MISSION STATEMENT

The purpose of the Fremont Lake Association (FLA) will be to improve the water quality of Fremont Lake and its watershed through research, education and actions leading to lake maintenance and improvements; promote activities which enhance the social welfare of its members & provide pertinent information through its Website, Newsletter and Meetings as appropriate.



Saturday, August 21, 9am at Sheridan Township Hall

- Updates on Invasive Species Treatment
- Speakers from Michigan DNR and EGLE
- Election of Directors

Currently our directors are: (year completing term):

2020 – Haveman, Sella, Schippers

2021 – Landheer, Nieboer, Rycenga

2022 – Knorr (resigning), Wolffis

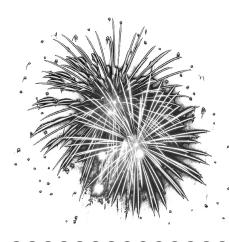
Since we did not have an Association meeting last year, our directors completing their terms in 2020 were not replaced. Also, the 2021 directors will complete their term with the annual meeting. It has been customary that we elect new directors at our annual meeting. Since our bylaws call for 5 to 9 directors, I conclude that we should have

- two openings for a one-year term ending 2022. (Wolffis plus 2 openings in group 2022)
- three openings for a two-year term ending 2023 (replacing group 2020)
- three openings for a three-year term ending 2024 (replacing group 2021)

We need to recruit some new membership, so please consider serving or start talking to your neighbors and friends about becoming a FLA director. There is not a large time commitment involved, maybe only two or three meetings per year. On the other hand, opportunities exist to take on a challenge and make an impact on the quality of our lake. One glaring shortcoming is not having any women as directors. That would be a big improvement! Please let me or any of the current directors know if you would like to throw your hat in the ring.

You may contact us at fla4members@gmail.com

Chair (acting) - Bruce Haveman Vice-Chair - Ken Wolffis



Independence Day Fireworks this July?

I am guessing that the major topic on your mind is "are we having Fireworks this year?" And the answer is, YES, although we needed to scramble to make that happen. When the Governor opened up the State as of July 1, we proceeded to put together our funding and get a shooter lined up. We have received contributions of \$3,000 each from the City of Fremont and Sheridan Charter Township. The Lake Association has likewise contributed \$3,000. Our show date will be Saturday, July 3 at dark, with a rain date the following Saturday, July 10. Since we have a new shooter this year, we anticipate changes from what we have seen in the past.

CHAIRMAN'S REPORT

First of all, my apology for this late delivery of your annual Fremont Lake Association newsletter. Our secretary and newsletter editor, Norm Knorr, is wanting to reduce his involvement in FLA. He is busy attending to personal matters, and is no longer a Fremont Lake resident. Norm has served FLA for many years (decades maybe?) and we owe him a great deal of thanks for his years of service. Many Thanks Norm! So, I am belatedly filling in for Norm in his absence.

Website – fremont.lake.net

The website has been updated with current documents, under the NEWS tab:

- 2021 Lake Management Proposal from PLM Lake and Land Management Corp
- 2021 Fremont Lake Notice (disclosures of products used for treatment, provided to property owners)
- 2020 Fremont Lake on-site Lake Evaluation YEAR END REPORT
- 2020 AVAS Aquatic Vegetation Annual Summary
- 2019 CLMP (Cooperative Lakes Management Program) this report contains data taken from lake water sampling, such as transparency, phosphorus, dissolved oxygen, chlorophyll, trophic status, and aquatic plants observed. Data was not updated for 2020 due to Covid, but this is a cumulative report with data (not complete) as far back as 1970.

Walleye planting

Last year we were scheduled for our bi-annual walleye plant, but it didn't happen as DNR didn't do an egg harvest, again due to Covid. This year I followed up with Mark Tonnello of DNR to see if we are scheduled this year, he responded:

Bruce,

Yes that is the plan. We were able to complete a successful walleye egg take on the Muskegon River this last week, so we will be rearing walleye this year (unlike last year). Fremont Lake was last stocked in 2018, so it will be a high priority for this year. No guarantees- walleye rearing is a lot like farming, there are good years and bad years. But if we can have a decent production year, Fremont should get stocked.

Mark Tonello
Fisheries Management Biologist
Central Lake Management Unit, Cadillac
Michigan Department of Natural Resources

Invasive Species Treatment

Our Lake Manager and staff were on our lake and surveyed current conditions recently. Due to a variety of factors, the current amount of invasives cover was found to be high. The first treatment for invasive species took place in early June.

Our past cost information for our Self-Assessment District is as follows:

	Total	City of	Sheridan	Property	Per
	Cost	Fremont	Townshi p	Owners	Parcel
2013	76,211	13,746	7,987	54,478	283
2014	47,300	9,459	5,675	32,166	156
2015		9,439			
2016	20,446		453	17,993	99
	47,153	260		46,893	241
MSU					
Study	25,878	12,939	12,939		
2017	39,352	174	4,602	33,576	174
2018	14,524	66	1,743	12,715	66
2019	13,646	62	1,638	11,946	62
2020					
Total	28,392	129	3,407	24,856	129
i Ulai	312,902	36,835	38,444	234,623	1,210

We anticipate that 2021 costs will exceed that of 2020.

Financial Information for Aquatic Nuisance Control Assessment

The Special Assessment District (SAD) addresses our Mission Statement to manage the water quality more effectively was passed with a majority vote of Fremont Lake Property Owners. The provisions of the SAD are that the annual cost cannot exceed \$100,000 or \$300 per parcel. Parcels with lake access pay ½ & commercial property owners pay double. The City of Fremont subsidized 20% the cost in 2013, 2014 & the 2016 MSU Study. Sheridan Charter Township has subsidized 12 % of the cost every year. As expected, the 1st year addressed the many years of neglect & was the costliest. The success of this effort can be seen in the reported improvement of the Lakes Eco-System along with lower cost to property owners in recent years. It's important to note that the provisions of the SAD are that all funds from the Assessment are used exclusively for that purpose.

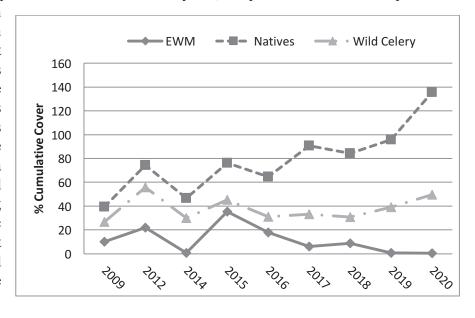
Fremont Lake Aquatic Plant Management Update

By: BreAnne Grabill, Northern Regional Manager, PLM Lake & Land Management Corp.

Welcome to June 2021 on Fremont Lake. We've already been on the water a few times this spring and as we work to manage nonnative plants within your lake, we are reminded of all the moving parts that impact your lake such as weather (warm springs, hot Junes, mild winters), seed banks, reproduction by fragmentation as well as working to meet the goals of everyone. Although we all love Fremont Lake, what one uses and wants out of the lake is not the same for everyone. Some prefer to view the lake from their home while others are avid water skiers or swimmers, while others kayak and/or fish. It is my goal as a lake manager to bring all these vested interests together and ensure that the number one goal of this waterbody is met-protecting its ecological integrity. Often times, we are limited with budget however my number one goal is managing nonnative, invasive species while promoting healthy native plants lake wide. Two species have been negatively impacting the plant communities and therefore the fishery for decades now, Eurasian watermilfoil (EWM) and Curlyleaf pondweed (CLP). Through action, the Fremont Lake Association has worked with Sheridan Township and the City of Fremont to form a whole lake management program some years ago. This program has successfully reduced the populations of these plants, yet it will be an ongoing program as eradication is not feasible but management to low levels is. Through active management, EWM and CLP populations can be reduced to have minimal impacts on the lake and decrease further negative impact on the waterbody. PLM's survey in June 2021, found more nonnative plants than the last few years, which is disappointing, however is not unexpected as it is the nature of the beast to see fluctuations in the populations. Treatment occurred for a portion of the nonnative plants in the second week of June and the lake will be continually monitored for the rest of the season.

The below graph shows the end of season infestation of nonnative species (from our end of summer 2020 survey) and the plant coverage in Fremont Lake, including the presence of EWM compared to that of Wild Celery (a native plant) and the overall native plant population. Over the last few years, the presence of nonnative plants has

decreased while the native plant population has increased, because of the steps taken in plant management. More native plant species have been found in recent surveys than a few years ago, which is the goal once the nonnative or exotic plant populations are reduced, allowing healthy native plants to flourish. Native plant populations are encouraged in waterbodies to promote a healthy fishery, provide oxygen, food and forage and many other benefits, including sediment stabilization. Nonnative or exotic plants destroy native plant populations that are needed to maintain a healthy lake and fishery as well as impacting recreational use of the lake.



Please watch your shoreline for updated treatment information/ posting signs in your area of the lake. Please feel free to contact PLM @ 800-382-4434 ext. 2200 Please enjoy a safe summer on Fremont Lake.



Impacts of Wake Boats and Best Practices:

The popularity of wake sports has been on the rise over the past several years and with it the number of "wake boats" operating on lakes. Whether wake boarding or wake surfing, these boats are designed to produce large waves. Hull shape, ballast tanks, adjustable plates, and horse power are some of the technologies used. These waves are often equal to or greater than most major storm events which can increase shoreline erosion. Unlike old school/conventional "ski" boats which typically push thrust parallel to the waters surface, wake boats tend to push thrust at a downward angle and therefore have a greater potential to disrupt bottom sediments in addition to eroding shoreline.

PLM staff often field inquiries about impacts of wake boats on lakes. The honest answer is that there is a shortage of research on the subject but new studies currently being done suggest that larger waves may increase the potential for shoreline erosion and deeper thrust may disrupt/resuspend sediments at the lake bottom.

PLM would like to provide a few guidelines that can reduce the potential for adverse effects to your lake.

- Waves decrease in size the longer they travel. Therefore, PLM recommends operation of wake boats at least 500 ft from shore whenever possible.
- Studies conducted on different wake boat models suggest that thrust (depending on the trim angle) will typically reach a depth of ~12 feet. Therefore, PLM recommends that wake boats be operated in depths greater than 12 ft whenever possible.

As time goes on there is certain to be more research done in this area and/or regulation. For the time being, be aware of potential effects on your lake and adapt boating practices to minimize impacts.





FREMONT LAKE ASSOCIATION ACCOMPLISHMENTS & ACTIVITIES

- 2007 FLA reestablished & By-Laws adapted
- 2008 2009 Water Rescue & Safety Demonstrations Co-Sponsored with Gerber Hospital
- 2009 Purchase & Install Signage at City & Twp. Launch Sites
- 2009 GVSU/AWRI Survey of Water Quality & Lake Inlets Funded FACF Grant & FLA Funds
- 2009 MSU / DEQ Survey of Deep-Water Sediment Core Samples
- 2010 Website established *** fremontlake.net *** By-Laws amended
- 2010 DNR stocking of Walleyes restarted (Usually about 40,000 Walleyes in the even years)
- 2010 Property Owner Weed Control contracts began with Professional Lake Management (PLM)
- 2011 Shoreline Restoration Planting with MRWA. Funded by FACF, MRWA & FLA Funds
- 2011 Swan Control Project implemented in cooperation with USDA
- 2011 PLM evaluation of Weed Problems No charge
- 2012 PLM contract to recommend actions needed for weed control- Funded by TWP, City & FLA Funds
- 2013 Reestablish a Special Assessment District (SAD) to control Aquatic Nuisances Funded by City, TWP, Property Owner Assessment & FLA funds (Similar to SAD in 1980's)
- 2014 2nd year of SAD Funded by City, TWP, & Property Owner Assessment
- 2015 3rd year of SAD Funded by TWP & Property Owner Assessment
- 2016 MSU Survey of Water Quality & Aquatic Plant Evaluation Funded by City& TWP
- 2016 4th year of SAD Funded by Property Owner Assessment
- 2017 5th year of SAD Funded by TWP & Property Owner Assessment
- 2017 Winter Water Quality Sample conducted by MSU, City of Fremont & FLA personnel
- 2018 6th year of SAD Funded by TWP & Property Owner Assessment
- 2018 Stream Monitoring Michigan Clean Water Corps Funded by MRWA & FLA
- 2019 7th year of SAD Funded by TWP & Property Owner Assessment
- 2019 Implement DEQ "Clear Lakes Monitoring Program" CLMP Conducted by Fremont City Staff
- 2019 Participated in Aquatic Invasive Species "Landing Blitz"
- 2020 CLPM funding suspended in State Budget Data will be collected by Fremont City Staff for reference
- 2020 8th year of SAD Funded by TWP & FLA Property Owner Assessment
- 2020 Fireworks Program cancelled due to COVID-19 restrictions
- 2020 Bulletin Boards & Signage at Launch Sites for Invasive Species Regulations & FLA Communications

Lake Water Levels

From Newaygo County Drain Commissioner Dale Twing: (reprinted with permission)

We are experiencing very low levels in all of our county lakes as well as in those throughout the state. Even the rivers are extremely low. As Drain Commissioner I am in charge of seven legally established lake levels. Three of these have different seasonal levels and we take boards in and out of a dam structure to make this change. These are engineered to coincide with the levels that have been established by court order. These are consistently done on the established dates.

The reason that lakes are low and yet water still flows over the dam is because evaporation and the lack of incoming water aren't in balance. No dam is usually intended to totally stop the discharge of water. Most lakes are part of a bigger watershed and the people downstream need water also.

The current drought is an issue that everyone is currently dealing with and only Mother Nature can solve.

A Natural Shoreline: A Better decision for you, your lake and your wallet

Editor's Note: This article was submitted by BreAnn Grabill of PLM FYI. The information works in concert with the 2016 MSU Survey & Recommendations. You may recall that these observations were included in Erick Elgin's - MSU remarks at our 2019 Annual Meeting.

Stewards can help keep your lake healthy by using ecological principals to maintain a natural shoreline. Having a buffer at the shoreline helps prevent erosion, which saves you from a loss of shoreline property and increased sedimentation in the water. Erosion and sedimentation cause poor water quality. Seawalls and natural shorelines (also known as bioengineering or "lakescaping") are two types of buffering systems.

Seawalls are often perceived as a more stable system and therefore used more often, but in fact they are less stable, more damaging to the lake ecosystem, and typically cost much more money to install and maintain over the years. Seawalls do not allow for absorption of energy from waves hitting the wall, causing wave energy to force back into the lake, causing more erosion and loss of sediment at the base of the wall. Seawalls also lead to negative impacts on fish, turtles, amphibians, etc while a natural shoreline or "lakescape" absorbs some if not all the energy from waves and wind.

Lakescapes use native plants, biodegradable products and natural materials to provide a stable shoreline to protect from erosion with providing ecological features, a living buffer, that adapts over the seasons and years. A few of the benefits to using native plants, grasses and shrubs are: providing food

and habitat; minimal maintenance; provides shade which lowers air and water temperatures; attracts birds leading to decreases in insects; root systems anchor soil in place; sustains biodiversity and helps keep out exotic species such as Phragmites and Purple Loosestrife; filters more water than turf grass; reducing geese on your property as geese like to see their

predators and prefer manicured lawns and seawalls.



NOTE: Due to our deadline to publish this newsletter, we are not enclosing an envelope for you to remit dues and fireworks contributions. Voluntary contributions may be sent to:

FLA, PO Box 404, Fremont, MI 49412

Make checks payable to FLA



PO Box 404 Fremont, MI 49412 www.FremontLake.net

Annual Meeting

Saturday, August 21, 9:00 AM Sheridan Charter TWP Hall

2021 Fireworks, Saturday, July 3rd @ dusk

FLA Committee

Bruce Haveman – Chair Ken Wolffis – Vice-Chair John Sella - Treasurer David Landheer Doug Nieboer John Rycenga Dirk Schippers Norm Knorr – Editor

Please send your check for voluntary
Dues to FLA, PO Box 404
Fremont, MI 49412



