



THREE LAKES ASSOCIATION

SERVING LAKE BELLAIRE, CLAM LAKE AND TORCH LAKE IN NORTHWEST MICHIGAN

JULY 2021

55 Years

QUARTERLY

Record Keeping Rock Stars

Do you have a photo album of birthdays, vacations, and time spent with your friends? Or, do you have files that hold store receipts, car or home maintenance records, or health records? If so, you know exactly how important it is to keep good records.

Three Lakes Association also keeps records of what is happening in all three of our lakes. This helps us to:

- know the character of each lake well (they are all different!)
- see how and when each lake has experienced change.
- solve new problems that arise.
- make decisions today that will protect lake health for the future.

Our Lake Monitors go out every week or two to measure the clarity of the water. On the first and last trip of the season, they also collect water for a phosphorus test, and twice a month they collect and filter water for a chlorophyll-a test. Samples are kept in their at-home freezers until the end of the season, when our coordinator, Cheryl-Lynn Fields collects them and brings the samples to the lab for testing.

We have 5 incredible volunteers this year who make this record keeping possible; one each for Lake Bellaire, Clam Lake, Torch South and two for Torch North. Some just

started this year, and others have been taking samples for decades. We asked each person four questions: 1) How do you get to your sampling location? 2) Why do you like volunteering in this way? 3) What is surprising to you this year, or what are you learning? 4) Anything else you want to share?

Rick Meyers monitors Lake Bellaire; this is his first year.

1. I take out a Boston Whaler Montauk, it takes me about 25 minutes to get out there, maybe more. I launch right from my dock on the Intermediate River. And I have to drive by a bald eagle's nest, so that's nice.
2. It gets me out on the lake at least one a week. I like to get out a lot more than that, but it does get me out there at least once a week. And if this is going to help the lake, that is a good thing too.
3. What is surprising is how much the weather can change. We sample Tuesday to Thursday, because there is less traffic on the lake, and between 11 and 2 because that is when the sun is the highest. We pick the best weather day. I went out to do it last week, and a little drizzle was coming when I was going down the river, but it was clear on the other side of the lake where I was going to take my reading. But then, the wind changed, and it turned to cats and dogs. I couldn't see the shore and got turned around on the lake. It was a very hot day, so I didn't mind getting wet.

Art Hoadley monitors Clam Lake, which he has been doing since the early 1990s.

1. I go out on my jet ski or pontoon boat to collect the samples, whichever is available. If I go on the pontoon, my



Art Hoadley lowering the secchi disc on Clam Lake

brother Steve goes with me. It's a little more difficult on the jet ski!

2. I've been involved in enough projects that I wish we had data from 10 years ago. We need to keep gathering the history on the lake. It helps us sort out problems. And, I enjoy getting out on the boat; it gets me out once a week.
3. When I first started sampling, the secchi depth was at 8 feet and it peaked

ROCK STARS continued on page 3

Sneak peek

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C. Torch Lake Township: Vacant, Vacant

D. Central Lake Township: Todd Collins, Steve Laurenz

E. Forest Home Township: Fred Sittel, Phil Weiss

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Water Safety: Art Hoadley

Lake Monitoring Program: Cheryl Lynn Fields

Publicity: Vacant

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Three Lakes Association

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President's Message

I only met Ed McDuffie one time. It was several years ago at the Alden Depot on the shoreline of Torch Lake during a public event jointly sponsored by TLA and other local organizations. Ed was joined by fellow long-time resident Herb Moir to inform a large crowd which had gathered on an unusually cool and windy summer evening, about the history of the Elk River Chain of Lakes. When he spoke about the early days of logging and the changes that brought to the area's rivers and lakes, it was clear Ed McDuffie cared deeply about the environment. After learning so much about local history from a person who lived it, I was saddened to read recently that Ed McDuffie passed away.

Ed McDuffie and his wife Mary Kay were probably best known for authoring a book in 2009 that chronicled the geological history of Torch Lake and life in the north woods. But I wanted to know more about a man that left such a big footprint in our area, and I easily found others who knew of his contributions to our area and community.

Ed McDuffie was a long-time biology teacher in the Bellaire public schools and recognized the power scientific study has to help preserve natural resources. That appreciation of science led him to reach out to Professor LaVerne L. Curry, head of the biology department at Central Michigan University, at a time when the college was engaged in a detailed study of the Elk River Chain of Lakes during the late 1960's and early 1970's. For a time during sample collection and fieldwork the professor and his students resided with the McDuffie household. The data collected by CMU over forty-five years ago provides an important baseline against which current day measurements of oxygen, water clarity, temperature and phosphorus can be compared.

Thank you, Ed McDuffie, for being a friend of science and the environment and an inspiration for all the current day volunteers who help preserve our lakes and other natural resources for future generations to enjoy.

Fred Sittel, TLA Interim President



TLA has a new phone number!
(231) 412-7551

Put it in your contacts, and give us a call or email us at 3lakes.info@gmail.com if you:

- have a question about something you see on your lakeshore.
- want to report a sighting while on the water (something beautiful, unusual, wonderful, or worrisome).
- want to volunteer.
- want advice about how to be a better Lake Steward.
- have a question or comment about something in the newsletter, the website, or Facebook.
- want to give feedback on how we are doing.

You will most likely get an answering machine. Please leave a message! Your message will be transcribed and delivered to the person in TLA who can best help you. They will call you back within a few days.

To start or renew your membership, or to update your contact information, go here: 3lakes.com/membership/

To donate, go here: 3lakes.com/donate/

Rock Stars

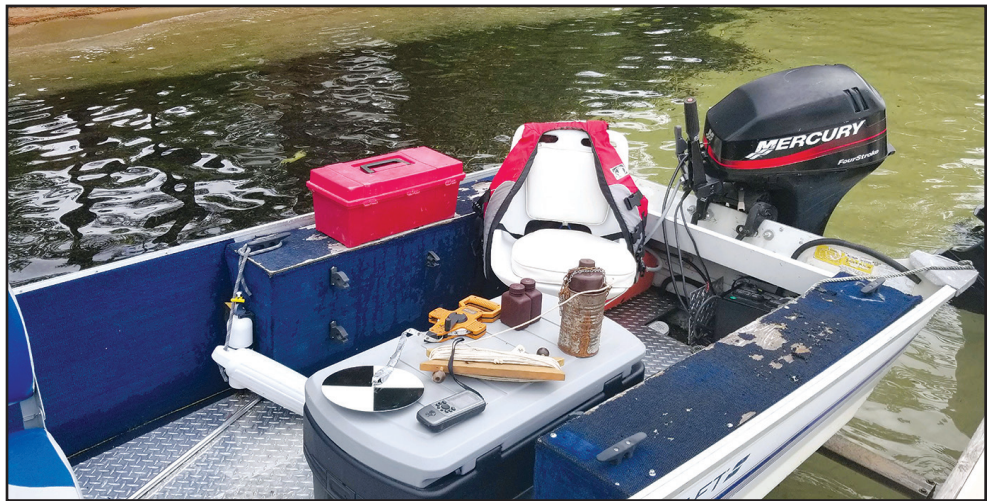
Continued from page 1

at 24, 25 feet, which is at the bottom of Clam. And it has gradually gone back up since then. Today, secchi depth is coming back to where it was when I first started, before zebra mussels came in.

4. When you are young you don't think of the lakes changing, you appreciate them, but not in the same way as when you get older. I understand now that people, and nature, can mess the lakes up. Birds move things around, for example. It's important to temper our desires to do things, and measure them against the risk of harm; to ask, "if everyone does what I do, can the lake tolerate it?" When I was younger I never considered how my actions impacted the water, but now I see that what we do matters.

Christian Stoldt monitors the South Torch Basin, for the sixth time in 2021.

1. Most of the time I use a 14-foot Starcraft with a 25 horse outboard because it is the quickest to get off the shore station and out there. It takes about 3 or 4 minutes to get there. I usually go alone.
2. I love Torch Lake. I started coming here when I was six years old. I spent my summers up here, and I think it's fun to be part of monitoring it, making sure it's preserved for future generations. And I really enjoy boating. I live here year round and we boat until the last possible moment, sometimes well into December. We are out there a lot even when there is nobody else.
3. It's pretty much the same [this year as compared to past years].
4. What I really like in the early season is that the lake is really clear. My secchi disc measuring tape is only 50 feet and I can look down and still see the bottom at about 70 feet (I can measure it with the fish finder). It's only like this for a few weeks in the spring, until about mid June.



Christian Stoldt's sampling supplies

Norton Bretz and Mike Novak monitor The North Torch Basin. Norton has been monitoring for decades, and this is Mike's first year. Norton was not available for an interview. These are Mike's words.

1. The sampling location is 1.8 miles from my house, so Norton and I leave



Mike Novak on his pontoon

from my dock and it takes about 10 minutes to get there. I have a Premier pontoon boat.

2. I love the water and I love the clarity of the water. And this particular project is about monitoring water clarity and that is important to me.
3. I am surprised at how fast the water is, [how much the water moves beneath the boat]. Torch is a big lake and we are $\frac{3}{4}$ of a mile offshore. It is really tough with the secchi disc to get a reading where the disc goes straight down. It often takes a couple of tries on different days. Fortunately, I am boating every day of the week and I have the secchi disc with me all the time, so whenever the conditions are right I drop it in. Norton and I will go out together to do the other water sampling.
4. [Monitoring the lake] has been a pretty simple process to do.



Volunteer Opportunity:

We need someone to scan documents through a copy machine at the Antrim Conservation District in Bellaire. If you have basic administrative skills this job will be easy to learn. Once trained, you can do the project on your own schedule, when the District Office is open. Please call 231-412-7551 or email 3lakes.info@gmail.com if you are interested.

Important Clarifications on Buoy Placement

By Fred Sittel
TLA Interim President

Recently, TLA received a letter from the DNR addressed to area lake associations regarding placement of objects on the surface of the water. The stated purpose of the letter is to “raise awareness regarding the growing problem of illegal buoys” being placed on the surface of a public waterway without a permit. The letter goes on to explain that the State of Michigan DNR cannot permit “star” buoys, distance marking buoys or other forms of distance markers because they do not fall under the U.S. Aids to Navigation system.

It is TLA’s understanding that under many years of common law adjudication, lakefront property owners have very specific and limited rights to bottomlands adjacent to their properties. These rights are subservient and inferior to the basic right the public has to navigate and recreate on a public waterway. They include overnight mooring of a boat attached to a properly anchored and conforming mooring buoy, and anchoring of a swim raft, both without a required DNR permit. These rights extend to seasonal docks and hoists provided that nothing being placed in or on the waterway causes a navigational hazard. If, solely or in

part, the placement of any object on the surface of the water is intended by the property owner to influence navigation of the public waterway, then the placement is illegal unless specifically permitted.

Many property owners have been complaining about boats exceeding a slow no wake speed at

distances less than one hundred feet from docks, hoists and swim rafts. They have concerns about safety, the potential for damage to boats and docks, and increased shoreline erosion. When these situations occur, the proper course of action is to report the concern, including the Michigan registration number of the offending watercraft, to local law enforcement, and if warranted, to follow up by letter to the DNR and the local Sheriff’s marine patrol regarding the need for enforcement. In no cases are shoreline property owners allowed to force a change in boat navigation by the placement of objects in or on the waterway.



Paddle Antrim Updates + Fun Volunteer Opportunities

By Deana Jerdee
Paddle Antrim

Did you notice orange and yellow signs popping up at public access sites this past fall? Those signs are part of the Chain of Lakes Water Trail, hosted by Paddle Antrim. In partnership with 19 local governments & non-profits, 84 access sites were identified and signed to create over 100 miles of water trail for paddlers to safely explore our lakes and rivers as well as learn more about protecting them.

On signs along the trail, visitors and residents will find information about safety, the woody debris project, protecting our loons, and preventing the spread of aquatic invasive species. To help individuals plan a trip, there are waterproof & digital maps available and a wealth of information online at www.chainoflakeswatertrail.org.

Paddle Antrim is committed to maintaining a premier water trail for all to enjoy. To do so, we are looking for volunteers to help monitor these 84 access sites along the trail. By having eyes on these sites on a regular basis, we can address any issues quickly. If you live near or visit one of the access sites regularly, you would be a great volunteer.

Additionally, on Saturday September 18th, you will see over 100 paddlers traveling from Bellaire to Elk Rapids as part of the 6th annual Paddle Antrim

Festival, a non-competitive event where paddlers can travel up to 42 miles along the water trail over two-days. We are grateful for all the Three Lakes Association members who previously volunteered on land and on motorized safety boats, ensuring a safe event with more eyes out on the water and invite you to join us again this year.

If you are interested in monitoring an access site near you or assisting with the Paddle Antrim Festival, please contact Ellie Kirkpatrick at 231-498-2080 or ellie@paddleantrim.com. We couldn’t do this without amazing volunteers.



Which Property is Yours?

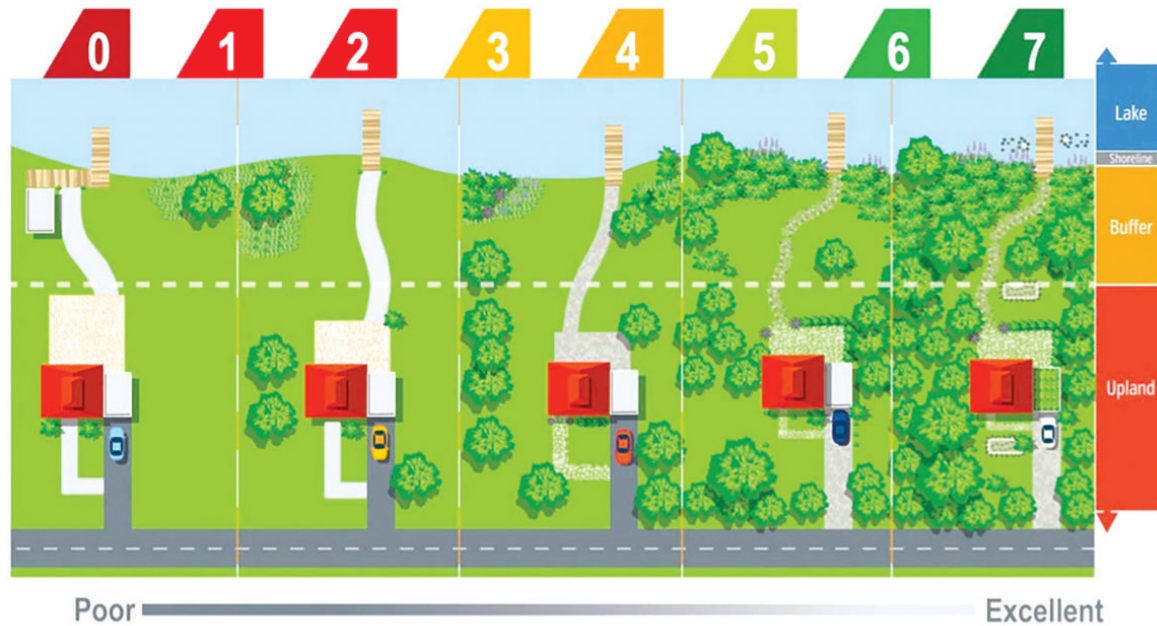


Image courtesy of Tip of the Mitt Watershed Council

How Well Are You Protecting Your Lake?

Most of us think we're doing a good job of protecting the water body we live on, but are we really? In only 15 minutes, you can find out how your property contributes to lake health by taking the online MICHIGAN SHORELANDS SURVEY:

1. Just go to: www.mishorelandstewards.org and click Rate Your Shoreland to register.
2. Then answer a short list of questions, such as:
 - Do you maintain a natural barrier between your lawn and the shoreline?
 - Do you maintain your septic system properly, having it serviced and pumped-out every three to five years?
 - Are you taking steps to prevent erosion near the shoreline?

FUN AND EASY!

- Those who've taken the survey say it's really kind of fun!
- High scores are given a Bronze, Silver, or Gold rating, if you are into that kind of thing.
- Above all, you can learn a lot about how to protect the lake.

IMPORTANCE:

- You'll know how to prevent erosion along the Shoreline Zone.
- You'll understand the importance of trees

and native plants in a wide Buffer Zone.

- You'll see the connection between hard surfaces in the Upland Zone and increased runoff going into the lake.

BENEFITS:

- You'll know which PAST actions you've taken that protect the water.
- You'll get customized recommendations for which NEW actions you can take to do an even better job.
- They survey is full of background information, definitions, and tips, which will answer almost any question you have about what beneficial shorelands look like.
- Your lake will be better off when many landowners take action to improve their property.

CONFIDENTIALITY: The survey can be taken anonymously, but TLA would prefer our members provide their names and addresses. Please select Three Lakes Association so we know how many people from Torch, Bellaire, Clam, and the Grass River have taken the survey. We may share this information with our partners on these lakes, but the information will not be used for any other purpose.

We will let you know in the next newsletter how many of our people have taken the

survey. Count yourself among them! Please reach out if you'd like help taking the survey or if you are ready to make some changes. We can direct you to resources.

New Members and Donations

A warm welcome to the new members who have joined us in the past few months

Daniel & Amy Crites
Dr. Beverly Darwin, MD
Greg Golday
Griffith & Ivanka Jordan
Ann Schimmel

We are very grateful for these recent donations of \$500 or more

Chris & Cindy Coble
Brian Hayes

These individuals were honored through memorial contributions

Jeffrey Jones
Gerrit Lee Wierda

Are snails influencing Golden Brown Algae in Torch Lake?

Three Lakes Association (TLA) has been investigating possible root causes of golden brown algae (GBA) for the last six years. GBA shows up as visible patches of various types of diatoms that grow on near-shore rocks and sand. This stuff turns the appearance of the lakes from a beautiful turquoise color to a less attractive golden brownish color. TLA's investigations have been conducted in collaboration with a diatom expert at Michigan State University, Professor Jan Stevenson. These studies have focused on the species of diatoms that make up the patches of GBA.

These studies have also evaluated changes in the concentrations of phosphorus in the groundwater and surface water that may have triggered the sudden appearance of GBA, and may be the result of using too much lawn fertilizer, or too many leaky septic systems seeping into the lake, or too few shoreline greenbelts around the lakes.

In addition to continuing these GBA studies in 2021, TLA is also evaluating another hypothesis: whether or not snails in Torch Lake graze on and therefore intervene in the presence of GBA. This determination is part of TLA's 2021 summer internship program with five students from area high schools.

These summer interns will look for the diatoms associated with GBA in the feces of two predominant species of snails in Torch Lake, *Physa* and *Pleurocera*. First, the snails are placed in enclosures on near-



TLA's snail research team; summer interns, TLA volunteers, and coordinators:
Left to Right; Back Row, TLA Executive Director, Jeanie Williams, TLA volunteer Richard Knopf, Intern Lily Brown (Elk Rapids), Coordinator David Yuhus, TLA volunteer Dean Branson, Middle Row Intern Grace Robinson (Bellaire), Intern Vivien Felker (Elk Rapids), Coordinator Katie Kraft, TLA volunteer Becky Norris; Front Row: Intern Rebekah Campell (Kalkaska), and Intern Anna Anger (Mancelona).

shore patches of GBA so they can eat. These enclosures are held securely in place with four steel rebar stakes and two bungee cords. After about a week, the snails are collected and each one placed in their own plastic cup where they defecate overnight. Finally, the snail feces are recovered from individual cups and examined with high-powered microscopes to determine what the snails have been eating.

We are grateful for the cooperation of our area high schools. Three of the microscopes for these examinations have been borrowed from Elk Rapids High School, and two microscopes have been borrowed from Bellaire High School.

In August, the students will write up their findings into a report which we will post on



Snails commonly found in Torch Lake:
***Physa* (l) & *Pleurocera* (r)**

our website. The students will prepare and present their findings to their school boards in the fall, and to TLA's board of directors.



Intern Lily Brown with collected *Physa* snails at the Lake Street public access site.



Collecting snail feces from individual snails, while enjoying muffins.

Memorial Fund Set up to Support TLA Internship Program

Did you know that a collection of snails is called an escargatoire? We didn't either, until this summer when we endeavored to lead a group of high school interns on an investigation of snail feeding (and pooping) in Torch Lake.

We are humbled and grateful that our internship program will now be supported on a regular basis by a new fund. To honor longtime summer resident and fan of Torch Lake, the family of Gerrit Lee Wierda has directed memorial donations to Three Lakes Association to support our internship program. Additionally, the family has helped TLA set up an ongoing fund, called the Gerrit Lee Wierda Memorial Internship Fund, to which the family will contribute annually. It costs about \$6,000 to run the internship program each year and this fund will cover a substantial portion of the costs.

Torch Lake holds an important role in the family history of Carolyn and her husband, Lee. Their respective families have been neighbors on Torch Lake for over 50 years, and Torch Lake is where the couple first met. It goes without saying that Torch Lake is also a very special place for their children and grandchildren. The health of the lake is a priority for the family, so they want to do what they can to protect it.

Carolyn says, "We chose the educational aspect [of TLA's programming] because education is also a big part of our lives." Carolyn has over 45 years of experience in education, their son Michael is a high school physics teacher in Saginaw Township

Community Schools in Saginaw, Michigan and their daughter, Jennifer, is an Assistant Dean at Otterbein University, in Westerville, Ohio. "It made sense to connect our interest in education to our love for Torch Lake." Carolyn also reminds us, "when students are actively engaged, it makes a difference in what we are trying to discover about the lake and it influences the paths the students may take."

Our internship program results in some of the most impactful and meaningful work we do at Three Lakes Association. Not only do we get to learn new words, but we also get to meet some of the most motivated and inspired young people in our region. In turn, we help them get to know their watershed and the water bodies that make Northwest Michigan world renown.

As high school juniors and seniors, our interns are about to make important decisions about their life paths. When we can show them the importance of clean water, the power of science, and the impact of good stewardship, they are more likely to serve as water stewards throughout their lives.

Carolyn is hopeful that this project will inspire other families to support efforts that connect to their own personal interests in water protection. We appreciate the Wierda family commitment and the ways their leadership encourages so much support for our lakes.

Our deep condolences go out to Carolyn and everyone who loved Lee. We aim to ensure our work at TLA honors his life and passes on his love for Torch Lake to generations to come, and in ways that benefit all of our waters.



Carolyn and Lee Wierda

Your Help Needed to Fight Invasive Species

Do you have underwater gardens growing in the lake in front of your house? Most of the time the aquatic plants in these gardens are beneficial, but sometimes they contain species that threaten the well-being of the lake ecosystem and the enjoyable recreation of humans. We need your help to keep the harmful species out of Torch Lake.

Torch Lake Protection Alliance (TLPA) and Three Lakes Association (TLA) have combined forces and funds to eradicate Eurasian Water Milfoil (EWM), an invasive aquatic plant that poses a potential threat to Torch Lake. This green plant grows up toward the surface and has a feathery appearance. While not harmful to humans or animals, EWM forms large mats of floating vegetation that can shade out native aquatic plants and impede recreational activities such as swimming and boating. Some lakes have been completely covered by this invasive plant.

In 2020, six known sites on Torch Lake or in the Clam River were treated with Renovate pellets, a herbicide that selectively



Eurasian Water Milfoil, Photo courtesy of Tip of the Mitt Watershed Council

targets EWM. The work was completed by PLM Land and Lake Management, a highly-respected company that has been treating EWM in the Chain of Lakes for years. Initial indications are that these treatments were effective in stopping plant growth.

This year, we have several additional efforts underway. First, a full aquatic plant survey of Torch Lake is planned (pending grant funding) to identify any new EWM locations and document native aquatic plant species. Secondly, volunteers from TLPA and TLA will continue to monitor the known EWM sites, in case of a resurgence. Lastly, our combined TLPA-TLA team will also be creating a long-term monitoring plan for EWM on Torch Lake as a whole.

We are asking for your help in this effort to control Eurasian Water Milfoil. If you see plants growing in the lake that resemble those in the photos above, please email the Torch Lake Protection Alliance at TLPA@torchlake.com or Three Lakes Association at 3lakes.info@gmail.com and one of our volunteers will make arrangements to come check it out. Catching and treating EWM early protects the lake and is far more cost-effective than treating large, established patches.

Thanks in advance for your help in keeping our lakes free of invasive plant species for future generations!

The mission of the Association is to provide leadership to preserve, protect, and improve the environmental quality of the Elk River Chain of Lakes Watershed for all generations with emphasis on Lake Bellaire, Clam Lake, Torch Lake and their tributaries.

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TLA's 55th Annual Meeting

The Three Lakes Association is delighted to announce our 55th Annual Meeting, which will be held in person at the Shanty Creek Beach Club on Lake Bellaire. We have missed you, and look forward to seeing your faces and exchanging handshakes and hugs once again.

JOIN US!

Thursday, August 5, 2021

- | | |
|---------|---|
| 5:00 PM | Social Hour – beverages, beer, and wine served |
| 6:00 PM | Old Fashioned BBQ Dinner, vegetarian and gluten-free options available |
| 6:30 PM | Business Meeting including Election of Officers |
| 7:00 PM | Speakers:
Deana Jerdee of Paddle Antrim: Chain of Lakes Water Trail
Jenn Wright of Grass River Natural Area: Protecting Grass River |
| 8:00 PM | Farewell |

Open to all TLA members. We would appreciate your RSVP: www.3lakes.com/2021-annual-meeting/
To join or renew your membership, go here: www.3lakes.com/membership

We look forward to seeing you!

We are also looking for new board members to join our team. Anyone 18 years or older who has a love for water is eligible, and you do not need to live on the water. We have openings for Zone Directors in these townships: Torch Lake, Helena, Custer, and Kearney as well as At-Large positions. If you would like to know more about what it means to be a TLA board member, please reach out: 231-412-7551, or 3lakes.info@gmail.com