## LAKE MANUELLA IMPROVEMENT ASSOCATION DUES

NAME:									
□ NEW MEMBER	☐ CONTACT INFORMATION CHANGES/ADDITIONS								
Lake Address:									
Mailing Address if different from above:									
Best Contact Phone number(s):									
Email Contact(s):									
I would like to	o continue my Lake Manuella Improvement Association membership in 2024 dues of \$75.								
I would like to	I would like to join the Lake Manuella Improvement Association in 2024, dues \$75.								
money is use	I would like to contribute to the Lake Manuella Improvement Associations Ongoing Project Fund. (This money is used to help fund Lake Improvement Projects and Aquatic Invasive Species treatments, etc.,)  My contribution is \$								
Please make to LMIA and	e checks payable I remit to: Pay your dues & additional contributions via Venmo:								
Barry Calh	oon/LMIA @LakeManuella-Improvement Assoc.								
21010 654	(IV								
Litchfield, I	MN 55355								

Lake Manuella Improvement Association; 65813 216th St. Darwin, MN 55324

The lake Manuella Improvement Association has applied for a permit to treat Curly Leaf Pondweed and Eurasian Water Milfoil, Aquatic Invasive Species (AIS) in Lake Manuella in 2024. @LakeManuella-ImprovementAssoc.

The Minnesota Department of Natural Resources has granted the LMIA a waiver of the requirement that the association obtain the signatures of approval of owners of lakeshore property. Instead, the LMIA will notify property owners of the treatment through alternate forms. This notice is one form of the LMIA is using to notify property owners. Other forms include, but are not limited to notification through the associations Facebook page, member newsletters and annual meetings.

With regard to treatment for this year; 2024.

- 1. The proposed date for treatment: April 15, 2024 through October 31, 2024.
- 2. The target species for the treatment: Curly Leaf Pondweed and Eurasian Water Milfoil.
- 3. The method of control or product being used: EPA and MDA registered aquatic herbicides, such as but not limited to Endothall, Diquat Dibromide, Liquid 2,4-D, Granular 2,4-D, Granular Triclopyr, Florpyrauxifen-Benzyl.
- 4. How landowners may request that control not occur adjacent to the landowner's property: If you desire that the treatment of Curly Leaf Pondweed or Eurasian Water Milfoil not occur adjacent to your property, please notify the LMIA immediately (No later than April 15, 2024) at the following address or email address below: Keith Radke, 65813 216th St, Darwin, MN 55324, or klradtke4@gmail.com

### PRESIDENT'S CORNER 2024

It looks like we are going to have an early spring. Open water is here. Let open water fishing begin.

It was great to see so many of you at the Winter Gathering at the Darwin Rod and Gun Club on February 4th. Many thanks to all who helped with this event. We hope to have another winter event next year, possibly on the lake??

The boat parade will be held on July 4th at 1:00 pm. We will line up in front of Bill and Faye Pinske's as usual. We ask anyone who is entering the parade to contact me (320-583-6952) or email klradtke4@gmail.com to register and get an entry number. The traveling trophy for first place will be awarded at the annual meeting. There was some discussion of a reverse parade at the Winter Gathering but no decision was made.

The Annual Lake Association picnic will be held 12:00 pm on July 20th, 2024, at the shelter on Cindy and Sue Barrick beach. As always bring a dish to pass, chairs and plates/silverware. We plan to start the annual meeting at 1:00pm. The LMIA Board and Weed Committee have started to meet with Meeker Soil and Water Conservation District (SWCD). A contract has been signed with Moore Engineering, Inc. to do a watershed assessment. Hopefully, we will have some information to share at the annual meeting.

The Lake Manuella Improvement Association (LMIA) is planning to treat for Curly Pond Leaf and Milfoil pending DNR approval of our permits. If you do not want treatment of your lake shore, we need notification by April 15th, 2024. Please see the form in newsletter.

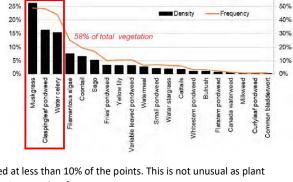
Hope to see you on the lake.

Keith

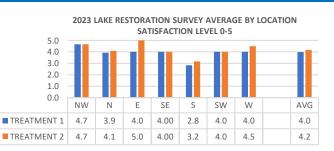
#### 2023 Aquatic Plant Survey Key Points

- Two separate sampling periods to identify the spring and summer plant communities separately. The spring survey was conducted on July 5, 2023 the summer survey on September 7, 2023.
- A total of **180 points were surveyed** over the **114** littoral acres to give a final spatial resolution of **1** point per 0.625 acres. Half of the points were surveyed in the spring and the other half later in the summer
- We found **87%** of the shallow lake habitat occupied with plants from **21** different species, including only one invasive species: curlyleaf pond-weed. While plants were found up to 14 ft, there was a clear drop-off in plant coverage starting between 12 and 13 ft.
- The most common type of vegetation on the lake were a type of macroalgae, muskgrass, and two true plants, namely claspingleaf pondweed and water celery. Curlyleaf pondweed was only found at a single point.
- A total of 21 species (plants or algae) were found, curlyleaf pondweed was the only invasive species detected during either survey, Eurasian watermilfoil has been found before in the lake, none was detected during this survey. At any given point during the survey, there was up to eight species but on average three different species per rake.
- Three species dominated the plant com-munity, accounting for 58% of all bio-mass collected, muskgrass, claspingleaf pondweed, and water celery.
- Muskgrass accounted for 26% of all bio-mass collected and was the most common vegetation type on the lake.
- Most of the species detected, 12 of the 21, might be classified as rare in that they were collected at less than 10% of the points. This is not unusual as plant communities in lakes tend to have a few dominant species but a higher number of species occurring at only a few spots.
- Muskgrass was dominant on Manuella especially in shallower areas. In general, muskgrass grows near bottom, creating blanket conditions, which lock up nutrients in lake sediments. The relatively high-water clarity in Lake Manuella is likely partially dependent on the high cover-age of muskgrass. At the same time, in some areas, muskgrass can grow so densely it creates a nuisance. There is also no doubt that there are areas on the lake that suffer from excessive growth of filamentous algae.
- It is important to note that zebra mussels are in a connected waterbody and starry stonewort is within 30 miles in another lake. Because of this proximity there is a high probability of a transfer in the near future, especially for zebra mussels.
- Starry stonewort is a macroalgae like native muskgrass. Muskgrass and starry stonewort prefer hard, or alkaline waters. Manuella is a slightly alkaline, hard water lake. The dominance of muskgrass and lake chemistry indicate that if introduced, starry stonewort may establish itself easily.

The Weed Committee sent out a survey regarding the 2023 Lake Restoration Weed Treatment. The vast majority of the response were very positive. The Key comments: Thickness of weeds past the treatment area. Muck! Invasive species Milfoil and Curly leaf. Wild Celery and Clasping Pond Weed (looks very similar to Curly leaf) thickness, and finding a treatment that works better on them. Making sure treatment areas were completely treated.

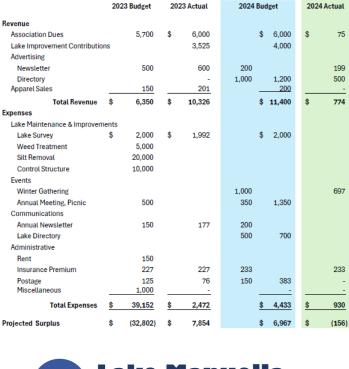


Lake Manuella (Meeker County, MN) Aquatic Plant Survey - 2023



### Lake Manuella Improvement Association Financial Statement For the Year Ending December 31, 2024

	2023 Budget		2023 Actual		2024 Budget		2024 Actual
Revenue							
Association Dues		5,700	\$	6,000		\$ 6,000	\$ 75
Lake Improvement Contribution				3,525		4,000	
Advertising							
Newsletter		500		600	200		199
Directory				-	1,000	1,200	500
Apparel Sales		150		201		200	
Total Revenue	\$	6,350	\$	10,326		\$ 11,400	\$ 774
Expenses							
Lake Maintenance & Improven	nents						
Lake Survey	\$	2,000	\$	1,992		\$ 2,000	
Weed Treatment		5,000					
Silt Removal		20,000					
Control Structure		10,000					
Events							
Winter Gathering					1,000		697
Annual Meeting, Picnic		500			350	1,350	
Communications							
Annual Newsletter		150		177	200		
Lake Directory					500	700	
Administrative							
Rent		150					
Insurance Premium		227		227	233		233
Postage		125		76	150	383	-
Miscellaneous		1,000		-			
Total Expenses	\$	39,152	\$	2,472		\$ 4,433	\$ 930
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# A LAKES GARGE

@ 3/25/2024



Mark your Calendars the North Fork Area Lakes; Mini Belle, Manuella, Stella and Washington are planning area wide garage sales June 6-8th, 2024. Start saving those treasures to sell them if that's your thing or spend the day shopping all the sales.



### **Lawn Application Program**

Round 1: pre-emergent crabgrass & fertilizer

Round 2: broadleaf weed control

Round 3: spot spray & weed control

Round 4: fertilizer & weed control

Round 5: winterizer

### **Lawn Care**

- Mowing
- Bagging
- **Shrub Trimming**
- Mulching
- Aeration
- Power Dethatching
- Spring/Fall Cleanups
- Weed Control





**CONTACT US FOR A FREE ESTIMATE!** PRIEVE@HUTCHTEL.NET • 320.583.7267

# Sucker Creek Assessment and Sediment Delta Removal

Members of the LMIA have been meeting with the Meeker County Soil and Water Conservation District (District) over the last year to determine how best to address the sediment inputs into our lake via Sucker Creek, including removal of the sediment delta. Last summer, a few LMIA members and staff from the District and Minnesota DNR walked the creek all the way up to 640th Avenue to: 1) assess the condition of the creek stabilization projects constructed in 2017- 2019, 2) look for new areas that may need repair, 3) identify locations for further mitigation projects, and 4) discuss next steps in excavating the sediment delta. It was found that the past stabilization projects were in good shape and only minor areas possibly needing repairs were identified. The group also identified a couple of areas for possible future improvement projects.

The following goals regarding the creek have been identified: 1) remove the existing delta, 2) determine what is causing the sediment inputs into the lake, 3) evaluate options to address the problem, and 4) implement the most feasible remedies.

We've been told that we won't be able to receive grant funding to remove the delta unless a sub-watershed assessment is first conducted to determine what is causing the sediment accumulation and address that within the sub-watershed and creek. This assessment will be conducted by Moore

Engineering and will be paid for by the District. A work order for the assessment has already been agreed to and the work should start very soon. The assessment will also aid in determining the best remedies (e.g. settling ponds, vegetative buffers, cover crops) to improve water quality within the sub-watershed, including Sucker Creek.

The removal of the sediment delta will not be able to be funded with grant funds as a single project but, rather, will be lumped in with other sub-watershed remedies. And there's no guarantee that funding will be available for the removal. If greater than 1-acre of sediment is to be removed, the state requires that an Environmental Assessment Worksheet, and possibly an Environmental Impact Statement, be completed. This is likely to be costly and time consuming since an engineering firm will be needed and state agencies and other stakeholders will likely review and provide comment on the project. Because an area greater than 1-acre of sediment has been deposited into the lake from the creek, seeking a grant from the District and/or the North Fork Crow River Watershed District to fund the removal may be the most appropriate solution. Right now, we are being told that there's money available for these projects and that our sub-watershed district is a priority for these organizations. But don't expect any such projects to be constructed until late 2025, at the earliest.





