



Photo by Scott Brown

Welcome to the Michigan Waterfront Alliance
Update for Wednesday, March 1st, 2023



Michigan Waterfront Alliance (MWA) is a 501(c) 4 non-profit corporation formed over twenty years ago in order to effectively advocate for the creation or preservation of state laws, and/or policies designed to protect, preserve, and promote the sustainable and wise use of our state's immense treasure of high quality freshwater resources. Our primary mission will be accomplished by pro-active participation in Michigan's legislative process (lobbying), by participating in court cases whose outcomes may have significant statewide ramifications, and/or by direct involvement with natural resources management, or environment focused state agencies or departments.



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Photo credit: United States Fish and Wildlife Service

The ‘Great Northern Diver’ - Common Loon Sightings Becoming Increasingly Rare in the Great Lakes Region

**by Scott Brown
MWA e-Newsletter Editor**

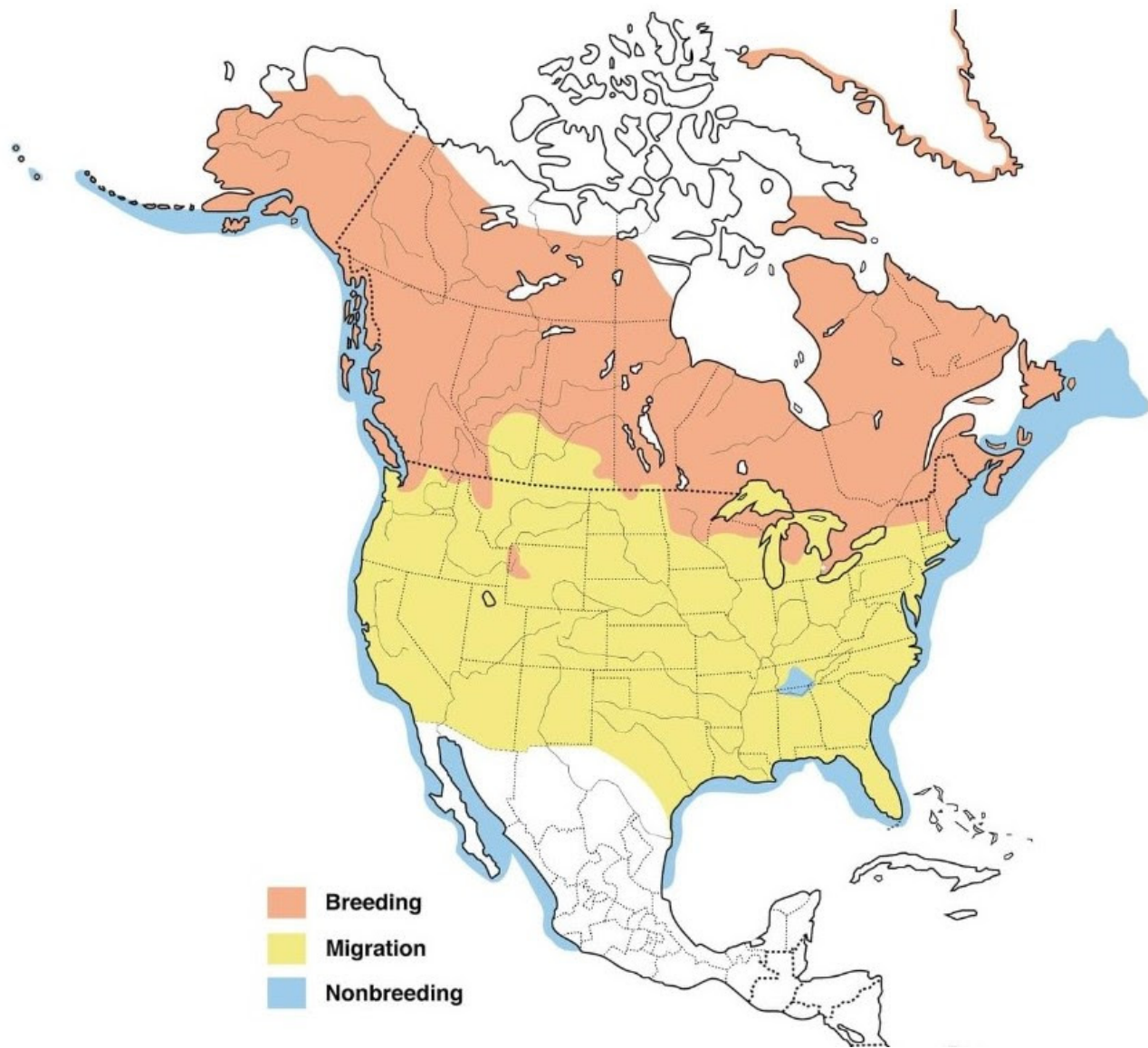
Prompting the return of a flood of fond memories of northern pike and walleye fishing with my son and grandson while on fly-in fishing trips to northern Ontario’s Shabuskwia Lake, the other worldly sound of a loon’s call has always held special meaning for this ageing baby boomer. Although I have not visited this gorgeous wilderness lake in many years, my son and wildlife biologist grandson tell me that loon sightings even in the far north have become increasingly rare.

Although there are five species of loon in North America – all member of the Family Gaviidae, including Red-throated Loon, Pacific Loon, Yellow-billed Loon, and Arctic Loon, the most abundant is the Common Loon (scientific name: *Gavia immer*). The International Union for the Conservation of Nature reports that the majority of the approximately 640,000 common loons that remain on earth are found in Canada.

Although they are awkward on land due to the fact their legs are placed far back on their bodies, common loons have evolved as water birds that venture onto shore only to mate and incubate eggs, and learn how to dive long before they learn how to fly. Though the name loon derives from their goofy, awkward walk, they are often referred to as 'great northern divers'. Capable of staying submerged for up to five minutes as they forage for fish and aquatic insects, loons are particularly well adept at hunting underwater due to their solid bones that make them less buoyant, their capacity to rapidly expel air from their lungs, and their ability to flatten their feathers in order to expel air from their plumage. The capacity to stay submerged for long periods is also enabled by their extraordinary physiological capacity to slow their heart rate while diving in order to conserve oxygen. The red eyes of loons have also evolved to allow them to detect fish and other prey in the low light conditions that are often present in water depths of up to fifteen feet.

Empowered by their capacity to rapidly descend and to swim at an extraordinary fast pace while underwater, loons are considered highly effective hunters that are capable of consuming a large quantity of small fish in relatively short order. Biologists familiar with the unique bird species have estimated that a single set of loon parents and their two chicks are capable of eating a half ton of fish in a single fifteen-week season. Due to their reliance upon diving to depths of up to fifteen feet to forage for food, loons prefer healthy inland lakes hosting relatively clear water and healthy fisheries. Loons are known to shy away from inland lakes suffering from poor water clarity. Frequent loon sightings in a particular region are considered a reliable indicator of the presence of large, healthy inland lakes hosting abundant fish populations, relatively clear waters, and the existence of undisturbed natural shorelines.

Graced with relatively small wings in comparison to their size and weight, loons are attracted to large lakes that provide them with an opportunity to takeoff into the wind and skitter across the water's surface for a long distance before creating enough aerodynamic lift to eventually become airborne. Once airborne, however, common loons are capable of flying at speeds of up to 70 miles per hour. It is interesting to note that their need for long, water-based take off 'runways' has caused migrating common loons to become stranded as they sometimes mistake wet highways and parking lots as rivers and lakes.



Due to their relatively large bodies, small wings, and the fact that their fast flight requires a lot of energy that must be replenished along the way, common loons are considered medium-distance migrants. (Please refer to the map that appears above.) The common loons of the northern United States and Canada migrate from lakes to the coastal oceanic waters of the Pacific or Atlantic. The loons of western Canada and Alaska migrate to the Pacific Coast ranging from Alaska's Aleutian Islands to Mexico's Baja Peninsula. Great Lakes region common loons migrate to the Gulf of Mexico or Florida coasts. Common loons that inhabit the lakes of eastern Canada migrate to the North Atlantic Coast.

Sharp declines in the abundance of all five loon species in North America have thus far been primarily attributed to intensive lakefront development facilitated loss of optimal loon habitat and a commensurate loss of preferred nesting and rearing habitat. Ecologists familiar with the decline of loon populations in North America also indicate that multiple stressors including the not yet well understood influences of climate change, diminished fish populations, acidification of inland lakes, and the loss of

eggs and chicks to an increasing number of scavenging predators have also contributed to the decline of loons throughout the northern United States and Canada. It is important to point out that common loon populations in the Laurentian Great Lakes region have also experienced decline due to increasingly frequent outbreaks of Type-E botulism that has caused massive annual die-offs of common loons, and other fish-eating birds in the past twenty five years.

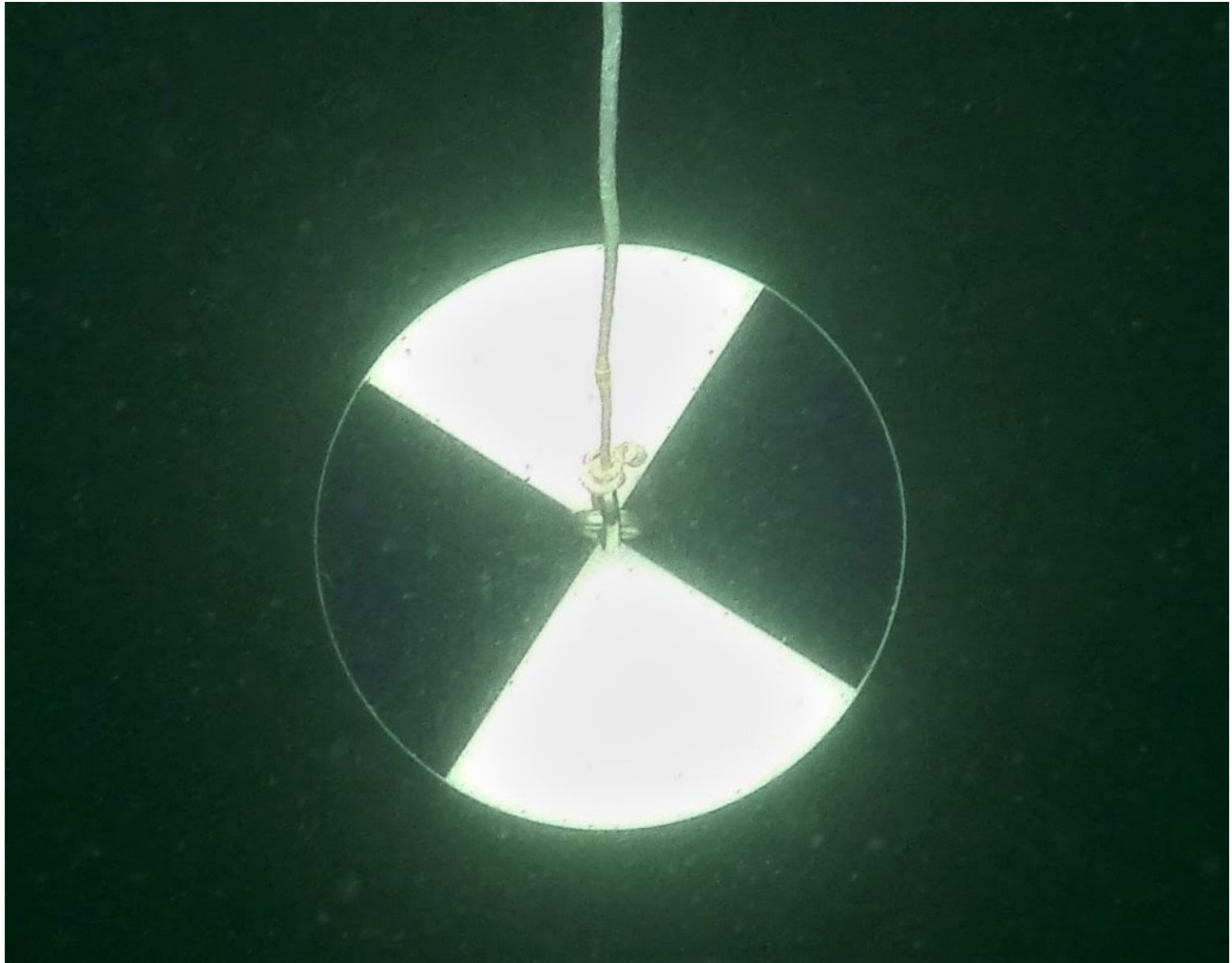


Photo by Scott Brown

**McNALMS - MLSA 2023 Lake Research Student
Grants Program Accepting Applications Until
5:00 PM EST, Friday, March 17, 2023**

The Michigan Chapter North American Lake Management Society (McNALMS) and Michigan Lakes and Streams Association (MLSA) have announced their call for proposals for the 2023 Lake Research Student

Grants Program. The purpose of the program is to promote student efforts to work with lakes and lake communities to enhance lake management. Projects that increase the understanding of lake ecology, strengthen collaborative lake management, address inland lakes fisheries, build lake partnerships and/or expand citizen involvement in lake management are eligible for consideration. This year one or more grants will be awarded with a total of \$4,000 allocated to this year's program. Proposals will be funded for one calendar year. Projects must have a Michigan focus. A link to the application and grant proposal form is at the bottom of this page.

Who May Apply

- Applicants must be either:
- University/College graduate student(s) conducting applied research/outreach projects
- University/College undergraduate student(s) working on special studies projects or
- Participants enrolled in or recent alumni of the Michigan Lake and Stream Leaders Institute, Michigan Conservation Stewards Program, or similar Watershed Academy

All applicants must be members or enroll as members of McNALMS when their application is submitted. Membership is free for full-time students. Membership applications are available on the [Membership](#) page.

Grant Application Deadlines

The deadline for this year's [grant application](#) is Friday, March 17, 2023 at 5:00 PM EST. Awards will be announced in late April.

Funds Distribution

In most cases, the cash award will be donated to the Department or Program in which the student resides with the understanding that the funds are earmarked for that student. Funds can be used for hourly support/wages, supplies, and travel. Equipment purchases including computers, smartphones, tablets and similar devices are not allowed.

Uncompleted Projects

If projects are not completed in the one-year time frame, grant recipient(s) may be asked to return up to 50% of the grant funds awarded, if they have not been expended. Extensions of up to three months after the end date may be considered.

Project Renewals

Grant recipient(s) may submit a grant request in a subsequent year's grant process for additional funds to continue or expand their project.

Project Products

Grant recipients must send a 1-2 paragraph email to mcnalms@mcnalms.org indicating progress on the project after six months. At the end of the project period the grant recipient(s) must electronically submit a three to five page report detailing the project's goals, methods and results. Grant recipient(s) may be asked and are encouraged to present and discuss their project and results at a McNALMS or MLSA Conference, the Michigan Inland Lakes Convention or another educational event. Each project will be evaluated based on nine criteria. The evaluator can give the proposal a score of 0 to 10 based upon the strength of the proposal. A perfect score would be 90 points. The criteria are:

- Is the proposed research strongly related to inland lake ecosystems, lake management, collaborative lake management, lake partnerships or expand citizen involvement in lake management and have applicability to Michigan lakes?
- How significantly will the research add to the understanding of lake ecosystems or lake management knowledge, build lake partnerships or expand citizen involvement?
- Will the project have statewide interest or application to other lakes?
- Are the proposal's objectives logical?
- Is the research approach and methods valid?
- Is there adequate facilities/equipment available to conduct this research?
- Are there other funding sources available or proposed for this project?
- Can the work be completed in the allotted time frame?
- Does the budget reflect the amount of work proposed?

Project Submission

Download the Grant Application and Form fill in the application, and return it and your proposal by email to: mcnalms@mcnalms.org or by U. S. mail to:

Lake Student Grants Program
Michigan Chapter, NALMS

P. O. Box 4812
East Lansing, MI 48826

For further information, contact us at:
mcnalms@mcnalms.org; or call 517-230-9281.



Good news! For its ninth year, the Mobile Boat Wash Program is hiring a crew leader and three crew members for the 2023 season!

As part of the mobile boat wash crew, you will visit over 40 of Michigan's pristine lakes, talk with boaters and anglers from all over, and get hands on experience with communication and field surveys! If interested, follow the link below to become part of the team.

<https://careers.msu.edu/.../extension-program-worker...>

WE'RE HIRING!

Invasive Species Outreach Technician

Crew Leader & Crew Members

At careers.msu.edu for Job #848516

Apply now!



Stop aquatic invasive species through boater education and outreach! You can help protect Michigan waters from invasive species by teaching boaters about invasive species, giving demonstrations on proper boat cleaning, and conducting invasive species surveys.

Contact Kelsey Bockelman at bockelm4@msu.edu



Photo by Scott Brown

Shoreline & Shallows Conference

Habitat for People, Fish and Wildlife



Shoreline & Shallows Conference 2023

Registration Open! In Person

Date: Thursday, March 9th

Location: Kellogg Hotel & Conference Center, East Lansing

Time: 9:30 AM - 4:00 PM

Registration Information

Cost: Early Bird - \$50 (until February 26) Regular: \$65 (Starts February 27)

REGISTER NOW

This year's Conference will include topics on the current state of Michigan's shorelines through the National Lake Assessment, why woody structure is good for lakes and how it can be used for In-Lake Habitat Improvements such as "fish sticks" and "turtle logs", highlights of one of the largest projects in Michigan to install woody structure for shoreline erosion control, discussion about the future state of bioengineering, aquatic plants and an overview of the best management practices associated with the updated shoreline permits.

Registration Questions: Contact Lois Wolfson 517-230-9281 E-Mail:

wolfson1@msu.edu



The Midwest Glacial Lakes Partnership (MGLP) brings together resource agencies, non-profit organizations, and other stakeholders to protect, rehabilitate, and enhance sustainable fish habitats in naturally formed lakes of the Midwest. We foster collaborations on fish habitat science, education and outreach, and conservation. For more information, stop by our [website](#), follow us on [Twitter](#), or reach out to our coordinator, [Joe Nohner](#).

Spring 2023 MGLP Lake Conservation Webinars

Dissolved oxygen in warming lakes

Steve Jane

March 28, 1:00 PM [Register here](#)

Dissolved oxygen (DO) is a fundamental component of lake ecosystems. It is an important attribute of habitat in that low levels make habitat unsuitable for most aerobic organisms like fish. In addition, because of its role in redox reactions, DO strongly influences water chemistry. Low oxygen can result in internal loading of limiting nutrients, accumulation of the greenhouse gas methane, as well as formation of the toxic form of mercury in the water column. Therefore, changes to lake DO strongly impact the functioning of lake ecosystems with implications for drinking water quality, biodiversity, and possibly, fish toxicity. In theory, DO should respond to warming surface waters through a variety of mechanisms. This talk will summarize recently published work that used long-term and geographically extensive lake water quality data to explore the relationship between warming of surface waters and DO.

Managing for RADical lake change: applying the Resist-Accept-Direct (RAD) framework to support walleye management in Wisconsin

Abigail Lynch and Colin Dassow

April 11, 1:00 PM [Register here](#)

Managers facing transforming lakes can benefit from considering broader objectives beyond a traditional focus on resisting change. They can also consider whether accepting inevitable change or directing it along some desirable pathway is more practical and appropriate under some circumstances (the [RAD framework](#)). Here, we'll introduce the RAD framework and highlight a decision-support tool for the walleye recreational fishery in Wisconsin as an example of how to link the RAD framework to real-world management of a large recreational fishery.

On thin ice: Are lakes feeling the heat?

Sapna Sharma

April 18, 1:00 P.M., [Register here](#)

Our planet is experiencing accelerated climate warming, with dramatic consequences not only on lake ecology, but also on the ecosystem services we rely on from our freshwater resources. Lakes with seasonal ice cover, which represent more than half of the world's lakes, are especially sensitive to a changing climate, as ice cover is a strong determinant of lake ecosystem functioning. Lakes are losing ice

cover at unprecedented rates. On average, ice duration is shorter by 17 days/century. However, in the past 25 years, lake ice loss is 6 times faster, with some lakes not freezing every winter. By the end of the century, over 200,000 lakes may no longer regularly freeze and almost 6,000 lakes may permanently lose ice cover with climate warming. With reduced ice cover, lakes may stratify earlier which can lead to elevated water temperatures, primary production, and likelihood of algal blooms, some of which may be toxic. Mitigation of greenhouse gases is essential to preserving this ecological, cultural, and economically important resource.



Photo by Scott Brown

2023 Great Lakes Conference
The Great Lakes: Managing Fisheries
and Exploring Islands

Tuesday, March 7, 2023

9:30 AM - 3:45 PM

Zoom Webinar

For more information:

Contact: [Lois Wolfson](#)

Phone: 517-230-9281

E-mail: wolfson1@msu.edu

[Register Now!](#)

Conference will take place on-line through Zoom

>>>Free to attend<<<

but registration is required

The 33rd Annual Great Lakes Conference will feature two themes with three presentations per theme as well as a panel discussion with Q/A from participants. The themes are Fisheries Management in the Great Lakes and Great Lakes Islands. The day will also feature a presentation on PFAS in Great Lakes Fish. More information, as well as a complete agenda can be found on the [conference website](#).

The conference is sponsored by Michigan State University Department of Fisheries and Wildlife, Institute of Water Research, Michigan Sea Grant Extension, Michigan Department of Environment, Great Lakes, and Energy, and MSU Extension. Support is provided by US Geological Survey Water Resources Research Program. The conference is free to attend.



State parks, trails, and waterways

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Starting rate is \$15/hour.

Know someone that might be interested?

To learn about these opportunities, visit

www.Michigan.gov/DNRJobs



Photo by Scott Brown



NotMISpecies Webinar Series

Invasive species pose a threat to Michigan's environment, economy, and sometimes even human health. What is at stake? What is being done? [This webinar series](#) explores how agencies, universities, and locally led organizations are working together to protect Michigan's natural resources through the Michigan Invasive Species Program. If you are concerned about the impacts of invasive species or interested in the techniques used to control them, join us as we examine species-specific actions, innovations in research and technology, and programs designed to help communities prevent and manage harmful invasive species. A question-and-answer period will follow each presentation. Recorded versions of all previous [NotMISpecies webinars](#) are available at Michigan.gov/EGLE/Outreach under "Featured Webinar Series."

Upcoming webinars in the series

Tuesday, March 21, 9:00 - 10:00 AM

[Rowing the boat: The Michigan Invasive Species Program 2022 year in review](#)

The hearty crew of staff, partners and volunteers that make up the MISP navigated through some rough waters in 2022 with new detections of beech leaf disease and spotted lanternfly in the state, but they also managed to make a lot of headway. The program's communications coordinator, Joanne Foreman, will highlight response efforts, prevention, outreach and survey work undertaken in 2022 to protect Michigan's natural resources from the effects of invasive species.

To access previously recorded NotMISpecies Webinars

[click here](#)

[Michigan.gov/EGLEevents](https://michigan.gov/EGLEevents)

REGISTRATION QUESTIONS:

Joel Roseberry: RoseberryJ@michigan.gov

Alana Berthold: BertholdA@michigan.gov



Virtual Lake Learning Opportunities

March 8, Noon: An overview of Tribal fisheries. Presented by Kevin Donner, Little Traverse Bands of Odawa Indians. Host: Tip of the Mitt Watershed Council. [Register.](#)

March 15, 2:00 PM: Preventing the spread of invasive species through PlayCleanGo and WorkCleanGo. Presented by Lindsey Cathcart, PlayCleanGo Program Manager. Host: North American Invasive Species Management Association. [Register.](#)

March 21, 9:00 AM: Rowing the boat: The Michigan Invasive Species Program 2022 year in review. Presented by Joanne Foreman, Michigan Department of Natural

Resources. Host: Michigan Invasive Species Program. [More details.](#)

March 22, Noon: Great Lakes Coastal Resiliency Study. Presented by David Bucaro, US Army Corps of Engineers. Host: Tip of the Mitt Watershed Council. [Register.](#)

March 28, 2:00 PM: Dissolved oxygen in warming lakes. Presented by Steve Jane, Cornell University. Host: Midwest Glacial Lakes Partnership. [More details.](#)

April 5, Noon: Go with the flow (*Restoring connectivity for stream health, biodiversity, and water quality protection*). Presented by Daniel Zielinski, Great Lakes Fishery Commission; and Jennifer Buchanan, Tip of the Mitt Watershed Council. Host: Tip of the Mitt Watershed Council. [Register.](#)

April 11, 2:00 PM: Managing for RADical lake change: applying the Resist-Accept-Direct (RAD) framework to support walleye management in Wisconsin. Presented by Abigail Lynch, US Geological Survey; and Colin Dassow, Wisconsin Department of Natural Resources. Host: Midwest Glacial Lakes Partnership. [More details.](#)

April 18, 2:00 PM: On thin ice: Are lakes feeling the heat? Presented by Sapna Sharma, York University. Host: Midwest Glacial Lakes Partnership. [More details.](#)

April 19, Noon: A model for evaluating septic pollution. Host: Tip of the Mitt Watershed Council. [Register.](#)

April 24-28: 13th National Monitoring Conference. (*hybrid conference with limited virtual format*) Host: National Water Quality Monitoring Council. [More details.](#) \$

May 2, 2:00 PM: Shoreline Living Volume Two: Property owner experiences in lakefront conservation. Presented by Erin Fuller, Van Buren (Michigan) Conservation District. Host: Midwest Glacial Lakes Partnership. [More details.](#)

May 9, 2:00 PM: Conservationists' perspectives of governance in the Iowa Great Lakes. Presented by Austin Holland, University of Wisconsin - Stevens Point. Host: Midwest Glacial Lakes Partnership. [More details.](#)

May 16, 2:00 PM: Healthy Watersheds, High-Quality Waters- A new program for protecting the wonderful waters of Wisconsin. Presented by Pamela Toshner, Wisconsin Department of Natural Resources. Host: Midwest Glacial Lakes Partnership. [More details.](#)



>>> We Need Your Help!!!
<<<

**Why You Should Join
Michigan Waterfront Alliance today?**

Do you care about your favorite lake, river, or stream?

Do you care enough to contact your state senator or representative about issues that may affect the quality of your waterbody?

Do you keep track of the bills that are important to your lake, river, or stream that may have been introduced in the Michigan House or Senate?

The good news is that Michigan Waterfront Alliance (MWA) is doing this for you.

And while we're at it - we will remind you that the activities and efforts of the Michigan Waterfront Alliance are conducted entirely by passionate volunteers who donate their own time and personal resources to helping preserve and protect Michigan's extraordinary freshwater lakes, ponds, rivers, stream and wetlands.

Did you know that not a single person who works directly on behalf of our non-profit organization receives compensation of any sort - financial or otherwise?

Did you know that with the exception of paying our attorneys to represent your interests, and the best interests of preserving our freshwater resources in court, that the majority of the relatively modest amount of revenue we generate from memberships is entirely dedicated to paying our Lansing-based lobbyist to work on your behalf and on behalf of protecting Michigan's water resources in our state capitol??

Did you know that Michigan Waterfront Alliance is a proactive member of the collaborative lake conservation focused organization known as the Michigan Inland Lakes Partnership???

Did you know that Michigan Waterfront Alliance was a 'platinum' level sponsor of the 2022 Michigan Inland Lakes Convention??

Did you know that Michigan Waterfront Alliance is a founding member of the Michigan Aquatic Invasive Species Task Force, a collaborative effort that is comprised of the Michigan Department of Environment, Great Lakes and Energy (EGLE), the Michigan Department of Natural Resources, and several statewide non-profit organizations that is dedicated to stopping the introduction and spread of exotic aquatic invasive plants and animals??

Did you know that our volunteers often reach out to elected members of the United States House of Representatives, the United States Senate, and to the United States Environmental Protection Agency in regards to resolving federal government level issues that pertain to protecting Michigan's freshwater resources??

Why not become a pro-active part of our efforts to help preserve and protect Michigan's incredible freshwater resources for future generations by becoming a member today??

Please remember that we rely entirely upon membership dues to fund the operating costs of our organization...

**TO BECOME A MEMBER OF
MICHIGAN WATERFRONT ALLIANCE VISIT OUR
>>>>> MEMBERSHIP PAGE <<<<<**

Annual Dues are:

\$50 for an individual;

\$100 for a lake association; and

With support from individuals like you, lake associations, and corporations, we can continue to work together as a unified voice choosing to protect Michigan's water resources for future generations. Thank you for your consideration!!!



ATTENTION READERS!!!

In order to add your friends, neighbors, and/or fellow lake or watershed conservation focused association member e-mails to our growing list of water resource conservation minded people who would like to receive this Michigan freshwater resources focused twice monthly newsletter, contact Editor Scott Brown at scottb1952@gmail.com



Join Michigan Waterfront Alliance!

- Are you tired of funding the management of aquatic invasive species on your lake that were introduced by recreational boaters using the local MI Department of Natural Resources public boating access site?
- Are you just a bit angry that recreational boaters using your lake are not being asked to contribute their fair share to combat the negative influences of aquatic invasive species?
- Are you worried about the fact that your lakefront residential property values are being negatively influenced by the steadily increasing presence of aquatic invasive species?
- Are you concerned about the fact that it is nearly impossible to find an inland lake in Michigan that does not currently host one or more potentially harmful aquatic invasive species?
- Are you aware of the fact that inland lakes are Michigan's most valuable natural resource, and that our state legislature has thus far appropriated almost nothing in the way of budget resources to help ensure they remain healthy and viable?

If your answer is yes to any of these important questions, please help ensure that your voice is heard in Lansing by joining Michigan Waterfront Alliance today.

[Click here to Join MWA](#)

[Visit the Michigan Waterfront Alliance Web Site by Clicking Here](#)

[Unsubscribe](#)