NRC eligible *	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]	1,034,348.00	[illegible]	[illegible]	[illegible]	-	-	[illegible]	[illegible]
Phase II - NRC ineligible **	[illegible]	-	-	-	-	-	-	-	-	72,000.00	72,000.00	[illegible]	[illegible]	[illegible]	-	-	[illegible]	[illegible]
Engineering design and permit	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]
Engineering and construction observation	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]	[illegible]
Contingency	[illegible]	-	-	-	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]	[illegible]
Siphon system - repair	[illegible]	[illegible]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	[illegible]	-
Siphon system - rental	[illegible]	[illegible]	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]	[illegible]
Pre-phase I and II engineering	[illegible]	[illegible]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	[illegible]	-
Accounting Fees	[illegible]	-	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]	[illegible]
Bond expense	[illegible]	-	-	-	[illegible]	-	-	[illegible]	[illegible]	-	-	-	-	-	-	-	[illegible]	[illegible]
Legal Fees	73,542.43	18,542.43	775.00	14,872.50	11,808.50	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	2,443.50	-	-	[illegible]	[illegible]
Total disbursements	10,484,577.87	1,443,020.58	775.00	227,101.50	281,584.19	(12,483.41)	241,382.34	[illegible]	[illegible]	1,513,753.34	1,513,753.34	1,513,753.34	1,513,753.34	1,243,176.26	-	-	[illegible]	[illegible]
Net cash flow surplus (deficit)	$ [illegible]	$ [illegible]	$ (775.00)	$ 23,325.20	$ (281,584.19)	$ 12,483.41	$ (241,382.34)	$ [illegible]	$ 1,477,778.44	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ 752,534.75	$ 74,212.85	$ [illegible]	
Beginning cash balance		$ -	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]		
Net cash flow surplus (deficit)		[illegible]	(775.00)	[illegible]	[illegible]	12,483.41	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	752,534.75	74,212.85		
Ending cash balance, excluding $[illegible] PA [illegible] advance		$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]	$ [illegible]		

Notes:

* NRC eligible costs	
[illegible]	$ 525,000.00
[illegible]	1,575,000.00
[illegible]	11,500.00
[illegible]	2,[illegible]
[illegible]	7[illegible]
Total Phase II - NRC eligible	$ [illegible]

** NRC ineligible costs		
[illegible]	$ 380,000.00	
[illegible]	-	not included, to be determined if necessary, if so, then $[illegible]
Total Phase II - NRC ineligible	$ 380,000.00	

Forest Lake
2024 Lakes Management Proposal

Prepared for:
Forest Lake Property Owners Association

Prepared by

Savin Lake Services, Inc.

3088 Hottis Road
Hale MI. 48739
(989) 728 -2200
lakeandpond.com

January 15th, 2024

Forest Lake Property Owners Association
Attn: Mr. Ron Swagman
6180 Bobcat Trail
Alger, MI 48610

Mr. Swagman

Savin Lake Services is a licensed and insured fully integrated lakes management firm offering multiple mitigation solutions to improve the overall health, aesthetics and/or recreational use of lakes all throughout Michigan. We offer both mechanical and herbicide control methods to manage nuisance aquatic plants. In addition to aquatic plant management, we also offer multiple types of lake studies and consulting services, phosphorus mitigation solutions, lake aeration systems, lake dredging, and bacterial augmentation options for our customers. Currently, we are the only lake management company in Michigan utilizing drones equipped with GPS rate-controlled liquid and granular herbicide applications systems, mapping software, and obstacle avoidance features. With their versatility and integrated technologies features, drone technology is the future of aquatic and terrestrial plant management.

Savin Lake Services Inc. has been servicing Michigan's lakes and ponds for over (25) years. We currently provide our services on over (75) lakes & (225) ponds in Michigan. The lakes that we currently have under contract range in size from 10 acres to 2,500 acres. Our solid reputation speaks for itself. We are known for a high level of quality service, and we have a strong commitment to customer satisfaction.

We are members of the Tawas Area and West Branch Chambers of Commerce and are an A+ Accredited Member of the Better Business Bureau of Michigan. We are also long-term members and sponsors of the Michigan Lakes & Streams Association, the Midwest Aquatic Plant Management Society, the Michigan Aquatic Managers Association, and the Aquatic Ecosystem Restoration Foundation.

We are pleased to offer the following proposal, company profile, and references, for your consideration. If you have any questions regarding the following proposal, please feel free to contact us at any time.

Sincerely,

Eric Largent – Sales and Market Development Manager
Savin Lake Services Inc.

Scope of Work to be Performed

General Information

Savin Lake Services will provide background information on Forest Lake. Various surveys will be performed, such as utilizing mapping software, visual surveys, etc, in order to provide an accurate depiction of the current state of Forest Lake, which will be very beneficial following the spillway failure. We'll be looking at the entire watershed, as well as the specifics of your lake, and if there's anything that makes it unique from most other lakes in Michigan. While the property owner's association may already know this information, it can be beneficial to any newcomers that view the final report as well as comparing historical information from before the spillway failure.

Aquatic Vegetation

A comprehensive vegetation assessment is a great way to get an understanding of the aquatic plant species in your lake as well as their distribution and abundance. Aquatic Vegetation Assessment Surveys (AVAS) are completed during late summer when emergent and submerged vegetation are fully grown. The data received from this assessment will provide a complete inventory of the plant diversity/species richness and their distribution in the lake that can be represented on a map for reporting purposes. In addition to the AVAS survey, we will also provide accurate bathymetric (depth contour), biovolume (vegetation density), and bottom hardness maps.

Once completed, Savin Lake Services will provide a 'status of the invasive species' in Forest Lake as well as recommendations to address current lake conditions to meet future management goals. Savin Lake Services are a fully integrated lakes management firm that can provide herbicide applications, mechanical harvesting, aeration systems, dredging operations, and other lake management strategies. Therefore, Savin Lake Services will provide recommendations for the best management practices that will meet your goals in the most cost-effective, efficient, and unbiased manner.

Water Quality

Samples will be collected in spring and late summer at different locations in the lake. Spring samples capture the water quality in the lake during a time when the water column is mixed (uniform) as opposed to the late summer when inland lakes typically stratify. Additionally, we will be collecting water quality samples from each of the inlets that flow into the lake. These samples will be analyzed so that results can be included in the water quality report.

The parameters being sampled are alkalinity, pH, dissolved oxygen, total phosphorous and free reactive phosphorus, Nitrates and Total Kjeldahl Nitrogen, ammonia, chlorophyll-a and algae identification, bacteria (E. coli), conductivity, turbidity, total suspended solids and total dissolved solids, sediment sample analysis, and Secchi disk transparency.

Once Savin Lake Services have all of the water quality data collected, we will be able to classify the lake's trophic status and report on the status of nutrient levels in the lake. Savin Lake Services will also compile the collected results with historical sampling data to provide trending analysis for each water quality parameter that data is available. If a concern is identified, we will the provide best management practices that will mitigate the specific concern. Methods and plans for phosphorus mitigation will be evaluated to address eutrophication concerns.

Evaluation of Additional Lake Management Strategies

Savin Lake Services will evaluate and provide recommendations for additional lake management strategies including:

Dredging

Savin Lake Services typically recommend dredging in areas where sediment has accumulated to the point that it is impairing recreational use of the waterbody. Additionally, dredging material that contains high amounts of nutrients will further benefit lake health. This involves removing the accumulated sediment and disposing it at in a state approved holding cell located nearby.

Aeration

Aeration is recommended in waterbodies that either have low dissolved oxygen, poor mixing, soft bottoms with high concentrations of organic matter, or some combination of the three. Aeration systems can greatly enhance bacterial decomposition of organic sediment (Muck) and offers great benefits to a lake's water quality. Integrating an aeration system in the low energy areas of Forest Lake will offer many long-term water quality benefits. Although adding aeration does not provide the immediate removal of the organic sediment on the lake bottom like dredging does, by adding diffused aeration to these areas it will increase the decomposition rate and slow the rate of further accumulation of organic sedimentation in the bottom of the lake which will prolong the need for further dredging of the lake in the future.

Bacterial Augmentation

This is used in conjunction with aeration in waterbodies with high concentrations of organic matter. Naturally occurring bacteria in your lake currently work to break down that organic matter. These treatments are completed by adding microbial pellets that produce enzymes and additional colony forming bacteria to digest the organic sediment. Overtime an aeration system coupled with bacterial augmentation treatments should mitigate additional sediment accumulation and overtime could result in a reduction in organic sediment.

Best Management Practices

In addition to the services Savin Lake Services provide, we'll talk you through several things that property owners around the lake can do to ensure that they are not negatively contributing to water quality in the lake and help slow the spread of invasive species both within the lake and regionally.

Project Pricing – FLPOA

Savin Lake Services is pleased to offer the above lake management proposal for Forest Lake for a firm fixed cost. There are no "hidden costs", Savin Lake Services will not charge additionally for telephone conversations, meeting attendance, or an hourly rate for our staff. Those items are part of our standard operating philosophies.

2024 Lake Management Plan as described above.....$ 6,900.00

PAYMENT TERMS:

½ down, ½ with final lake management plan submission (December 2024).

AGREEMENT ACCEPTANCE

If the above proposal meets your needs, please sign below indicating your acceptance, and return to us at your earliest convenience. If you have any questions – please feel free to contact us at a time.

Sincerely,

Eric Largent – Sales and Market Development Manager
Savin Lake Services Inc.

_____ _____

Mr. Ron Swagman Date
Forest Lake Property Owners Association Board – Vice President

SAVIN LAKE SERVICES – COMPANY PROFILE

Savin Lake Services has been managing lakes and ponds in Michigan since 1995. The business was originally started as Rustin Lake & Pond Service by Dennis Rustin and was based in the Clare, Michigan area. Guy Savin purchased the company in 2004 and moved the main office location to Hale, Michigan. The business has grown over thirty (30) times the original size in the past 20 years. Savin Lake Services mission statement is simple. We truly believe that we are "Preserving our Lakes Today, for Our Generations Tomorrow".

Savin Lake Services' main office location is based in Hale, Michigan, and our work is located all over Michigan. Although we have only a single main office location – Savin Lake Services has been successful in managing lakes all over Michigan very well. We disperse our lakes management crews to a geographic location in Michigan and they remain in that area (typically staying in hotels) until all work in that area is completed. We feel that this philosophy allows us to service our lakes well, without adding the additional overhead associated with multiple locations. Savin Lake Services currently employs (12) commercially certified applicators, and (6) additional team members.

Savin Lake Services utilizes technology in our company that is not available with any other aquatic management company in the state of Michigan. Our GPS technology not only controls the application rate of the products that we apply to lakes, but our GPS technology also allows us to ensure that we are neither overlapping nor missing areas on your lake. We can also provide you with an application report generated from our GPS system, so that you know exactly where we have applied herbicide products to a lake, for each application that we perform utilizing our GPS enabled boats. Savin Lake Services also provides mechanical removal (harvesting) of submerged aquatic vegetation utilizing our own fleet of vegetation harvesters, and our vegetation harvesters are equipped with GPS guidance systems so that we can ensure that we do not miss areas of harvesting on your lake.

We have built our business based on servicing our customers well, and our location will allow us to respond to any issues or concerns that may arise at the Forest Lake Property Owners Association within a (2) day timeframe. Our solid reputation speaks for itself. We are known for a high level of quality service, and we have a strong commitment to customer satisfaction.

The products that we use for aquatic nuisance weed control are of the highest quality and used in the safest manner possible. All the products are registered by the Federal EPA (Environmental Protection Agency) and controlled by the Michigan EGLE. The required permits are issued by the Michigan EGLE, and Savin Lake Services will manage the application for these permits (at no additional charge). Savin Lake Services is licensed by the State of Michigan and carries all required insurances. License and insurance will remain in effect to cover the entire treatment season. All the employees of Savin Lake Services are well trained and hold commercial certifications.

SAVIN LAKE SERVICES PROFESSIONAL STAFF:

Guy B. Savin, IV – President

Specialties: Lake management services, aquatic vegetation control, corporate strategic planning, full-lake aeration specialist, pond design and development. Education: B.S. Business Administration, Northwood University. Guy Savin has been involved with lake management for over twenty (20) years and as president he leads his team growing the business, attending trade conferences, and keeping current with regulations and lake management technologies.

Eric Largent – Sales and Market Development Manager

Specialties: Lake and pond management services, aquatic and terrestrial vegetation control, project management, and fountain and aeration specialist. Eric Largent has been Certified Herbicide Applicator (including Category V and Category VI) for over 15 years and in that time, he has gained a vast amount of hands-on experience in all fields of services that we offer. Eric handles all new project sales and requests for quotes. Eric attends and has completed numerous classes, trade conferences, and sales/service training seminars to further his education and stay up to date on the latest technologies and changes in the industry.

Matt Novotny – Environmental Scientist/Operations Manager

Specialties: Certified Herbicide Applicator (including Category V and Category VI), water quality technician, and ecological Studies. Education: B.S. Geochemistry, Western Michigan University. Matt has a wide variety of environmental knowledge obtained through his degree at Western. He heads up our water quality division. Matt's versatility allows him to be a part of many aspects of Savin Lake Services. As Operations Manager, Matt oversees daily operations to ensure tasks are completed in a safe and timely manner, within budget, and meet or exceed company standards. Matt is also responsible for coordinating project details, staff and resource scheduling, skills and safety training, annual follow-up treatment reporting, required posting, and our GPS technology equipped boats.

Contact Information

Savin Lake Services Inc.
3088 Hottis Rd.
Hale, MI 48739
(877)-SAV-LAKE (877-728-5253)
(989) 728-2200 Fax: (989) 516-5900

guysavin@lakeandpond.com
ericlargent@lakeandpond.com
mattnovotny@lakeandpond.com

Liability Insurance and Licenses:

ACORD **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY): 10/05/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Diebold Insurance Agency 917 W Houghton Ave PO Box 188 West Branch MI 48661	CONTACT NAME: Jackie Rachow PHONE (A/C, No, Ext): (989) 345-0200 FAX (A/C, No): (989) 345-0232 E-MAIL ADDRESS: jackie@dieboldinsurance.com
INSURED Savin Lake Services, Inc, DBA: Alcona Dredge 3088 Hottis Road Hale MI 48739	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: Navigators INSURER B: All America — 20222 INSURER C: Retailers Mutual Insurance Co INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 23 to 24 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

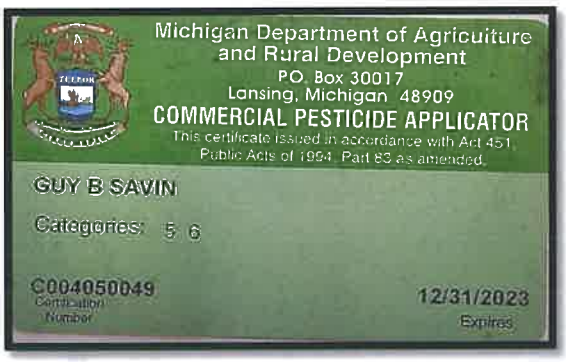
INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			NY23MPKZ0211J01	05/01/2023	05/01/2024	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Product - Completed	$ 1,000,000 $ 50,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ $ 1,000,000
B	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			BAP 9684314	05/01/2023	05/01/2024	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Uninsured motorist	$ 1,000,000 $ $ $ 3,000 $ 1,000,000
A	UMBRELLA LIAB X EXCESS LIAB DED X RETENTION $ 25,000			NY23LIAZ0AK1901	05/01/2023	05/01/2024	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: Y If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WCP00012185	12/15/2022	12/15/2023	PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 2,000,000 $ 2,000,000 $ 2,000,000

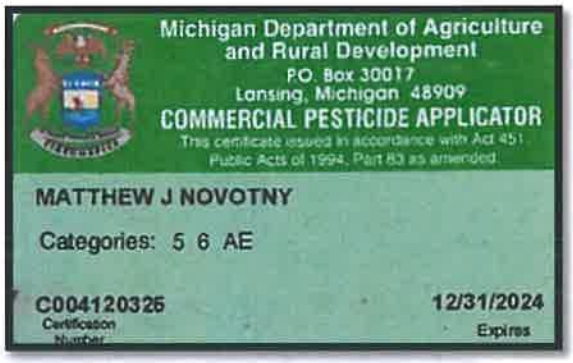
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER	CANCELLATION
Insured's Copy - Reference Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

(Commercial Pesticide Applicator License):


Michigan Department of Agriculture and Rural Development
P.O. Box 30017
Lansing, Michigan 48909
COMMERCIAL PESTICIDE APPLICATOR
This certificate issued in accordance with Act 451, Public Acts of 1994, Part 83 as amended.
GUY B SAVIN
Categories: 5 6
C004050049
Certification Number
12/31/2023
Expires


Michigan Department of Agriculture and Rural Development
P.O. Box 30017
Lansing, Michigan 48909
COMMERCIAL PESTICIDE APPLICATOR
This certificate issued in accordance with Act 451, Public Acts of 1994, Part 83 as amended.
MATTHEW J NOVOTNY
Categories: 5 6 AE
C004120325
Certification Number
12/31/2024
Expires

(MDARD Pesticide Application Business License):


PI-079 (07/03)

Michigan Department of Agriculture & Rural Development
Pesticide and Plant Pest Management Division
Pesticide Application Business License

License No: 650006
Issue Date: 01/26/2023
Expiration: 12/31/2023

Issued To:

SAVIN LAKE SERVICES, INC.
3088 HOTTIS RD.
HALE, MI 48739-
Category(ies): 5, 6

Mailing Address:

SAVIN LAKE SERVICES, INC.

3088 HOTTIS RD.
HALE, MI 48739-

PAB

KATHLEEN ANGERER
Acting Director of Agriculture

This license is issued in accordance with the provisions of Act451, Part 83, PA of 1994, as amended & is only valid for the establishment, address, and categories listed above. Categories with an (*) are RESTRICTED (see back). This license is not transferable.

SAVIN LAKE SERVICES EQUIPMENT LIST

BOATS

	Length	HULL	TYPE	USE	Propulsion
1	12 FT.	ALUMINUM	FLAT BOTTOM	POND MAINTENANCE	8HP MERCURY OUTBOARD
2	12 FT.	ALUMINUM	FLAT BOTTOM	POND MAINTENANCE	9.9 MERCURY OUTBOARD
3	14 FT.	ALUMINUM	FLAT BOTTOM	LAKE/POND MANAGEMENT	15HP MERCURY OUTBOARD
4	14 FT	ALUMINUM	SEMI V	LAKE/POND MANAGEMENT	25 HP HONDA OUTBOARD
5	16 FT.	FIBERGLASS	CAROLINA SKIFF	LAKES MANAGEMENT	60 HP MERCURY OUTBOARD
6	16 FT.	FIBERGLASS	SUNDANCE SKIFF	LAKES MANAGEMENT	60 HP MERCURY OUTBOARD
7	17 FT.	ALUMINUM	SEMI V	LAKES MANAGEMENT	40 HP MERCURY OUTBOARD
8	18 FT.	STEEL BOAT	SEMI V	DREDGING OPERATIONS	60 HP JOHNSON ETEC OUTBOARD
9	19 FT.	FIBERGLASS	CAROLINA SKIFF	LAKES MANAGEMENT	60 HP MERCURY OUTBOARD
10	20 FT.	ALUMINUM	SEMI V	DREDGING OPERATIONS	90 HP YAMAHA OUTBOARD
11	20 FT.	ALUMINUM	SEMI V	LAKES MANAGEMENT	90 HP MERCURY OUTBOARD
12	20 FT.	ALUMINUM	SEMI V	LAKES MANAGEMENT	150 HP HONDA OUTBOARD
13	20 FT.	ALUMINUM	AIRBOAT	LAKES MANAGEMENT	CHEVY 350 C.I. MARINE ENGINE
14	20 FT.	STEEL	BARGE	DREDGING OPERATIONS	140 HP SUZUKI OUTBOARD

ALL EQUIPPED WITH GPS COORDINATE MAPPING & APPLICATION CAPABILITIES, AND HERBICIDE APPLICATION EQUIPMENT INCLUDING SPREADERS, TANKS, HOSES, PUMPS, SPRAY GUNS, ETC.

VEHICLES

	YEAR	MAKE	MODEL	*OPTIONS*
1	2022	CHEVROLET	TAHOE	DURAMAX DIESEL WITH TRAILERING PACKAGE
2	2021	JEEP	GLADIATOR	
3	2017	CHEVROLET	EQUINOX	AWD- WITH TRAILERING PACKAGE
4	2016	CHEVROLET	SILVERADO 3500 (DUALLY)	DURAMAX DIESEL 4X4 CREW CAB W/UTILITY BOXES
5	2016	CHEVROLET	SILVERADO 1500	4X4 CREW CAB WITH V MAX TRAILERING PACKAGE
6	2016	JEEP	CHEROKEE	AWD- WITH TRAILERING PACKAGE
7	2015	CHEVROLET	SILVERADO 1500	4X4 CREW CAB
8	2015	CHEVROLET	SILVERADO 1500	4X4 DOUBLE CAB
9	2014	CHEVROLET	SILVERADO 1500	4X4 DOUBLE CAB
10	2011	CHEVROLET	SILVERADO 1500	4X4 EXTENDED CAB
11	2011	CHEVROLET	SILVERADO 3500 (DUALLY)	DURAMAX DIESEL 4X4 CREW CAB W/ UTILITY BOXES
12	2010	CHEVROLET	SILVERADO 2500	DURAMAX DIESEL 4X4 CREW CAB
13	2007	CHEVROLET	SILVERADO 3500	4X4 EXTENDED CAB
14	2007	CHEVROLET	SILVERADO 2500 HD	4X4 CREW CAB
15	2006	CHEVROLET	SILVERADO 3500 (DUALLY)	4 X 4 EXTENDED CAB TRUCK
16	2004	CHEVROLET	SILVERADO 2500 HD	DURAMAX DIESEL 4X4 EXTENDED CAB
17	2004	CHEVROLET	SILVERADO 1500	4 X 4 EXTENDED CAB TRUCK
18	2003	CHEVROLET	S-10	4 X 4 EXTENDED CAB TRUCK
19	2001	FREIGHTLINER	SEMI/TRACTOR	
20	1977	PETERBUILT	SEMI/TRACTOR	

AQUATIC VEGETATION HARVESTING EQUIPMENT				
	HARVESTERS & CONVEYER TRAILERS MAKE/MODEL	CAPACITY (CU. FT.)	CUTTERHEAD WIDTH	AVG TIME TO CUT 1 ACRE
1	AQUATICS UNLIMITED AUH8-200	200	8 FT.	2 HOURS
2	AQUARIUS SYSTEMS H-220 WITH TRC-12 SERIES OFFLOADING CONVEYOR TRAILER	220	5 FT.	3 HOURS
3	AQUARIUS SYSTEMS H-420 WITH TRC-23 SERIES OFFLOADING CONVEYOR TRAILER	420	7 FT.	2 HOURS
4	AQUARIUS SYSTEMS H-420 WITH TRC-23 SERIES OFFLOADING CONVEYOR TRAILER	420	7 FT.	2 HOURS
5	AQUAMARINE H-650 WITH TRC-34 SERIES OFFLOADING CONVEYOR TRAILER	650	8 FT.	2 HOURS

ALL EQUIPPED WITH GPS COORDINATE MAPPING

DREDGING EQUIPMENT	
1	W & S "BADGER" HYDRAULIC CUTTERHEAD DREDGE (8 INCH)
2	W & S "BADGER" HYDRAULIC CUTTERHEAD DREDGE (8 INCH)
3	W & S "BADGER" HYDRAULIC CUTTERHEAD DREDGE (8 INCH)
4	BOOSTER PUMP (8 INCH) MOUNTED ON FLOATING BARGE
5	McELROY PIT BULL NO.28 (8 INCH) PIPE FUSION MACHINE
6	OVER 20,000 FEET OF 8 INCH PIPE
7	KOMATSU PC220 LC5 EXCAVATOR
8	CATERPILLER 307 SSR EXCAVATOR
9	JOHN DEERE CRAWL 650 DOZER
10	CATERPILLAR D5M LGP DOZER
11	FORD 2120 TRACTOR WITH ATTACHMENTS
12	NEW HOLLAND BOOMER 55 TRACTOR WITH ATTACHMENTS
13	BOMBADIER 4 – WHEELER
14	ARGO 75 HD
15	HONDA PIONEER SXS1000M5P
16	TALBERT LOW BOY SEMI TRAILER
17	TRAILMOBILE STEP DECK SEMI TRAILER (DREDGE TRANSPORT)
18	TRAILMOBILE STEP DECK SEMI TRAILERS (DREDGE TRANSPORT)
19	TRANSCRAFT FLATBED SEMI TRAILER
20	TRANSCRAFT STEP DECK SEMI TRAILER (DREDGE TRANSPORT)
21	DYNAWELD FLAT BED EQUIPMENT TRAILER
22	TRAIL KING TRIAXLE EQUIPMENT TRAILER
23	LOAD TRAIL 38' GOOSENECK PIPE TRAILER
24	LOAD TRAIL 40' GOOSENECK PIPE TRAILER
25	R&R TRAILERS INC. TANDEM AXLE SNOWMOBILE TRAILER
27	RC TRAILERS INC ENCLOSED TRAILER
28	KARAVAN UTILITY TRAILER
29	2007 SPRINTER FIFTH WHEEL CAMPER
30	2008 JAYCO FIFTH WHEEL CAMPER

SAVIN LAKE SERVICES STAFF LISTING

Guy Savin – President & Commercially Certified Applicator since 2004.

John Bernard – Dredging Expert & Previous Owner of Alcona Dredge.

Eric Largent – Sales and Market Development Manager.

Matt Novotny – Operations Manager/Environmental Scientist & Commercially Certified Applicator since 2012.

Kimm Flynn- Business Manager / Accountant.

Rhonda Sumeracki – Office Manager.

Mike Kujawa – Pond Services Manager, and Commercially Certified Applicator since 2010.

Justin Tenbusch – Regional Lakes Manager and Commercially Certified Applicator since 2016.

Kyle Fowler - Regional Lakes Manager and Commercially Certified Applicator since 2016.

Scott Miller – Certified Marine Mechanic and Boat Storage and Maintenance Manager.

David Phinney – Heavy Equipment Operator.

Brandon Williamson – Harvester Operator and Dredge Operator.

Tim Cady – Harvester Operator and Dredge Operator.

Tyler Fowler – Harvester Operator and Dredge Operator.

Anthony Scott – Posting Crew Member, Harvester Operator, and Dredge hand.

Bryant Kesler - Posting Crew Member, Harvester Operator, and Dredge hand.

James Priest – Harvester operator, and Dredge hand.

Jarrett Short – Harvester operator, and Dredge hand.

Dario Martinez – Harvester operator, and Dredge hand.

Frank Tschiggfrey- Dredge Operations / Heavy hauling.


SAVIN
LAKE SERVICES


SAVIN
LAKE SERVICES
3088 Hottis Rd., Hale MI 48739
www.LakeAndP


SAVIN
LAKE SERVICES

EXPERIENCE AND REFERENCES:

FIFE LAKE AQUATIC VEGETATION CONTROL

CLIENT:

Fife Lake Nuisance Weed Commission
Fred Joles - Former Fife Lake Township Supervisor
Weed Control Contact (231) 620-0098

LOCATION:

Grand Traverse and Kalkaska Counties, Michigan

KEY SERVICES PROVIDED:

Lake Management
Nuisance Weed Control
2,4-D granular application
Diquat Dibromide liquid application
Lily Pad Control

PROJECT DURATION:

2006 – 2026 (Contracted through 2026)

TOTAL CONTRACT COST:
$775,000.00

PROJECT DESCRIPTION

The history between Savin Lake Services and Fife Lake actually dates to 2006 when Savin Lake Services was awarded the lake management contract and aided in the establishment of a Special Assessment District. Ironically, a lake management and consulting firm selected a competing herbicide applicator in 2007 based upon the board's preference. Resulting from the public outcry originating from the dissatisfaction of the property owners in 2007, Savin Lake Services was awarded a multi-year contract in 2008 to return Fife Lake to its pre-2007 splendor. GPS generated application reports are provided at the conclusion of every visit. The systemic control philosophy that we have implemented has reduced the annually recurring hybridized milfoil population from 150 acres to approximately (10) acres treated per year. We have recently signed a five (5) year contract with Fife Lake for treatment through the 2026 season.

EXPERIENCE AND REFERENCES (Continued):

WALLED LAKE AQUATIC VEGETATION CONTROL

CLIENT:

Walled Lake Improvement Board
Mr. David Galloway - Riparian Owner Representative
1197 East Lake Drive
Novi, MI 48377
Home: 248-496-6601

LOCATION:
Oakland County, Michigan

KEY SERVICES PROVIDED:
Lake Management
Nuisance Weed Control
2,4-D granular application
Diquat Dibromide liquid application
Aquatic Vegetation Harvesting
Lily Pad Control

PROJECT DURATION:
2011 – 2022 (Automatically Renewing Contract through 2022)

TOTAL CONTRACT COST:
$1,100,000.00

PROJECT DESCRIPTION

Savin Lake Service began working with Walled Lake in 2010 when we were awarded a contract to perform a full lake survey specifically isolating Eurasian Water Milfoil. Initially, the Lake Improvement Board preferred harvesting as a control method however during the past few years, they have leaned toward systemic control using 2-4, D. Treatments began with nearly 400 permitted acres of treatment and that total has been significantly reduced during the years.

EXPERIENCE AND REFERENCES (Continued):

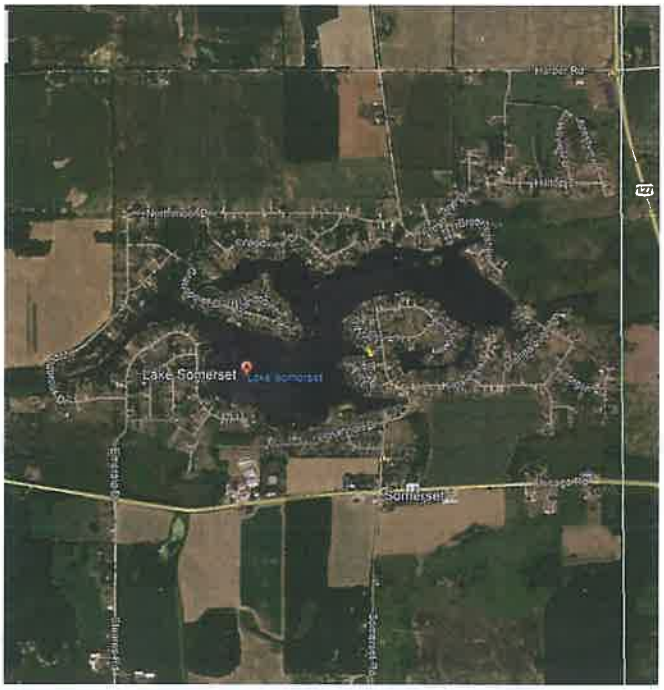
LAKE SOMERSET AQUATIC VEGETATION CONTROL AND DREDGING OPERATIONS

CLIENT:

Lake Somerset POA
Jodi Dahlberg - President
(517) 815-4100 (cell)

LOCATION:

Hillsdale County, Michigan



KEY SERVICES PROVIDED:

Lake Management
Dredging Operations
Nuisance Weed Control
2,4-D granular application
Diquat Dibromide liquid application
Aquatic Vegetation Harvesting
Lily Pad Control

PROJECT DURATION:

2018 – 2023

TOTAL CONTRACT COST:

$ 1,050,400.00

PROJECT DESCRIPTION

Lake Somerset offers over 187 acres of all sports activity located in Somerset Township in Hillsdale County. Savin Lake Services was originally awarded a $ 700,000 dredging project in 2018, and in 2019 LSPOA hired us to be their lake management partner also.

This lake is a great example of our philosophy to "take control before things get out of control" as the Lake Somerset Association Board has renewed our contract this year for another three (3) years.

Reference Letter from Lake Somerset:

Lake Somerset Association

Jodi A Dahlberg, Vice President

8/8/2019

To Whom it May Concern:

My name is Jodi Dahlberg and I am the Vice President of the Lake Somerset Property Owners Association (LSPOA). I wanted to take a few moments to write a reference for the lake and pond management company - Savin Lake Services Inc. located in Hale, Michigan.

Lake Somerset is a 220-acre lake located in Somerset Center, MI approximately 15 miles south of Jackson, MI. For (7) years (2012 – 2018), the LSPOA had contracted with a lake management company PLM for the aquatic herbicide management on Lake Somerset. Our lake continue to show degradation over that time until last year when it was almost unpassable. We had to stop our boats every so often to pull all the weeds off our props. Algae was everywhere and the lake looked terrible.

In 2018 the LSPOA board elected to hire Savin Lake Services to perform a large dredging project on Lake Somerset, and Savin Lake Services attention to detail and communication in regards to the dredging project impressed the LSPOA Board members. Guy walked us through the process and had our permit completed and worked through many obstacles.

In 2019, the Board decided to change our lake services and hire Savin to manage our lake, his service in the dredging process and his ideas impressed many of us on the board. The level of communication and level of detail exhibited by Savin Lake Services team members in their treatment methodologies far exceeds anything we had experienced in the past with the previous company. The LSPOA Board has been very happy and has received nothing but positive commentary from the property owners on Lake Somerset as they see the difference in the attention to detail between the (2) companies. I have attached some of the emails we have received from our members below. The GPS application technology that Savin utilizes sets them apart as a company from their competition. Our members now look forward to receiving the map. It has helped them to understand where it was treated and what chemical was placed on their lakeshore. The calls, questions and inquiries from the members has greatly reduced by using this tool.

One of the largest problems that LSPOA experienced in the past ....is with the wild celery management on Lake Somerset. In the past.... the previous company had utilized many products for wild celery management including Nautique, Komeen Crystal, and Hydrothol 191 Granular. In the past.... the LSPOA had seen very little success with these products. As mentioned above, we could barely boat for ½ an hour without removing it from our props.

THANK YOU, SAVIN!

Lake Somerset Reference Letter (continued)

Reference Letter from Dayton Bear Lake Outing Club:

Dayton Bear Lake Outing Club
7972 Heaton Ave
Bear Lake, MI 49614

May 9, 2021

Guy Savin
3088 Hottis Road
Savin Lake Services
Hale, MI 48739

Dear Guy,

I'm reaching out on behalf of the Dayton Bear Lake Outing Club (DBLOC) to thank you, your partner John Bernard and everyone on your team for your successful dredging project here last November. We had 20+ years of lake sand accumulating at the mouth of Bear Lake's Little Bay, which was impeding navigation and in danger of closing off the bay and creating a stagnant pond. The members and owners of the DBLOC approved a special assessment to complete a dredging project, with the goal of restoring the navigability and health of the Little Bay. We appreciated that you joined a 'town hall' meeting with our members/owners to answer questions and help garner support for the project.

We could not be more thrilled with the project's results. The bay's point shoreline has been restored to appear as it did decades ago, just in time for us to celebrate our Club's Centennial in 2021. Access to the Little Bay is significantly improved and it appears that waterflow into the bay has increased, which will benefit the entire natural area.

Your dredging team was on site for several weeks into November and did simply a phenomenal job. Daniel and James worked tirelessly, seven-days-a-week, mostly in less than ideal weather conditions. They often were here until well after dark in an effort to get the project completed before winter fully set in. They were extremely knowledgeable, resourceful and really seemed to care about the outcome of our project almost as much as we did. I was impressed by how they resolved the day-to-day challenges they encountered and appreciated how they took time to answer any questions that we had about the project along the way.

Although I hope we won't be doing more dredging work here any time soon, we wouldn't hesitate to work with you in the future and highly recommend your team to others who are contemplating similar projects. Thank you!

Sincerely,

Laurie Stewart
President

Reference Letter from AuGres Boat Club:

To: Prospective Clients/Customers of Savin Lakes

Ref: Letter of Recommendation

August 15, 2023

The Au Gres Boat Club Association (AGBC) is a quiet community of 72 homes all located on a canal system that connects directly to Saginaw Bay. We have been working with Savin Lake Services for over 10 years on canal and weed control maintenance as well as two major dredging projects on our canal system. The most recent dredging project was completed last month. Guy Savin took time to answer all our questions before and during the project to ensure our membership would be completely satisfied. The Savin Lakes team performing the work was very professional and courteous. Savin Lakes worked with us to prepare the scope of the project and provided weekly updates, including joint visits to the dredge site to inspect progress together which included final inspection.

After final inspection of the 2023 dredging project, Mr. Guy Savin provided myself and The AuGres Boat Club, at no additional cost, a BIO/BASE contour map which shows all depths throughout our 1.5 miles of canal.

Multiple times a year, the team at Savin Lake Services treat our canals for aquatic vegetation and algae. They provide notice and post signs at all home's water edge to let us know when this will be done in advance. With this, our canals remain clear and completely navigable. Every year at our annual AGBC meeting we discuss the pricing for the current and following year and review the work Savin Lake has done for us. Each year we then vote to continue with their services because we feel they are a great value to our water way.

I and the AGBC board would recommend Savin Lake Services to others who need dredging and/or weed treatment for their waters. We look forward to continuing to work with them in the years to come.

Carl Bosley
Mobile# 616-485-5453
Co-Commodore
Au Gres Boat Club Association

**** A Homeowners Association dedicated to forming a congenial social group and lifestyle which enjoys the advantages of boating, sailing, fishing, skating, hunting, and harmonious community living ****

Au Gres Boat Club Association Subdivision, Au Gres Township, Arenac County, Michigan.

2024 Lake Treatment Proposal

For Forest Lake

Prepared for:

Forest Lake Property Owners Association

Prepared by:

Savin Lake Services Inc.

3088 Hottis Road
Hale MI. 48739
(989) 728 -2200
lakeandpond.com

January 24, 2024

Forest Lake Property Owners Association
Attn: Mr. Ron Swagman
6180 Bobcat Trail
Alger, MI 48610

Subject: 2024 Lake Treatment Proposal for Forest Lake

Forest Lake Property Owners Association,

Savin Lake Services Inc. has a vested interest in becoming your lakes management partner for Forest Lake. Savin Lake Services is a licensed and insured fully integrated lakes management firm offering multiple mitigation solutions to improve the overall health, aesthetics and/or recreational use of lakes all throughout Michigan. We offer both mechanical and herbicide control methods to manage nuisance aquatic plants. In addition to aquatic plant management, we also offer multiple types of lake studies and consulting services, phosphorus mitigation solutions, lake aeration systems, lake dredging, and bacterial augmentation options for our customers. Currently, we are the only lake management company in Michigan utilizing drones equipped with GPS rate-controlled liquid and granular herbicide applications systems, mapping software, and obstacle avoidance features. With their versatility and integrated technologies features, drone technology is the future of aquatic and terrestrial plant management.

Savin Lake Services Inc. has been servicing Michigan's lakes and ponds for over (25) years. We currently provide our services on over (80) lakes & (225) ponds in Michigan. The lakes that we currently have under contract range in size from 10 acres to 2,500 acres. Our solid reputation speaks for itself. We are known for an elevated level of quality service, and we have a strong commitment to customer satisfaction.

We are members of the Tawas Area and West Branch Chambers of Commerce and are an A+ Accredited Member of the Better Business Bureau of Michigan. We are also long-term members and sponsors of the Michigan Lakes & Streams Association, the Midwest Aquatic Plant Management Society, the Michigan Aquatic Managers Association, the Michigan Inland Lakes Partnership, and the Aquatic Ecosystem Restoration Foundation.

We are pleased to offer the following proposal, company profile, and references, for your consideration. If you have any questions regarding the following proposal, please feel free to contact us at any time.

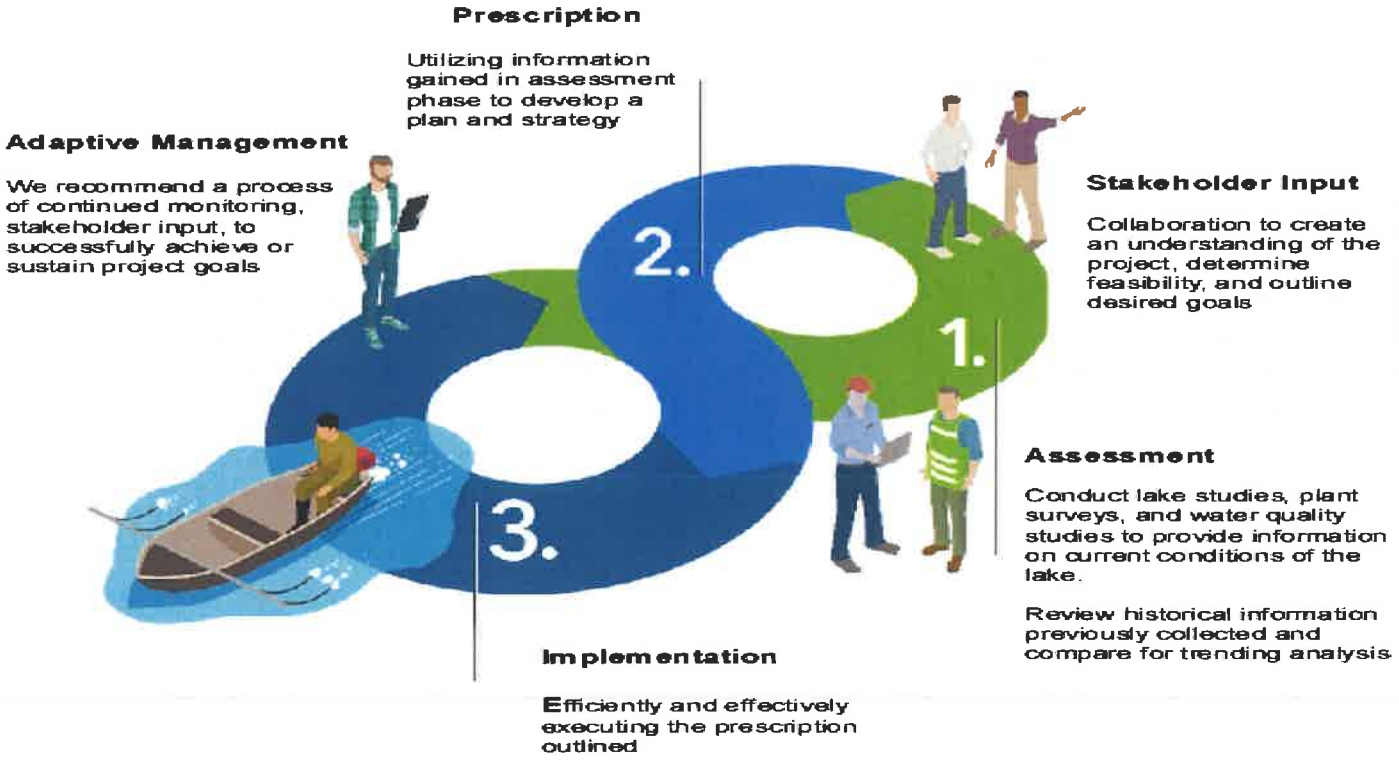
Sincerely,

Eric Largent – Sales and Market Development Manager
Savin Lake Services Inc.

PROPOSED LAKES MANAGEMENT PLAN FOR FOREST LAKE

If selected as your lakes management services provider, Savin Lake Services will implement an integrated plant management plan to manage Forest Lake safely and effectively. We will continuously assess and study the ecology of the lake to prevent and identify any threats. Then evaluate which physical(mechanical), herbicide, and/or biological control method will be the most effective, economical, and feasible option to eliminate or reduce the threat and positively impact Forest Lake's ecosystem.

MANAGEMENT STRATEGY FOR 2024



Routine monitoring - Savin Lake Services Inc. will closely monitor the lake by conducting routine vegetation surveys. Conducting routine surveys and studies will result in early detection of potential threats to the lake. Early detection of a potential threat gives us the ability to be proactive instead of reactive in our management approach.

Invasive Plant Management - Invasive plant communities are a threat to the ecology of a lake. Invasive plants outcompete the desired native plants and impact fisheries habitat and spawning areas, which results in reduced aquatic plant and animal diversity. Invasive plant presence in a lake can also reduce property values and restrict fishing, boating, and other recreational opportunities if they are not effectively managed. Early detection and rapid response are key to preventing the negative ecological and economic impacts these plant species can cause to a lake and its surrounding riparian's.

- During our previous experience on Forest Lake, the aquatic invasive plant species detected were Curly Leaf Pondweed, and Eurasian/Hybrid Watermilfoil. These species are well established throughout several areas of the littoral zone of the lake and will require management to keep them under control. Currently, these plants pose the greatest threat to Forest Lake. Savin Lake Services will aggressively attack the invasive plant communities that exist in Forest Lake with aquatic herbicides. Herbicide management is currently the most efficient and cost-effective way to manage invasive plant communities.
- Utilization of selective systemic herbicides – Targeted invasive plant communities will be managed utilizing selective and systemic herbicides whenever possible.
  - By utilizing these types of herbicides, we can treat the entire plant of an undesirable targeted invasive species and leave the non-targeted indigenous species unharmed. Plants treated systemically will not regrow, and by utilizing selective herbicides, desired indigenous plants are given the opportunity to thrive and outcompete the invasive plants. This method will reduce densities or areas invasive plants can exist and reduces the risk of new infestations or re-infestations of invasive plants.

Indigenous (Native) Plant Management – Indigenous plants play a key role in having a heathy and diverse aquatic ecosystem. These plants produce oxygen and provide food sources for other aquatic life, provide suitable fish habitat for fisheries to thrive and cover for prey fish. They also absorb nutrients, stabilize bottom sediments, clarify the water column, and aid in reducing shoreline soil erosion. Due to all the beneficial contributions they provide to the lake, treatment of these type plants should always be kept to a minimum and only managed if they reach a nuisance level that is detrimentally impacting the recreational use of the lake.

- Savin Lake Services Inc. will utilize herbicides/algaecides to control nuisance indigenous plant and alga communities where they are directly impeding recreation use in the near shore developed areas of the lake.

RECOMMENDED LAKE SURVEYS AND STUDIES

Spring Visual Survey – This survey is to assess plant and algae growth, locate areas containing early season invasive plant communities (Curly Leaf Pondweed & Hybrid/Eurasian Watermilfoil), delineate treatment areas, and determine resources required and ideal timeframe for initial treatment.

Fall Visual Survey – This survey is to assess plant and algae growth, identify plant diversity/species richness, determine if any areas of the lake contain any new infestations or regrowth of non-native plant communities, and determine if any additional treatment/management is required for the season. We also inspect the vegetation growth in all previous treatment areas and evaluate if any changes are required in our management approach.

RECOMMENDED MANAGEMENT TIMELINE

Winter / Spring – Savin Lake Services will apply for the required annual EGLE permit.

May – A spring visual plant survey of the lake will be completed to determine areas containing invasive and nuisance natives that require treatment.

Early June – Mid-June – Herbicide application will be completed. Initial herbicide application dates will vary from early to mid-June depending on the weed growth and water temperature.

- Initial herbicide application will target the invasive/exotic plant species that are present throughout the lake.
  - If any Invasive Milfoil populations exist, they will be treated utilizing systemic herbicides and any Curly Leaf Pondweed that exists will be treated utilizing contact herbicides.
- Nuisance native vegetation and algae may require treatment at this time also.
  - If native vegetation treatment is necessary, we will target the native plant and algae species in the near shore developed areas where they are impeding recreational use of the lake utilizing contact herbicides/algaecides.

September – A fall visual plant survey will take place to identify any areas of the lake that contain any new infestations or regrowth of non-native plant communities, we will also survey all previous treatment areas for efficacy and evaluate if any changes in our management approach are required.

RECOMMENDED HERBICIDES TO BE UTILIZED

Savin Lake Services anticipates utilizing the following aquatic herbicides on Forest Lake:

1. ProcellaCOR EC – An aquatically labeled herbicide for systemic management of invasive Watermilfoils.
2. 2, 4 – D Ester (Navigate) – An aquatically labeled herbicide in a granular formulation for systemic management of invasive Watermilfoils.
3. Diquat Dibromide – An aquatically labeled broad spectrum contact herbicide for management of various milfoils & pondweeds.
4. Aquathol K – An aquatically labeled broad spectrum contact herbicide for management of various milfoils & pondweeds.
5. Hydrothol 191 – An aquatically labeled contact herbicide/algaecide that provides for management of various pondweeds and Macroalgae like Starry Stonewort.
6. Cutrine Plus – An aquatically labeled algaecide in a Chelated Copper formulation for management of algae and macroalgae.
7. Copper Sulfate – An aquatically labeled algaecide for management of algae and macroalgae.
8. Cygnet Plus – An additive that promotes efficacy of treatments.

PROPOSED FEES:

The below pricing is based on the indicated application rate for each product listed. The customer agrees that the unit prices named will be utilized for billing. Unit price adjustments shall be proportional to the unit adjustments in dosage (for example if 2,4-D Ester is utilized at 150 lbs. per acre then the billed rate will be 50% higher than the below quoted unit price). Prices for treatment and or harvesting of aquatic vegetation on Forest Lake will be as follows:

Systemic Herbicides	
1. 2, 4-D Ester @ 100 lbs./acre for systemic milfoil control	$ 650.00 per acre
2. Triclopyr Granular @ 120 lbs. / acre	$ 695.00 per acre
3. Triclopyr Liquid - (like Renovate 3) @ 2.5 gals / acre	$ 425.00 per acre
4. Triclopyr Liquid & Aquathol K – (like Renovate 3)	$ 575.00 per acre
5. ProcellaCOR EC	$ 95.00 per PDU
6. ProcellaCOR EC @ 6 PDU/acre + Diquat Dibromide @ 1 gal./acre	$ 695.00 per acre
Contact Herbicides	
7. Diquat Dibromide - Non-native plants @ 1 gal / acre	$ 185.00 per acre
8. Diquat Dibromide - Native plants @ 2 gal / acre	$ 285.00 per acre
9. Diquat Dibromide & Aquathol K combo @ 1 gal / acre	$ 295.00 per acre
10. Aquathol K / Hydrothol 191 @ 1 gal / acre	$ 195.00 per acre
11. Endothall's @ 2 gals / acre	$ 305.00 per acre
12. Flumioxazin - Clipper (200 ppb)	$ 315.00 per acre
13. Flumioxazin - Clipper- (100 ppb) + Diquat	$ 355.00 per acre
14. Nautique for Wild Celery @ 7.5 gal / Acre	$ 475.00 per acre
15. Harpoon Granular @ 160 lbs. / acre - Wild Celery	$ 775.00 per acre
Algaecides	
16. Algae – Chelated Copper (like Captain / Cutrine Plus) 1 gal / acre	$ 75.00 per acre
17. Algae – Max Copper Sulfate Rates for Chara or SSW 4.4 lbs./acre ft.	$ 90.00 per acre
18. Copper Sulfate/Chelated Copper + Hydrothol 191 combo	$ 235.00 per acre
Emergent Plant Control	
19. Lily pads, Cattails, Purple Loosestrife Control	$ 75.00 per 40'x40'
Bacterial Augmentation	
20. Mukk Busster® Biological/Enzyme Muck Control	$ 275.00 per acre
Vegetation Harvesting	
21. Mechanical Harvesting of Nuisance Natives (minimum 20 acres)	$ 625.00 per acre
22. Mechanical Harvesting of Starry Stonewort (minimum 20 acres)	$ 775.00 per acre
Water Quality and Survey Studies	
23. All Studies Included with Lake Management Proposal (LMP)	Included with LMP
Miscellaneous	
24. Yearly Michigan EGLE Permit fee	$ 225.00 per report

SAVIN LAKE SERVICES RECOMMENDED MANAGEMENT QUOTE:

Savin Lake Services recommends a 2024 budget of $36,575.00 - $58,575.00 for the management of invasive species in Forest Lake.

Please keep in mind that these are approximate numbers based 2023 fall survey information. There are many variables in a lakes ecosystem that can change from year to year that make it hard to give an exact number. These recommendations are provided to assist in establishing an annual budget for the lake's management. It is important to note that Savin Lake Services is willing to work within any budget provided. We will only recommend and manage what we feel is in the best interest of the overall health of the lake and make it more desirable for use for the riparian owners. Our goal is to keep the invasive plant communities in check throughout the entire lake, manage nuisance natives only where necessary to make riparian owner's docks and swim areas more desirable for use, and to evaluate additional mitigation options to improve the overall health, water quality, and recreational use of the lake.

Estimated herbicide treatment cost analysis:

Permit Application:	*$ 875.00*
30-50 acres of Eurasian watermilfoil Control Utilizing ProcellaCOR EC	*$ 32,000.00 - $54,000.00*
20 acres Curly Leaf Pondweed and other Eurasian watermilfoil treatment	*$ 3,700.00*
Total Estimated 2024 Lake Treatment Cost	**$ 36,575.00 - $ 58,575.00**

AGREEMENT TERMS:

MECHANICAL HARVESTING:

- Savin Lake Services will provide all necessary labor and materials to provide aquatic vegetation harvesting services utilizing our own vegetation harvesters.
- Proposed Price is based on a minimum of 20 acres being cut. If minimum acreage requirement is not met a $2,500.00 setup and mobilization fee will be added to the total cost of actual acreage cut.
- Price includes removal and transportation of aquatic vegetation to a location within (5) miles of Lake.
- Savin Lake Services will harvest to a maximum depth of 5 ft where practical. Harvesting cannot be performed in areas with less than 18" of water depth. Savin Lake Services will make all reasonable efforts to harvest as needed between docks, and as close as possible to shorelines. For safety reasons, our harvesting crews will not harvest within (10) ft of any boat / dock / raft etc.
- Please note that a suitable launch is necessary to launch and remove our vegetation harvesters from your waterbody. Our harvester / trailer combinations weigh between 12,000 and 18,000 lbs. Savin Lake Services will make every reasonable effort to remove our harvesters from your water body without additional charges. However, any additional costs associated for towing or removal of our vegetation harvesters due to poor launch conditions will be the responsibility of the customer.
- Savin Lake Services will ensure that the launch area is kept clean and raked at the end of each day. All Savin Lake Services harvesters utilize marine grade hydraulic oil for safety. The MSDS sheets for this hydraulic oil will be kept on site during any harvesting operations.
- All Savin Lake Services harvesters are equipped with GPS guidance systems so that we can ensure that we do not miss areas of harvesting on your lake. We will provide you with a report at the end of each harvest which will indicate the exact area that we have harvested, and the total acres harvested.
- Savin Lake Services harvesters will pick up and collect most of the cut vegetation, however, it is important to note that some "cut and drift" vegetation will normally wash to shore during harvesting operations. We will work hard to minimize the amount of cut vegetation that washes to shore; however, it will be the responsibility of the property owners to collect and dispose of any vegetation that cannot be captured by our vegetation harvesters.

BACTERIAL AUGMENTATION (Muck Reduction) Treatments:

Bacterial Augmentation treatments are completed by applying microbial pellets that contain colony forming beneficial bacteria and enzymes capable of digesting up to 4 – 6 inches of organic sediment (muck) a year. These treatments will also reduce odors and improve water clarity.

LILY PAD CONTROL:

This is an optional program for the treatment of lily pads in the lake. Lily pad treatments are included in the quoted price. This service is optional. Per the EGLE (State of Michigan) regulations, an area of 40ft X 40ft can only be treated at each residence. Boat lanes to open water can be considered for treatment also.

NON - TARGET SPECIES

Please be aware that we can only control weeds and algae that is present at the time of treatment. Emergent vegetation (cattails, bulrush, purple loosestrife), and lily pads require separate programs for control and are not treated unless specifically desired by the customer. We have no power over future weed and algae growth based on the current aquatic herbicides registered for aquatic use in Michigan.

POSTING OF TREATMENT AREAS

Posting signs will be placed every 80-100 ft. along the lake shore in developed areas and undeveloped areas where we intend to treat. All launches and access sites will be posted. We will use brightly colored signs and the colors will be different for each treatment. Please do not remove these signs until the last restriction date has passed. We will try to post the signs the day before treatment occurs, however there are some occasions that signs do get posted the morning of.

LIABILITY ISSUES

Dead and dying fish are an ugly sight. The truth is that most species of fish are relatively short-lived and have a high rate of mortality. Even large fish, too large to be eaten by predators such as bass and pike, experience a death rate of approximately 50% per year. Fortunately, the deaths are usually spread-out over the year and are rarely observed or become a problem except when concentrated as a fish kill. Only a fraction of the dead fish will ever be observed because many decompose on the bottom or are eaten by scavengers such as turtles and crayfish.

Most of the time, fish kills are due to natural causes over which we have no control, such as weather. Natural fish kills are of three basic seasonal types: winterkill, which occurs in late winter but may not be seen until early spring; spring kill, which is occurs in late May to early June; and summer kill, which occurs on the hottest days of mid-summer. Savin Lake Services cannot be held responsible for fish kills, as most fish kills are natural fish kills.

The above information was taken from the DNR website. For more information regarding fish kills please go here:
http://www.michigan.gov/dnr/0,4570,7-153-10364_52259-119822--,00.html

PROPOSAL TERMS:

- Any unforeseen change in State Regulatory Agency requirements concerning the implementation of any part of this agreement shall nullify this agreement.
- Documentable aquatic management cost increases or decreases more than 3% per year may cause this contract to be re-evaluated in conjunction with the Forest Lake Property Owners Association.
- Savin Lake Services will not charge for telephone conversations, meeting attendance, or an hourly rate for our staff. Those items are part of our standard operating philosophies.

TERM AND TERMINATION:

- The term of this Professional Services Agreement shall commence on the signature date and shall continue for a period ending on December 31, 2024.
- Agreement term extensions beyond calendar year 2024 at the amount of proposed price plus 3% are contingent upon the discretion of the Forest Lake Property Owners Association.
- If either party hereto fails to comply with a provision of this agreement, then the other party shall have the right to terminate this agreement by giving written notice of the default to the defaulting party and the defaulting party fails to cure the default within fifteen (15) days of receipt of said notice.

PAYMENT TERMS:

- An invoice for the permit fee will be billed in the winter of the previous year (ex: Treatments for 2024 will have the permit fee billed in winter of 2023). Checks will be paid directly to Savin Lake Services. Savin Lake Services will apply for the EGLE permit through the State of Michigan once the permit fee is received.
- Following each treatment or service provided an invoice will be mailed or emailed. The invoice will show the date of treatment/service, acres treated, type of treatment/service, price per acre and total monies due. Invoice payment will be due in full net thirty (30) days after the service rendered date.
- Any changes in the permit fee imposed by the State of Michigan will be the responsibility of the Forest Lake Property Owners Association.

AGREEMENT ACCEPTANCE

If the above proposal meets your needs, please sign below indicating your acceptance, and return it to us at your earliest convenience. If you have any questions – please feel free to contact us at any time.

We look forward to working in collaboration with the Forest Lake Property Owners Association on the Forest Lake management project for the 2024 management season.

Sincerely,

Eric Largent – Sales and Market Development Manager
Savin Lake Services, Inc.

_____ _____

Mr. Ron Swagman- Aquatic Weed Control Association — Date
Forest Lake Property Owners Association

Savin Lake Services, Inc.
3088 Hottis Rd
Hale, MI 48739
(989) 728-2200
rhondasumeracki@lakeandpond.com
www.lakeandpond.com

INVOICE

BILL TO
Forest Lake Property Owners
Association Board
Alger, MI 48610

INVOICE # 9172
DATE 01/24/2024
DUE DATE 02/23/2024
TERMS Net 30

DATE OF SERVICE
1/24/24

DESCRIPTION	QTY	RATE	AMOUNT
2023 Forest Lake Management Services - Remaining 50% of Contract Value	1	3,450.00	3,450.00

Thank you for your business

SUBTOTAL	3,450.00
TAX	0.00
TOTAL	3,450.00
BALANCE DUE	**$3,450.00**

Additional Info/Services Requested:

SAVIN LAKE SERVICES

FOREST LAKE

2023 Lake Management Study

Prepared for:

Forest Lake Property Owners Association

3088 Hottis Road Hale, MI 48739
989-728-2200
www.lakeandpond.com

January 22nd, 2023

Forest Lake Property Owners Association
Attn: Mr. Ron Swagman
6180 Bobcat Trail
Alger, MI 48610

Mr. Ron Swagman,

It was a pleasure assessing Forest Lake for you this past summer. Every year seems to bring a unique set of challenges and we welcome the opportunity to meet these challenges every single year.

While we make the transition and focus our efforts to the 2024 season, we would like to provide you with a full report of the services rendered by Savin Lake Services in 2023. This report will include a brief description of the services rendered and the data that was gathered/generated from services. You will also find included in this report the recommended lakes management approach for 2024.

Please keep in mind that we are a fully integrated lakes management company offering solutions including but not limited to mechanical harvesting, herbicide control, dredging, bio-augmentation, and aeration. Savin Lake Services also offers a complete range of water quality testing, depth contour mapping, individual property solutions, and even aquatic plant density reporting.

We look forward to working with the Forest Lake Property Owners Association this year.

Sincerely,

Matthew Novotny

Matt Novotny – Operations Manager
Savin Lake Services Inc.

Introduction

Savin Lake Services was hired to complete to complete multiple survey methodologies, acquire water quality data, and assess the aquatic vegetation of Forest Lake in 2023. Upon completing these services we would summarize the results and analyze recent yearly trends in conjunction with previous results, in order to recommend a lake management plan that is right for Forest Lake both ecologically and recreationally.

Although that was our intent, the spillway remaining damaged throughout 2023 limited our ability to complete some of these strategies. Despite this, we collected data to still provide as much of that information as possible. In this report you will find a vegetation assessment, potential treatment information, water quality data with trending charts, and a lead-in to phosphorus mitigation to improve the health and aesthetics of Forest Lake in the future.

Aquatic Vegetation – AVAS Survey

A comprehensive vegetation survey called an Aquatic Vegetation Assessment Survey (AVAS), was performed on Forest Lake at the end of the year. During this survey, the lake is divided into evenly spaced sections. Inside each section, we document every type of aquatic vegetation found and determine its density inside of that section. Compiling all of these sections into a summary page, we determine a complete set of plant species found within Forest Lake and its approximate abundance.

There are 3 different sets of pages. The first is the summary page which gives you the lake wide plant coverage shown as an approximate percentage in column 11. Next is the lake map showing the numerous AVAS sections. The last set of pages are the density pages. Using the map and the density pages together you can determine what plant species exist in each section of the lake.

Looking through all of the pages will look very confusing if you do not understand what the numbers and letters mean. Each plant species has a 'code number'. You can see this on the summary and density pages on the left side. There are 4 different density categories:

- A = found, or <2% of the area
- B = sparse (2% - 20%)
- C = common (20% - 60%)
- D = dense (60% - 100%)

When surveying the lake, we take the plant species number and pair it with a density rating for each AVAS section. We then compile the totals and the results are generated. The results are on the next couple of pages. As you can see, Eurasian watermilfoil and Illinois pondweed were the most prominent species found. The increase in abundance of milfoil was alarming and treatment most definitely should be accomplished in 2024. Phragmites was also observed along portions of the shoreline and should be treated as well in 2024.

AVAS Summary

LAKE NAME- Forest Lake COUNTY- Arenac SURVEY DATE: Fall 2023

Standard Aquatic Vegetation Summary Sheet SURVEY BY: Savin Lake Services

		Total number of AVAS's for each Density Catagory					Calculations				Sum of Previous Four Columns	Total Number of AVAS's	Quotient of Column 9 divided by Column 10		
							Catagory	Catagory	Catagory	Catagory					
		A	B	C	D		A x 1	B x10	C x 40	D x 80					
Code No	Plant Name	1	2	3	4		5	6	7	8	9	10	11	Code No	Plant Name
1	Eurasian watermilfoil	6	19	4	1		6	190	160	80	436	38	11.5	1	Eurasian milfoil
4	Thin leaf pondweed	2					2	0	0	0	2	38	0.1	4	Thinleaf pondweed
6	Robbins pondweed	1					1	0	0	0	1	38	0.0	6	Robbins pondweed
10	Illinois pondweed	2	30	1			2	300	40	0	342	38	9.0	10	Illinois pondweed
12	American pondweed		1				0	10	0	0	10	38	0.3	12	American pondweed
20	Coontail	5	6	1			5	60	40	0	105	38	2.8	20	Coontail
27	Sago pondweed	8	5				8	50	0	0	58	38	1.5	27	Sago pondweed
34	Great duckweed		1				0	10	0	0	10	38	0.3	34	Spirodella
39	Cattail	5	14				5	140	0	0	145	38	3.8	39	Cattails
45	Phragmites	4	9				4	90	0	0	94	38	2.5	45	Phragmites

AVAS Section Map

AVAS Site Densities

Standard Aquatic Vegetation Assessment Site Species Density Sheet																			
		Aquatic Vegetation Assessment Site Number										Aquatic Vegetation Assessment Site Number							
Code No	Plant Name	NO 1	NO 2	NO 3	NO 4	NO 5	NO 6	NO 7	NO 8	Code No	Plant Name	NO 9	NO 10	NO 11	NO 12	NO 13	NO 14	NO 15	NO 16
1	Eurasian watermilfoil	D	C	B	B	B	B		A	1	Eurasian watermilfoil	B	A	B	A	B		B	
2	Curly leaf pondweed									2	Curly leaf pondweed								
3	Chara									3	Chara								
4	Thin leaf pondweed					A			A	4	Thin leaf pondweed								
5	Flat stem pondweed									5	Flat stem pondweed								
6	Robbins pondweed									6	Robbins pondweed								
7	Variable pondweed									7	Variable pondweed								
8	White stem pondweed									8	White stem pondweed								
9	Richardsons pondweed									9	Richardsons pondweed								
10	Illinois pondweed					B	B	A	B	10	Illinois pondweed	B	B	B	B	B	B	B	B
11	Large leaf pondweed									11	Large leaf pondweed								
12	American pondweed				B					12	American pondweed								
13	Floating leaf pondweed									13	Floating leaf pondweed								
14	Water stargrass									14	Water stargrass								
15	Wild Celery									15	Wild Celery								
16	Arrowhead (submergent)									16	Arrowhead (submergent)								
17	Native milfoil									17	Native milfoil								
18	Whorled watermilfoil									18	Whorled watermilfoil								
19	Various leaf watermilfoil									19	Various leaf watermilfoil								
20	Coontail	C								20	Coontail		A			A		A	B
21	Elodea									21	Elodea								
22	Bladderwort									22	Bladderwort								
23	Bladderwort (mini)									23	Bladderwort (mini)								
24	Buttercup									24	Buttercup								
25	Najas spp.									25	Najas spp.								
26	Brittle naiad									26	Brittle naiad								
27	Sago pondweed								A	27	Sago pondweed	A					B		
28										28									
29										29									
30	White waterlily									30	White waterlily								
31	Yellow waterlily									31	Yellow waterlily								
32	Watershield									32	Watershield								
33	Small duckweed									33	Small duckweed								
34	Great duckweed		B							34	Great duckweed								
35	Watermeal									35	Watermeal								
36	Arrowhead									36	Arrowhead								
37	Pickerelweed									37	Pickerelweed								
38	Arrow arum									38	Arrow arum								
39	Cattail	B		B	B	A				39	Cattail	A	B	B	B	B	B	B	B
40	Bulrush									40	Bulrush								
41	Iris									41	Iris								
42	Swamp Loosestrife									42	Swamp Loosestrife								
43	Purple Loosestrife									43	Purple Loosestrife								
44	Starry Stonewort									44	Starry Stonewort								
45	Phragmites	B	B	B	B			A	A	45	Phragmites			B					B

Standard Aquatic Vegetation Assessment Site Species Density Sheet

Code No.	Plant Name	Aquatic Vegetation Assessment Site Number NO 17	NO 18	NO. 19	NO. 20	NO 21	NO 22	NO 23	NO 24	Code No.	Plant Name	Aquatic Vegetation Assessment Site Number NO 25	NO 26	NO 27	NO 28	NO 29	NO 30	NO 31	NO 32
1	Eurasian watermilfoil			C		A	B	B	B	1	Eurasian watermilfoil	A			B	B	A	B	B
2	Curly leaf pondweed									2	Curly leaf pondweed								
3	Chara									3	Chara								
4	Thin leaf pondweed									4	Thin leaf pondweed								
5	Flat stem pondweed									5	Flat stem pondweed								
6	Robbins pondweed					A				6	Robbins pondweed								
7	Variable pondweed									7	Variable pondweed								
8	White stem pondweed									8	White stem pondweed								
9	Richardsons pondweed									9	Richardsons pondweed								
10	Illinois pondweed	B	B	C	B	B	B	B	B	10	Illinois pondweed	A	B	B	B	B	B	B	B
11	Large leaf pondweed									11	Large leaf pondweed								
12	American pondweed									12	American pondweed								
13	Floating leaf pondweed									13	Floating leaf pondweed								
14	Water stargrass									14	Water stargrass								
15	Wild Celery									15	Wild Celery								
16	Arrowhead (submergent)									16	Arrowhead (submergent)								
17	Native milfoil									17	Native milfoil								
18	Whorled watermilfoil									18	Whorled watermilfoil								
19	Various leaf watermilfoil									19	Various leaf watermilfoil								
20	Coontail	B								20	Coontail				B		A		
21	Elodea									21	Elodea								
22	Bladderwort									22	Bladderwort								
23	Bladderwort (mini)									23	Bladderwort (mini)								
24	Buttercup									24	Buttercup								
25	Najas spp.									25	Najas spp.								
26	Brittle naiad									26	Brittle naiad								
27	Sago pondweed		B				A			27	Sago pondweed	B		A		B	B	A	A
28										28									
29										29									
30	White waterlily									30	White waterlily								
31	Yellow waterlily									31	Yellow waterlily								
32	Watershield									32	Watershield								
33	Small duckweed									33	Small duckweed								
34	Great duckweed									34	Great duckweed								
35	Watermeal									35	Watermeal								
36	Arrowhead									36	Arrowhead								
37	Pickerelweed									37	Pickerelweed								
38	Arrow arum									38	Arrow arum								
39	Cattail	A		B	B	A			A	39	Cattail				B				
40	Bulrush									40	Bulrush								
41	Iris									41	Iris								
42	Swamp Loosestrife									42	Swamp Loosestrife								
43	Purple Loosestrife									43	Purple Loosestrife								
44	Starry Stonewort									44	Starry Stonewort								
45	Phragmites	B	B		B	A				45	Phragmites						A		

Standard Aquatic Vegetation Assessment Site Species Density Sheet

Code No	Plant Name	Aquatic Vegetation Assessment Site Number NO 33	NO 34	NO 35	NO 36	NO 37	NO 38	NO 39	NO 40	Code No	Plant Name	Aquatic Vegetation Assessment Site Number NO 41	NO 42	NO 43	NO 44	NO 45	NO 46	NO 47	NO 48
1	Eurasian watermilfoil	B	B	B	B	C	C			1	Eurasian watermilfoil								
2	Curly leaf pondweed									2	Curly leaf pondweed								
3	Chara									3	Chara								
4	Thin leaf pondweed									4	Thin leaf pondweed								
5	Flat stem pondweed									5	Flat stem pondweed								
6	Robbins pondweed									6	Robbins pondweed								
7	Variable pondweed									7	Variable pondweed								
8	White stem pondweed									8	White stem pondweed								
9	Richardsons pondweed									9	Richardsons pondweed								
10	Illinois pondweed	B	B	B	B	B				10	Illinois pondweed								
11	Large leaf pondweed									11	Large leaf pondweed								
12	American pondweed									12	American pondweed								
13	Floating leaf pondweed									13	Floating leaf pondweed								
14	Water stargrass									14	Water stargrass								
15	Wild Celery									15	Wild Celery								
16	Arrowhead (submergent)									16	Arrowhead (submergent)								
17	Native milfoil									17	Native milfoil								
18	Whorled watermilfoil									18	Whorled watermilfoil								
19	Various leaf watermilfoil									19	Various leaf watermilfoil								
20	Coontail	A			B	B	B			20	Coontail								
21	Elodea									21	Elodea								
22	Bladderwort									22	Bladderwort								
23	Bladderwort (mini)									23	Bladderwort (mini)								
24	Buttercup									24	Buttercup								
25	Najas spp.									25	Najas spp.								
26	Brittle naiad									26	Brittle naiad								
27	Sago pondweed	A	A							27	Sago pondweed								
28										28									
29										29									
30	White waterlily									30	White waterlily								
31	Yellow waterlily									31	Yellow waterlily								
32	Watershield									32	Watershield								
33	Small duckweed									33	Small duckweed								
34	Great duckweed									34	Great duckweed								
35	Watermeal									35	Watermeal								
36	Arrowhead									36	Arrowhead								
37	Pickerelweed									37	Pickerelweed								
38	Arrow arum									38	Arrow arum								
39	Cattail			B						39	Cattail								
40	Bulrush									40	Bulrush								
41	Iris									41	Iris								
42	Swamp Loosestrife									42	Swamp Loosestrife								
43	Purple Loosestrife									43	Purple Loosestrife								
44	Starry Stonewort									44	Starry Stonewort								
45	Phragmites									45	Phragmites								

Potential Treatment Recommendations

The primary concern with any vegetation management plan are invasive species. In Forest Lake, this means Eurasian watermilfoil, phragmites, and what was observed in previous years curly leaf pondweed. While systemic control options exist for Eurasian watermilfoil and phragmites, none exist for curly leaf pondweed.

For the control of curly leaf pondweed, usually one treatment early in the season (May or June) with aquatic herbicides such as diquat dibromide is all that is necessary as the plant will not regrow very well in warmer water temperatures. This will also kill the plant before turion production occurs, limiting future plant growth.

For Eurasian watermilfoil, because a systemic control option exists, an effort to reduce any large beds of the plant should always be performed. Most systemic control options need to factor herbicide concentration and exposure time for successful treatments. Small beds or individual plants may not allow for systemic control to be viable because of those factors. Therefore, it may be cost beneficial to utilize contact herbicides on smaller beds and reserve any systemic control options to larger beds. However, recent advancements in herbicide technologies have led to the availability certain fast acting systemic herbicides for aquatic use. While the same concentration versus exposure time truths exists for the new products available, the successful systemic control of smaller Eurasian watermilfoil beds has greatly increased. It appears the milfoil population in Forest Lake is minimized, therefore smaller routine (yearly) systemic treatments should be performed to limit its potential regrowth and spread.

Phragmites should be treated with a systemic herbicide. Treatment can be made throughout the warmer months, however it is advised to treat in the fall. This is because the net movement of nutrients in the fall is generally downward into the roots for overwinter storage. Treatment at this time will increase the efficiency of the translocation of herbicide to the roots. Additionally treatment can be made on any of that years' new growth in the fall. Once dead (but no sooner than 3 weeks after treatment) the plant should be cut and removed (or burned).

Native vegetation and algae should be treated only as needed, if nuisance conditions exist. A healthy ecosystem includes having a wide variety of native plant species present, as well as algae. Native plants and algae provide protection and food sources for juvenile fish and aquatic animals. Additionally, complete removal of native vegetation will open substrate for non-native invasive species to take root. Emergent vegetation such as lily pads and cattails can spread and grow in new areas if it is not managed. However, these plants should be managed similar to other native submerged vegetation and only treated where they may impede recreational use of the lake.

Besides herbicides, mechanical harvesting can sometimes be utilized to manage nuisance vegetation. While removal of vegetation may be beneficial for the lake, for instance due to nutrient release and organic build up once a plant decomposes if treated with herbicides, the harvesting process is slow and more expensive per acre. Additionally, the invasive species starry stonewort and Eurasian watermilfoil can regrow by fragmentation, thus cut stems and fragments of Eurasian

watermilfoil and starry stonewort that is not collected (or dropped) by the harvesters may spread and grow in new areas.

When the spillway on Forest Lake is repaired and the water raises to 'normal' levels, it will be crucial to perform frequent vegetation surveys to observe the growth of Eurasian watermilfoil and curly leaf pondweed. As these species can outcompete native vegetation, the reintroduction of lake water to previously exposed bottomlands my promote its spread. There is no guarantee that the vegetation distribution in the lake will be the same as it was in 2019.

2024 Treatment

It is recommended that a systemic treatment for Eurasian watermilfoil occur in 2024. Eurasian watermilfoil appears to have spread through the shallow northwestern portion of the lake and the immediate shoreline areas of the rest of the lake. Due to the shallowness and poor visibility in the water, we were not able to navigate the entirety of the northwest portion of the lake. Therefore a spring survey will be accomplished with an airboat to accurately determine the actual acreage of milfoil.

We recommend utilizing the systemic herbicide ProcellaCOR EC for this treatment. This product requires an accurate survey of the milfoil beds to determine their location in the lake, density of the bed, and water depth at the bed site. At that point a treatment prescription can be made and the treatment will be carried out sometime in May or early June. Due to the necessity of those springtime survey values, we cannot explicitly state what the treatment would cost at this point. However we can approximate that there exists 30 to 50 acres of Eurasian watermilfoil and that based on an average water depth of 3 feet, the treatment in its entirety would cost between $32,000 and $54,000. Any watermilfoil not systemically treated or any small amount of regrowth should then be treated with diquat dibromide or additional ProcellaCOR pending budgetary constraints.

If any curly leaf pondweed exists at the time of treatment for the Eurasian watermilfoil, that species should be treated with a contact herbicide as well. Phragmites observed throughout the shoreline of Forest Lake should also be treated in a manner described previously at the end of 2024.

2023 Drone Treatment

Treatment was conducted near the Seder Creek for woody species such as Cottonwood and Willows. This woody growth came from the exposed bottomlands of the lake due to the decreased water level. A herbicide application drone was used to accomplish this treatment using systemic herbicides on the woody plants. Once the systemic kill was accomplished, the dead woody plants were mulched at the end of the season. The following are pictures of the drone application and the area post mulching.

3088 HOTTIS ROAD HALE, MI 48739 877-SAV-LAKE (877-728-5253) LakeAndPond.com

Water Quality

Forest Lake had water samples taken on September 29h, 2023. Water samples were taken from sites 1, 2, and 3 for water quality testing. Fourteen parameters were analyzed from the water samples at these three sites for this report. Of the parameters tested, Temperature, Dissolved Oxygen, Secchi Disk, and pH were sampled while on the lake. Chlorophyll α, Nitrate-N, Phosphorus, Alkalinity, Conductivity, Total Kjeldahl Nitrogen, Orthophospate, Total Dissolved Solids, Total Suspended Solids, and Turbidity were sampled by sending the water in sample bottles to an independent laboratory, White Water Associates located in Amasa, MI, where the analysis was ran. A complete lake profile for temperature and dissolved oxygen only was taken from site 3, which is the deepest part of the lake.

A well known limnologist named Wally Fusilier developed a grading scale for various parameters of water quality. Data collected in 2023 is shown below and nine of the parameters analyzed were given a grade based on Fusilier's scale. Additionally, the trophic state index is quantified. This index is used to generalize the biological productivity of a waterbody. The 3 main trophic states for a lake are oligotrophic (low productivity), mesotrophic (medium productivity), and eutrophic (high productivity). The index is calculated based on only chlorophyll α, total phosphorus, and secchi disk values.

(Water Quality Sampling Sites)

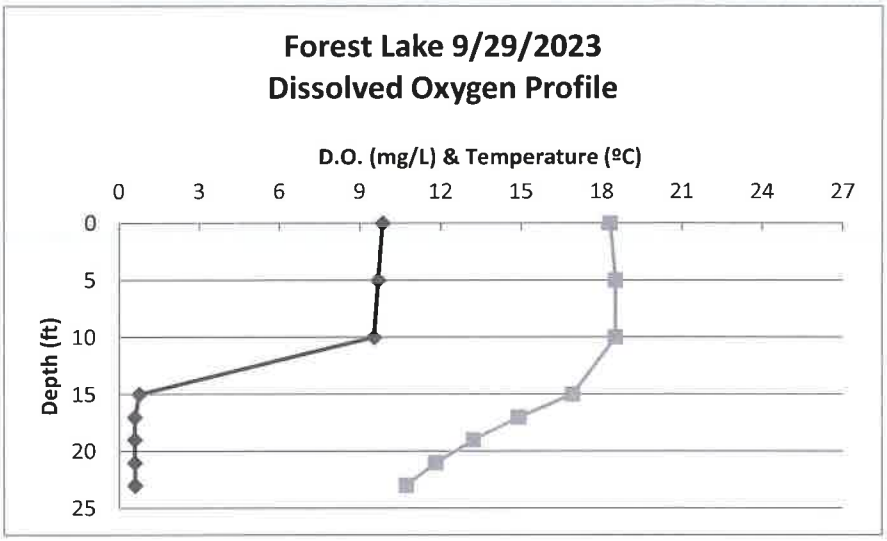
Date: 9/29/2023

Site Number:	1	2	3	Average	Grade
Chlorophyll α (ug/L)	4.8	12	7.7	8.17	D
Total Phosphorus (ug/L)	19	25	13	19.00	A
Nitrate-N (ug/L)	<130	<130	<130	<130	A
Alkalinity (mg/L)	130	120	120	123	A
pH	8.32	8.15	8.13	8.20	A
Conductivity (umho/cm)	350	330	330	337	A
Secchi Disk Depth (meters)	0.91	1.52	1.83	1.42	D
Surface Temp (ºC)	18.5	19	18.3	18.60	A
Surface D.O. (mg/L)	7.52	9.09	9.84	8.82	A

Trophic State Index	Value	Trophic State
Secchi Disk	54.9	Eutrophic
Chlorophyll α	51.2	Eutrophic
Total Phosphorus	46.6	Mesotrophic

Additional Parameters

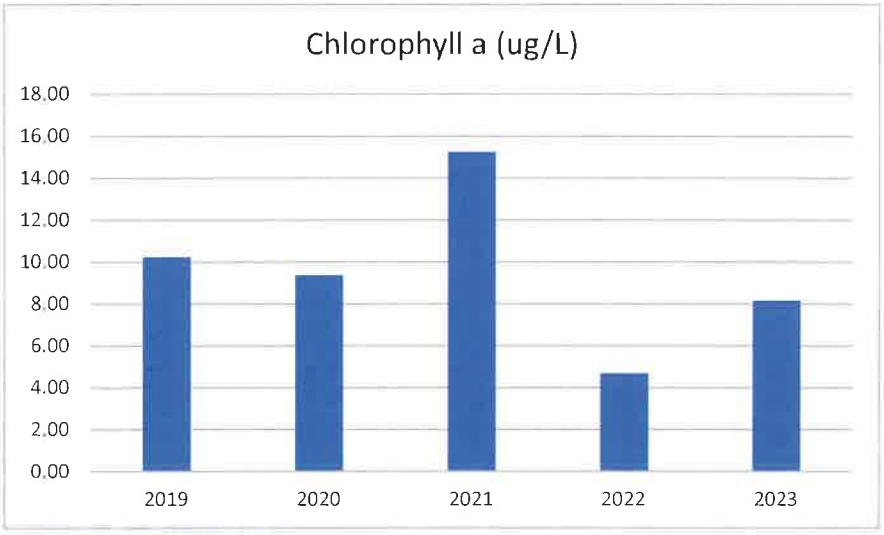
Site Number:	1	2	3
Orthophosphate-P (ug/L)	<10	<10	<10
Total Kjeldahl Nitrogen (mg/L)	0.73	0.82	0.79
Total Dissolved Solids (mg/L)	230	230	220
Total Suspended Solids (mg/L)	9	7	4
Turbidity (NTU's)	5.2	7	4.9

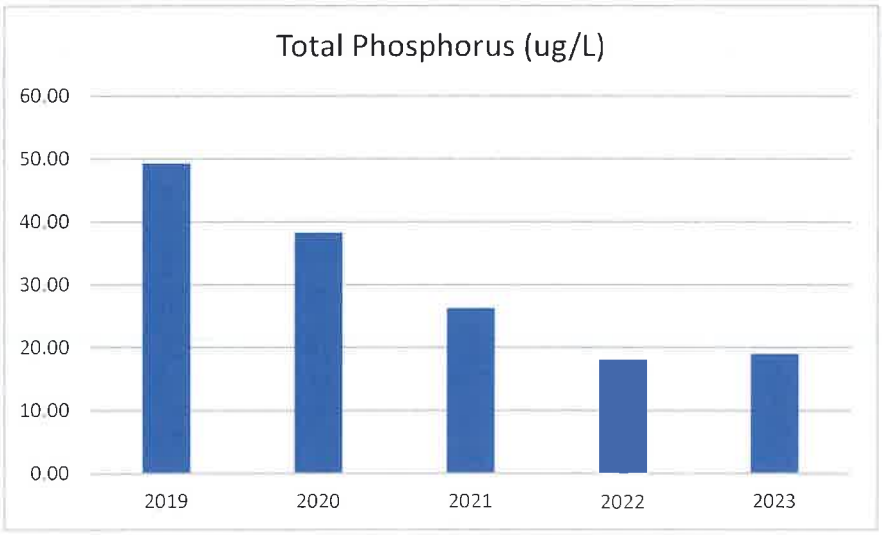


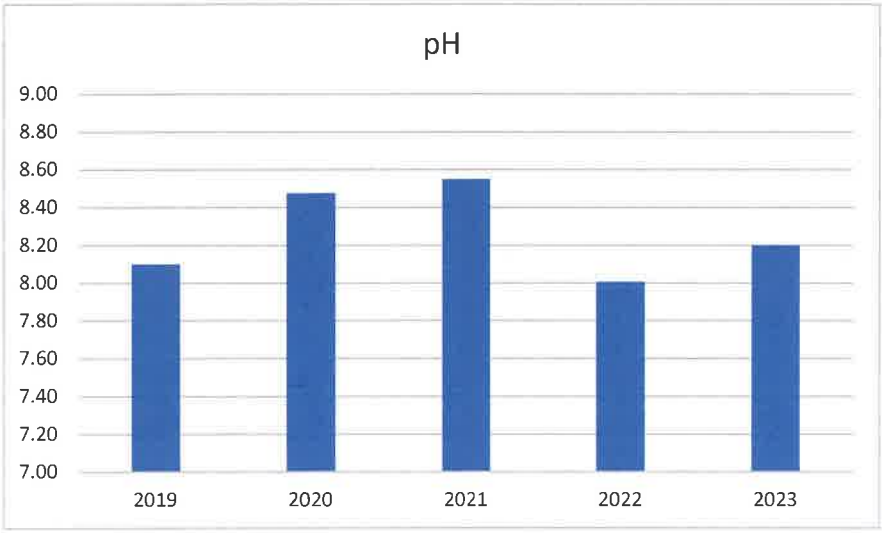
Temp (ºC)	D.O. (mg/L)	Depth (ft)
18.3	9.84	0
18.5	9.67	5
18.5	9.52	10
16.9	0.73	15
14.9	0.57	17
13.2	0.57	19
11.8	0.57	21
10.7	0.58	23

Water Quality Trend Graphs

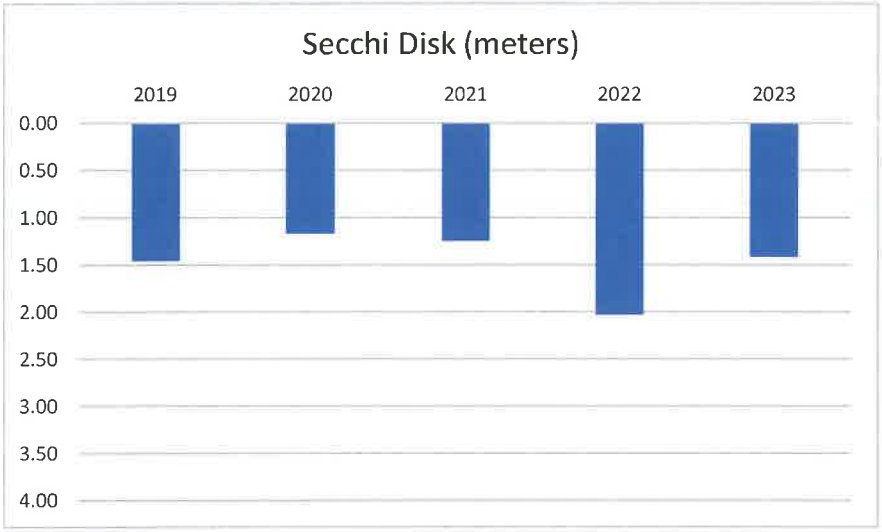
The following are graphs showing recent trending for some of the previously tested water quality data. Data provided is an average of all values obtained in a particular year. Not all parameters have graphs provided. This is due to either having one or two years with data available, or having a majority of the data being unquantified. The most common reason for this is if the values were below the detection limit for the tests being run. For instance, Nitrate-N values are all below the detection limit of 130 ug/L in 2023.

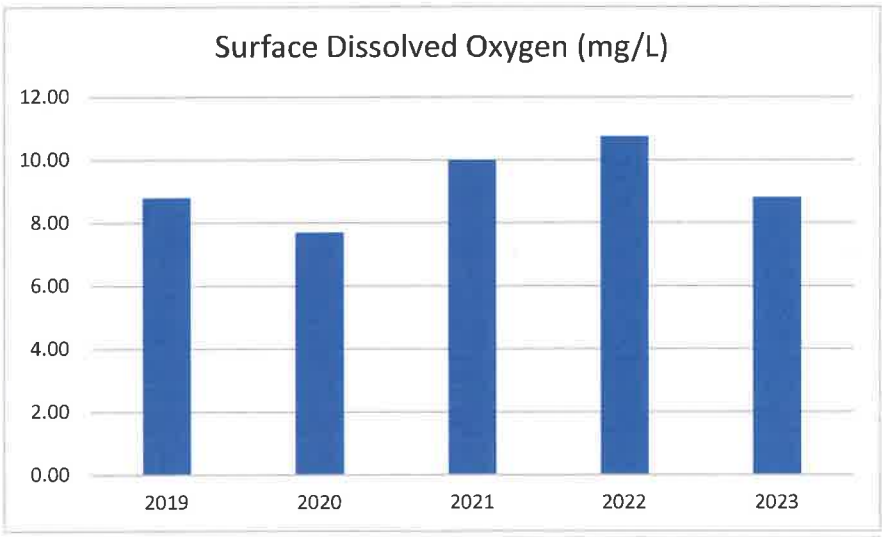


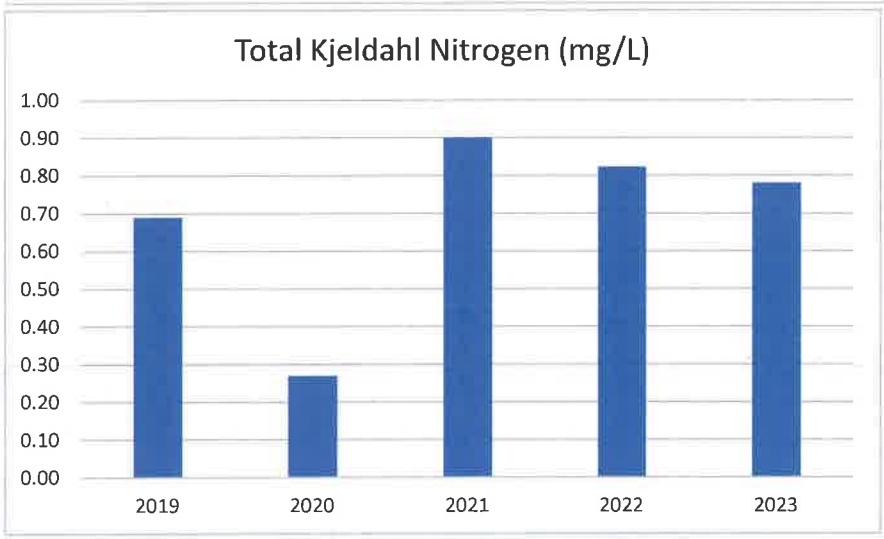


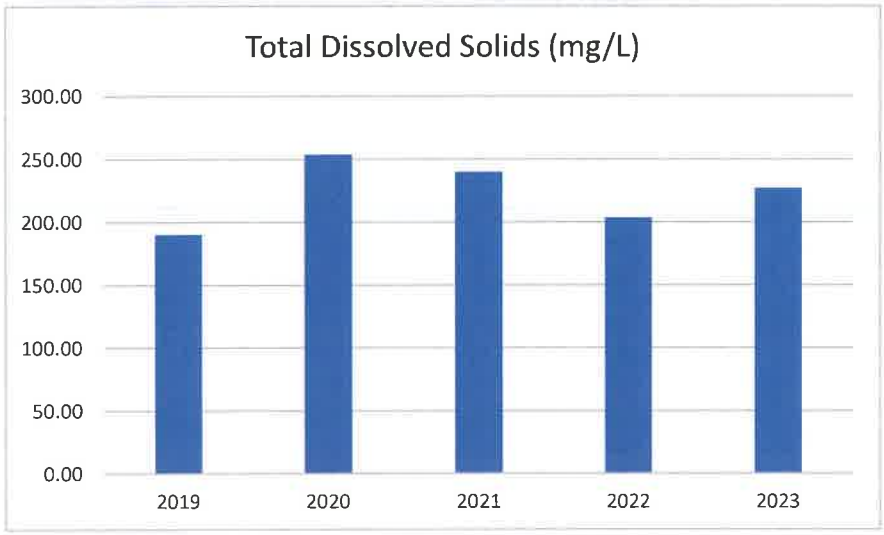

pH
9.00
8.80
8.60
8.40
8.20
8.00
7.80
7.60
7.40
7.20
7.00
2019
2020
2021
2022
2023


Conductivity (umhos/cm)
450.00
400.00
350.00
300.00
250.00
200.00
150.00
100.00
50.00
0.00
2019
2020
2021
2022
2023


Secchi Disk (meters)
2019
2020
2021
2022
2023
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00


Surface Dissolved Oxygen (mg/L)
12.00
10.00
8.00
6.00
4.00
2.00
0.00
2019
2020
2021
2022
2023


Total Kjeldahl Nitrogen (mg/L)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
2019
2020
2021
2022
2023


Total Dissolved Solids (mg/L)
300.00
250.00
200.00
150.00
100.00
50.00
0.00
2019
2020
2021
2022
2023

Parameter Descriptions:

TEMPERATURE AND DISSOLVED OXYGEN

Temperature exerts a wide variety of influences on most lakes, such as the separation of layers of water (stratification), solubility of gases, and biological activity.

Dissolved oxygen is the parameter most often selected by lake water quality scientists as being important. Besides providing oxygen for aquatic organisms in natural lakes, dissolved oxygen is involved in phenomena such as phosphorus precipitation to, and release from, the lake bottom sediments and decomposition of organic material in the lake.

Low dissolved oxygen concentrations (below 4 milligrams per liter) are generally insufficient to support fish life. In most Michigan lakes, there is no dissolved oxygen below the thermocline in late summer. Some experts like to see some dissolved oxygen in the bottom water of a lake, even if it is almost zero. This is because as long as there is some dissolved oxygen in the water at the bottom of the lake, phosphorus precipitated by iron to the bottom sediments will remain there. Once a lake runs out of dissolved oxygen in the water at the bottom iron comes back into solution. When that happens, it releases the phosphorus back into the water. This can cause additional algae to grow when the lake mixes.

DISSOLVED OXYGEN, PERCENT SATURATION

Because the amount of dissolved oxygen a water can hold is temperature dependent with cold water holding more than warm water, dissolved oxygen saturation is often a better way to determine if oxygen supplies are adequate. The best is between 90 and 110 percent.

CHLOROPHYLL α

Chlorophyll α is used by lake scientists as a measure of the biological productivity of the water. Generally, the lower the chlorophyll α, the better. High concentrations of chlorophyll α are indicative of an algal bloom in the lake, an indication of poor lake water quality. The highest surface chlorophyll α concentration found by Wallace Fusilier (Water Quality Investigators, WQI) in a Michigan lake was 216 micrograms per liter. Best is below one microgram per liter.

SECCHI DISK TRANSPARENCY (originally Secchi's disk)

In 1865, Angelo Secchi, the Pope's astronomer in Rome, Italy devised a 20-centimeter (8 inch) white disk for studying the transparency of the water in the Mediterranean Sea. Later an American limnologist (lake scientist) named Whipple divided the disk into black and white quadrants which many are familiar with today.

The Secchi disk transparency is a lake test widely used and accepted by limnologists. The experts generally felt the greater the Secchi disk depth, the better quality the water. However, one Canadian scientist pointed out acid lakes have very deep Secchi disk readings. (Would you consider a very clear lake a good quality lake, even if it had no fish in it? It would be almost like a swimming pool.) Most lakes in southeast Michigan have Secchi disk transparencies of less than ten feet. On the other hand, Elizabeth Lake in Oakland County had 34 foot Secchi disk readings in summer 1996, evidently caused by a zebra mussel invasion a couple of years earlier.

Most limnology texts recommend the following: to take a Secchi disk transparency reading, lower the disk into the water on the shaded side of an anchored boat to a point where it disappears. Then raise it to a point where it's visible. The average of these two readings is the Secchi disk transparency depth.

Secchi disk measurements should be taken between 10 AM and 4 PM. Rough water will give slightly shallower readings than smooth water. Sunny days will give slightly deeper readings than cloudy days. However, roughness influences the visibility of the disk more than sunny or cloudy days.

TOTAL PHOSPHORUS

Although there are several forms of phosphorus found in lakes, the experts selected total phosphorus as being most important. This is probably because all forms of phosphorus can be converted to the other forms. Currently, most lake scientists feel phosphorus, which is measured in parts per billion (1 part per billion is one second in 31 years) or micrograms per liter (ug/L), is the one nutrient which might be controlled. If its addition to lake water could be limited, the lake might not become covered with the algal communities so often found in eutrophic lakes.

Based on WQI's studies of many Michigan inland lakes, they've found many lakes were phosphorus limited in spring (so don't add phosphorus) and nitrate limited in summer (so don't add nitrogen).

10 parts per billion is considered a low concentration of phosphorus in a lake and 50 parts per billion is considered a high value in a lake by many limnologists.

NITRATE NITROGEN

Nitrate, also measured in the parts per billion range, has traditionally been considered by lake scientists to be a limiting nutrient. The experts felt any concentration below 200 parts per billion was excellent in terms of lake water quality. The highest value found by Fusilier was 48,000 parts per billion in an Ottawa County River which flowed into Lake Macatawa in Holland, Michigan

On the other hand, WQI has studied hundreds of Michigan inland lakes, and many times they find them nitrate limited (very low nitrate nitrogen concentrations), especially in summer.

WQI was finding many lakes have lower nitrate nitrogen concentrations in summer than in spring. This is probably due to two factors. First, plants and algae growing in lakes as water warms can remove nitrates from the water column. And second, bacterial denitrification (where nitrates are converted to nitrogen gas by bacteria) also occurs at a much faster rate in summer when the water is warmer.

Generally, limnologists feel optimal nitrate nitrogen concentrations (which encourage maximum plant and algal growth) are about 10-20 times higher than phosphorus concentrations. The reason more nitrogen than phosphorus is needed is because nitrogen is one of the chemicals used in the production of plant proteins, while phosphorus is used in the transfer of energy, but is not used to create plant material. If the nitrate concentration is less than 10-20 times the phosphorus concentration, the lake is considered nitrogen limited. If the nitrate concentration is higher than 10-20 times the phosphorus concentration, the lake is considered phosphorus limited.

TOTAL ALKALINITY

Alkalinity is a measure of the ability of the water to absorb acids (or bases) without changing the hydrogen ion concentration (pH). It is, in effect, a chemical sponge. In most Michigan lakes, alkalinity is due to the presence of carbonates and bicarbonates which were introduced into the lake from ground water or streams which flow into the lake. In lower Michigan, acidification of most lakes should not be a problem because of the high alkalinity concentrations.

HYDROGEN ION CONCENTRATION (pH)

pH has traditionally been a measure of water quality. Today it is an excellent indicator of the effects of acid rain on lakes. About 99% of the rain events in southeastern Michigan are below a pH of 5.6 and are thus considered acid. However, there seems to be no lakes in southern Michigan which are being affected by acid rain. Most lakes have pH values between 7.5 and 9.0.

SPECIFIC CONDUCTIVITY

Conductivity, measured with a meter, detects the capacity of a water to conduct an electric current. More importantly however, it measures the amount of materials dissolved in the water, since only dissolved materials will permit an electric current to flow. Theoretically, pure water will not conduct an electric current. It is the perception of the experts that poor quality water has more dissolved materials than does good quality water

Orthophosphate

Another common name for orthophosphate is "reactive phosphorus". Orthophosphate is the form of phosphate available to living organisms. For example, orthophosphate is the phosphorus form that is directly taken up by algae. Thus, the amount of orthophosphate in the amount available for potential algal growth.

Total Kjeldahl Nitrogen (TKN)

TKN is the amount of nitrogen in the water in the form of ammonia and in all biological forms. The higher the value, the more likely a problem exists such as algae blooms and less oxygen.

Total Dissolved Solids (TDS)

Total dissolved solids is the amount of dissolved organic and inorganic material in the water. Generally higher TDS results in poorer water quality.

Total Suspended Solids (TSS)

Total suspended solids is the amount of suspended material in the water. Higher levels of TSS will increase water temperatures and decrease dissolved oxygen levels. Suspended particles will absorb more heat from the sun than water will.

Turbidity

Turbidity is the measure of the clarity of water. It is the measurement of the light scattered by material in the water. Turbidity readings can be used to indicate the potential pollution in the water.

Phosphorus Mitigation

There exists a couple of products that directly capture and remove phosphorus from a waterbody. One set of products will strip the phosphorus from the water column and cap the sediments from internal releasing phosphorus back into the water. A couple examples of this are Allum and Phoslock. Another product that accomplishes a similar strategy is EutroSORB. EutroSORB is a line of multiple products that is designed to capture soluble reactive phosphorus. Each product in the EutroSORB line accomplishes the capture of phosphorus through different means. For instance one product is a large bag filled with the ingredient that is designed capture phosphorus. Water flows through the bag preferably at an inlet stream, and phosphorus in the water will bind with the ingredient and settle inside the bag. Once the binding capacity is near its limit, you remove the bag, thus removing the bound phosphorus, and replace a new bag to start the process over. Because of this process, the water entering the lake contains much less available phosphorus for algae to use. Other products in the EutroSORB line help bind phosphorus already in the water column, and another blocks internal loading of phosphorus from sediments.

These products will soon be available for use in Michigan. We believe when they are, it will be a key component of lake management strategies. We will be able to treat algal problems from the source, nutrients. Because of this, we collected water samples from creeks entering the lake, as well as collected sediment samples from the lake bottom, to help start some of the data collection that would be necessary to implement a phosphorus mitigation strategy.

Sediment samples were acquired in 2022 at the same 3 water quality sampling sites. Creeks were numerically labeled the same as previous studies for comparisons.

- Site 1: Seder Creek.
- Site 2: Wells Creek.
- Site 3: Whippoorwill Creek.
- Site 4: Ringneck Creek.
- Site 5: Bobcat Creek.
- Site 6: Park Road Drain.

(*Stream Sampling Sites*)

Stream Data:

FRP (ug/L)

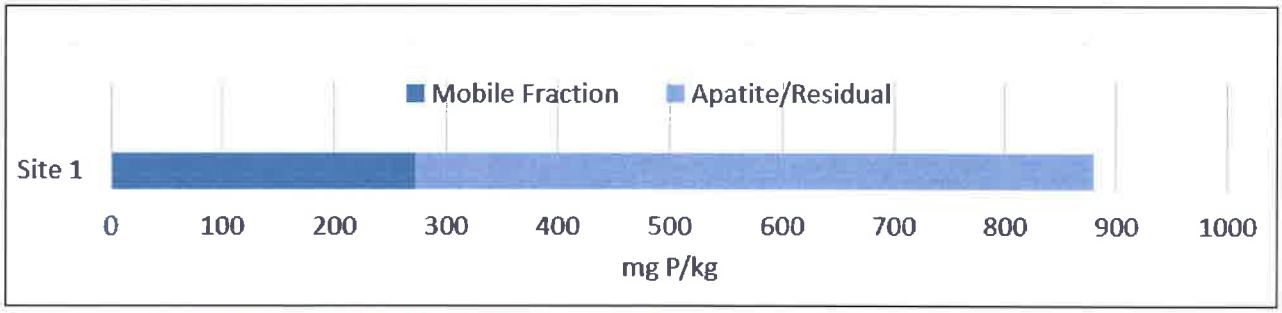
Stream Data	Sampling Dates	
	Early Summer	Late Summer
Site 1	36	121
Site 2	<10	13
Site 3	<10	<10
Site 4	41	19
Site 5	23	25
Site 6	N/A	N/A

TP (ug/L)

Stream Data	Sampling Dates	
	Early Summer	Late Summer
Site 1	110	314
Site 2	23	31
Site 3	18	14
Site 4	112	67
Site 5	41	48
Site 6	N/A	N/A

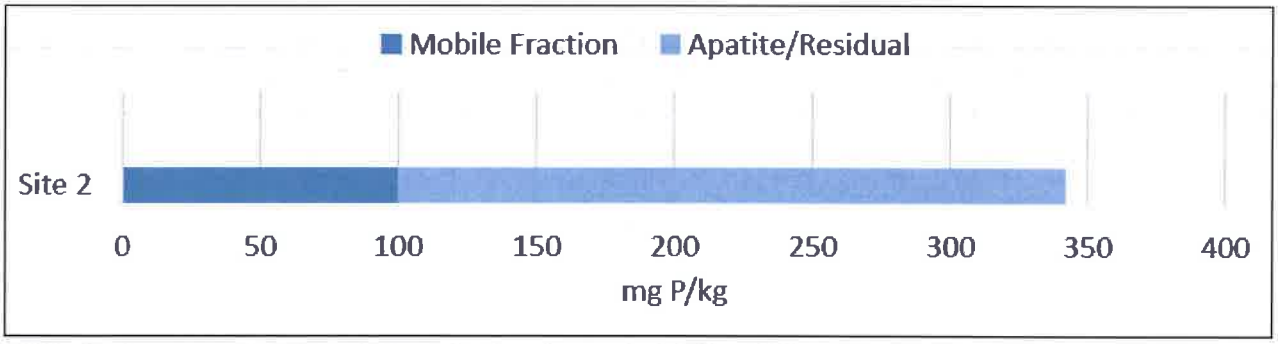
Sediment Data from 2022:

Sample ID	Sample Name	Apatite and Residual (mg P/kg)	Mobile Phosphorus† Fraction (mg P/kg)	TP (mg P/kg)	% Solids (% Dry Wt.)
CTM40965	Site 1	607	272	879	23



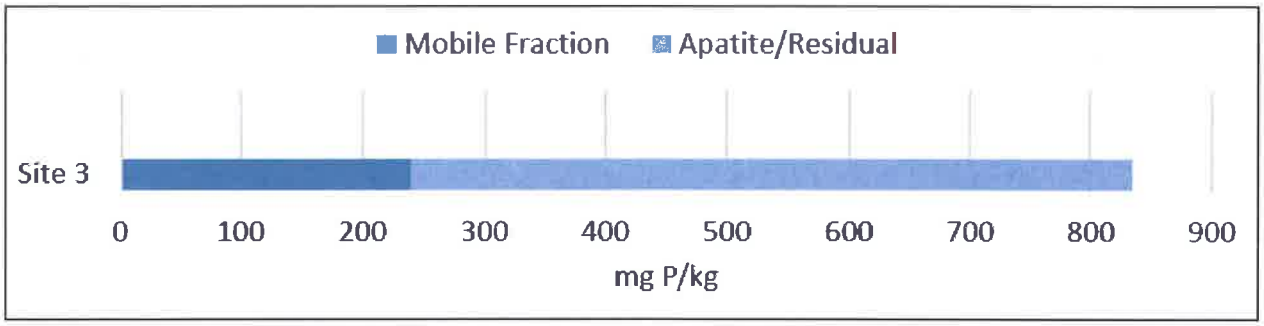
†Mobile phosphorus represents fractions of sediment phosphorus that are potentially bio-available in typical aquatic environments. All concentrations are reported based on dry weight

Sample ID	Sample Name	Apatite and Residual (mg P/kg)	Mobile Phosphorus† Fraction (mg P/kg)	TP (mg P/kg)	% Solids (% Dry Wt.)
CTM40966	Site 2	241	100	342	47



†Mobile phosphorus represents fractions of sediment phosphorus that are potentially bio-available in typical aquatic environments. All concentrations are reported based on dry weight

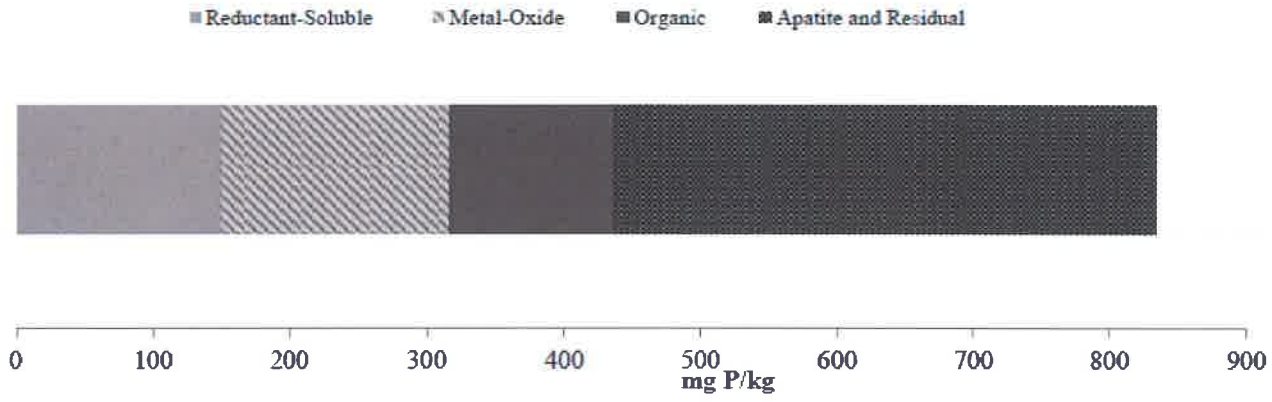
Sample ID	Sample Name	Apatite and Residual (mg P/kg)	Mobile Phosphorus† Fraction (mg P/kg)	TP (mg P/kg)	% Solids (% Dry Wt.)
CTM40967	Site 3	594	240	834	24



†Mobile phosphorus represents fractions of sediment phosphorus that are potentially bio-available in typical aquatic environments. All concentrations are reported based on dry weight

Name	Sample ID	% Solids (% Dry Wt.)	Labile (mg P/kg)	Reductant-Soluble (mg P/kg)	Metal-Oxide (mg P/kg)	Organic (mg P/kg)	Apatite and Residual (mg P/kg)
Site 3	CTM40967	24	*	150	166	120	397

*** Concentration was less than reportable limits with 99% confidence**
All concentrations are reported based on dry weight



2024 Forest Lake Management Recommendations

As the spillway repair is not yet completed, most of the recommendations have remained the same.

Forest Lake will soon undergo many changes between the repairing of the spillway, the water levels returning to normal, and the dredging project that will begin as well. Monitoring of the water quality and vegetative growth will be important upon their completion. As previously stated, the vegetative response to the lake filling could potentially allow invasive species to spread rapidly. Native species treatments should be discouraged to allow their propagation, with the exception of treatments that are necessary for allowing recreational use of the lake if their coverage and density mimic what has been observed in the northwest portion of the lake.

Eurasian watermilfoil should be systemically treated in 2024 with the product ProcellaCOR. Efforts should be made now to reduce its spread and lower its density in the lake. Phragmites observed throughout the shoreline of Forest Lake should also be treated. Phragmites treatment can be accomplished by boat or walking, but in some instances utilizing a drone may be more practical.

In general, Savin Lake Services does not believe herbicide treatment of native aquatic vegetation will be necessary in 2024. However, should the Property Owners Association request herbicide treatment of Forest Lake at its current water level to benefit recreational uses like kayaking and canoeing please let us know.

Water quality testing continue in order to monitor trending analysis and identify any changes that may occur. This will also help for if phosphorus mitigation efforts begin in the near future.

An updated sonar survey is recommended when water levels return to normal. The bathymetric (depth contour), biovolume (vegetation density), and bottom hardness maps will be informative and complement other survey methodologies to evaluate any changes that may have occurred to the lake over the last few years. Water quality monitoring should be completed in a similar manner to previous years in order to document changes that may occur when the lake returns to normal water levels.

FOREST LAKE PROPERTY OWNERS' ASSOCIATION ("FLPOA")

PARKS SURVEY

1. How often do you use the FLPOA parks and what parks do use (a map of FLPOA parks is attached hereto)?

   _____

2. How satisfied are you with the FLPOA parks? (1-10, 10 being very satisfied)

   Circle One: 1 2 3 4 5 6 7 8 9 10

3. Would you like to see new walking trails in addition to Bryan's Trail?

   Circle One: Yes/No If yes, where: _____

4. How satisfied are you with FLPOA park/playgrounds? (1-10, 10 being very satisfied)

   Circle One: 1 2 3 4 5 6 7 8 9 10

5. How satisfied are you with the FLPOA park/picnic grounds? (1-10, 10 being very satisfied)

   Circle One: 1 2 3 4 5 6 7 8 9 10

6. How satisfied are you with the FLPOA baseball field? (1-10, 10 being very satisfied)

   Circle One: 1 2 3 4 5 6 7 8 9 10

9. How satisfied are you with the beaches/swimming areas? (1-10, 10 being very satisfied)

   Circle One: 1 2 3 4 5 6 7 8 9 10

7. Would you be interested in seeing a fitness trail/area in the future?

   Circle One: Yes/No If yes, where:_____

8. Would you be interested in seeing a designated dog platform/swimming area?

   Circle One: Yes/No If yes, where:_____

9. Would you be interested in seeing a designated kayak launch?

   Circle One: Yes/No If yes, where:_____

10. Please tell us what, if anything, you feel can be done to improve the FLPOA parks.

    _____

    _____

11. Please tell us what you like most about FLPOA parks?

    _____

    _____

12. Please submit your suggestions as to any other park improvements/additions.

    _____

    _____

    _____

Please mail or drop of your responses to the FLPOA Office, Attn: Tracy Reitzloff or email your responses to tracyreitzloff@att.net.

Thank you!

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