

Photo by Scott Brown

Welcome to the Michigan Waterfront Alliance Update for Tuesday, August 1, 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.







STATE OF MICHIGAN DEPARTMENT OF NATURAL RESOURCES

7 July 2023

A Literature Review of Wake Boat Effects on Aquatic Habitat

James Francis, Joel Nohner, John Bauman, and Brian Gunderman



www.michigan.gov/dnr/

FISHERIES DIVISION FISHERIES REPORT 37

EXECUTIVE SUMMARY

The operation of wake boats in a manner that creates large waves can erode shorelines and resuspend sediments and is an emerging threat to natural resources in inland lakes. Wake boats can produce waves with 1.7–17 times the energy of other comparable-sized powerboats and their propellers generated enough turbulence to resuspend bottom

sediments in water up to 33 feet deep. The large waves generated by wake boats take between 400–1,023 feet to dissipate to heights and wave energies observed 100–200 feet away from typical boats operating at cruising speed. Further, the use of ballast tanks in wake boats results in a dramatic increase in risk for transporting Dreissenid mussels and other aquatic invasive species and pathogens among water bodies. The cumulative negative effects of wake boats on natural resources has the potential to lead to loss of habitat, resulting in the decline of aquatic ecosystems and angling opportunity. These concerns can be mitigated by operating farther from shore to allow waves to dissipate before reaching shore, operating in deeper water to prevent bottom scour and resuspension of sediments, and disinfecting ballast tanks.

Michigan's current boating laws and regulations are intended to both promote public safety and avoid property damage but were created prior to the commercialization and popularization of wake boats in the early 2000s. As a result of the large waves and increased scour caused by these vessels, the existing 100-foot operating buffers around docks and shorelines on inland lakes are not sufficient to protect aquatic resources. The Michigan Department of Natural Resources, Fisheries Division (Division) recognizes the recreational value and popularity of wake boats, and recommends the following voluntary best operating practices in support of the continued use of wake boats while minimizing the effects on natural resources:

- 1. Boats operating in wake-surfing mode or wake-boarding mode, during which boat speed, wave shapers, and/or ballast are used to increase wave height, are recommended to operate at least 500 feet from docks or the shoreline, regardless of water depth.
- 2. Boats operating in wake-surfing or wake-boarding modes are recommended to operate in water at least 15 feet deep.
- 3. Ballast tanks should be completely drained prior to transporting the watercraft over land.

To download a copy of MI DNR's newly released Fisheries

Division Fisheries Report 37 - A Literature Review of Wake

Boat Effects on Aquatic Habitat, <u>click here</u>



Photo by Scott Brown

Michigan Waterfront Alliance (Proposed) Wake Boat Resolution

WHEREAS, Michigan's glacier formed landscape is graced with over 11,000 inland lakes; and,

WHEREAS, the majority of Michigan's inland lakes are defined by healthy freshwater ecosystems as indicated by the existence of clear, sunlight inundated waters, highly beneficial native aquatic plant communities, and diverse and abundant populations of invertebrates, fish, amphibians, reptiles, and waterfowl; and,

WHEREAS, healthy inland lake ecosystems provide a wide array of valuable economic and ecological services that are recognized for the vital role they play in helping to foster and sustain the growth and development of Michigan's increasingly freshwater resource dependent economy, and culture; and,

WHEREAS, Michigan's vast treasure of high quality inland lakes represents one of our most valuable natural resources; and,

WHEREAS, one of the most important services that inland lakes provide to millions of Michigan citizens and visitors to our state is the opportunity to engage in popular water-borne recreational activities such as swimming, fishing, kayaking, canoeing, jet skiing, power boating, and water skiing; and,

WHEREAS, a dramatic increase in the popularity of enhanced wake dependent water sports that are enabled by wake boats designed for the sole purpose of generating wakes that are defined by kinetic energy levels that greatly exceed those that are produced by wind, and/or conventional watercraft have gained the attention of state and local government officials, law enforcement agencies, and the news media; and,

WHEREAS, the results of several peer reviewed scientific studies that have explored the physics of the high energy wakes created by wake enhanced boats, and the nature and scope of their potential impact on aquatic ecosystems have demonstrated that the recent surge in the number of wake enhanced watercraft operating on the inland lakes of Michigan are likely responsible for rendering a destructive array of adverse ecological impacts; and,

WHEREAS, wake boat generated high energy wakes created in close proximity to shore, and/or within shallow areas of inland lake basins are not allotted the distance, time, and/or depth necessary for their extraordinarily high kinetic energy levels to dissipate before disturbing vulnerable benthic habitat, and/or having an adverse impact on both natural and developed shorelines; and,

WHEREAS, the jet engine-like turbulence generated by the four blade, large diameter propellers of wake boats are capable of scouring lake beds in depths in excess of sixteen feet; and,

WHEREAS, wake boats operating in areas of inland lakes defined by depths of less than sixteen feet are capable of causing high volume sediment resuspension that contributes to increases in phytoplankton (algae) production, increased turbidity, decreased water clarity, inhibition of aquatic plant growth, loss of fish habitat, and overall degradation in water quality; and,

WHEREAS, in addition to causing damage to docked watercraft, piers, and other forms of shoreline infrastructure, high energy wakes generated by wake enhanced watercraft operating within 500 feet of shore are capable of endangering kayakers and swimmers, of rendering significant damage to natural shorelines that serve as a protective buffer, and provide life sustaining habitat for fish, aquatic animals, and waterfowl; and,

WHEREAS, high energy wakes created by wake boats within 500 feet of shore are capable of inducing accelerated rates of shoreline erosion that leads to high volume sediment deposition and accumulation that results in degradation of fish spawning habitat, loss of fish foraging habitat, and a significant reduction in the capacity of inland lakes to support diverse recreational opportunities; and,

WHEREAS, wake boats that are towed from lake-to-lake by their owner/operators are equipped with high volume ballast water tanks that significantly increases the risk of introducing new exotic invasive aquatic plant and animal species to unaffected lakes; and,

WHEREAS, in light of the steadily increasing number of wake boats operating upon the waters of inland lakes, current State of Michigan laws pertaining to the safe operation of watercraft as it applies to the generation of high energy wakes are now outdated; and,

WHEREAS, Michigan Waterfront Alliance (MWA) is a 501 (C) 4 non-profit organization dedicated to contributing to the enactment of state laws and natural resource management policies that help preserve, protect, and/or promote long-term sustainable use of Michigan's vast treasure of high quality freshwater resources; and,

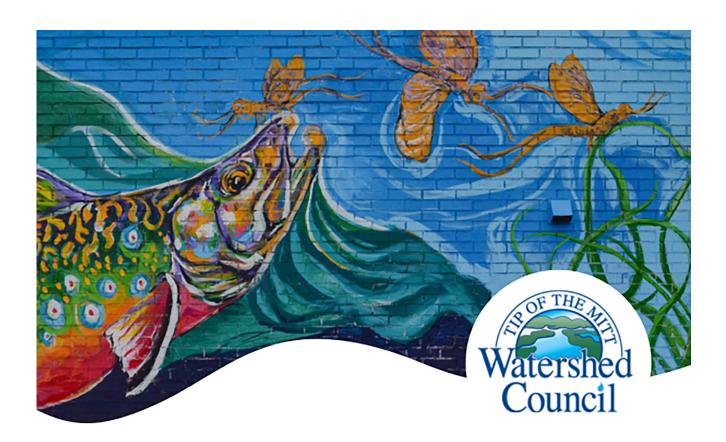
WHEREAS, Michigan Waterfront Alliance is committed to working with the Governor and the legislature of the State of Michigan in order to enact revisions to state law that will help ensure the safety of people engaging in passive recreational pursuits such as swimming, kayaking, and fishing, and the protection of natural shorelines, shoreline property, and vulnerable inland lake ecosystems.



Photo by Scott Brown

Bluegill

Scientific Name: Lepomis macrochirus



Torch Lake Township Approves Time-of-Transfer Septic Ordinance to Safeguard Water Quality and Public Health

The <u>Torch Lake Township Board</u> voted unanimously in favor of a groundbreaking time-of-transfer septic ordinance on Tuesday, July 18. The new ordinance mandates the inspection of well and septic systems in the Township before any residential property is sold, safeguarding water resources and ensuring public health.

The ordinance is set to take effect on August 17, 2023. According to Torch Lake Township Supervisor Bob Cook, "the passage of the ordinance is an important step in reducing septic pollution in Torch Lake and Little Traverse Bay. At the same time, it protects all homeowners' water supply from potential contamination from neighboring septic

systems. We are proud to be a part of the growing effort to protect our lakes and drinking water supply."

The Township board initially introduced the draft ordinance at the beginning of June and subsequently held a public meeting during the second week of July where representatives from Tip of the Mitt Watershed Council and the Health Department of Northwest Michigan were on hand to address inquiries from the Board and the public regarding the ordinance. Township residents in attendance demonstrated overwhelming support for the proposed ordinance that protects water quality and public health.

Anna McGlashen, local policy manager for the <u>Tip of the Mitt Watershed Council</u>, emphasized the significance of local governments in safeguarding water quality. "Local government has an important role in protecting water quality, filling in the gaps left by state and federal regulations," said McGlashen. "Local officials understand the particular issues their communities are facing. Torch Lake Township worked with the Health Department of Northwest Michigan, solicited feedback from residents, and came up with an ordinance that will help ensure the safety of residents and protect the quality of water resources. I hope local governments across Michigan follow their lead."

Modeled after neighboring Milton Township, the ordinance is intended to protect public health and safeguard ground and surface water from malfunctioning or failing septic systems. Upon property transfer, the Health Department of Northwest Michigan will conduct the necessary inspections, enabling the Health Department to take any required actions to protect public health and the environment. "We appreciate the township's interest and action in protecting our local lakes and streams," said Jeremy Fruk, Director of Environmental Health Services for the Health Department of Northwest Michigan. "We look forward to working with Township residents to help protect Torch Lake when the ordinance takes effect."

Making the ordinance a model for other local units of government, the Torch Lake Township ordinance not only requires time-of-transfer inspections, it incorporates additional safeguards to address septic systems that pose the greatest risk to water resources. The ordinance requires inspections of properties within 500 feet of a water body and properties that have no record of a septic permit. This will provide a more comprehensive protection program for Torch Lake and Lake Michigan.

Upholding their mission to protect and preserve Torch Lake, the Torch Lake Protection Alliance (TLPA) played a crucial role in facilitating the development of the ordinance by providing essential background materials and support during deliberations over the past several months. "With the ordinance now approved, the TLPA believes it will greatly reduce the risk of septic contamination in Torch Lake and commends the Township's leadership and courage," said TLPA board member Tom Joseph. "The recently approved Septic Ordinance in Torch Lake Township is a positive step forward for the Township. All residents deserve to have access to clean drinking water."

The Torch Lake Township Board's decision to implement this time-of-transfer septic ordinance marks a significant milestone in the ongoing commitment to protecting the natural beauty and health of Torch Lake and Lake Michigan. The collective efforts of Tip of the Mitt Watershed Council, Torch Lake Protection Alliance, the Health Department of Northwest Michigan, local officials, and concerned residents underscore the community's dedication to preserving Northern Michigan water resource for future generations.

For questions or inquiries, please contact:

Anna McGlashen Local Policy Manager (231) 489-7276

amcglashen@watershedcouncil.org







Aquatic Invasive Species Pathways Program

Aquatic Invasive Species Alert

What should I know?

The Watershed Center Grand Traverse recently discovered New Zealand mud snails (NZMS) in Four Mile Creek, a tributary of Mitchell Creek in Grand Traverse County.

Why are we concerned?

- NZMS are tiny, only 3-5 mm long, and are easily spread between waterbodies on fishing equipment, boats, and waders.
- NZMS have voracious appetites, quickly outcompeting macroinvertebrates (AKA fish food) for food. In addition, these snails provide very little nutritional value to fish.
 As such, fish may feel full from eating them but may actually be starving due to nutritional deficits.
- NZMS reproduce asexually through cloning. Just one snail can make 200 in a single year!

What can I do about it?

To help stop the spread and introduction of NZMS, remember to clean, drain, dry ALL equipment that enters

the water.

- Visually inspect and remove all debris from your equipment
- Use a brush to scrub your gear
- Spray equipment liberally with 409 Multi-Surface Cleaner and leave on for 20 minutes
- Rinse gear with clean water
- Allow your gear to completely dry. NZMS can live out of the water for weeks at a time!

For more information:

- Contact AIS Coordinator, Kyla Foley, at kyla@benziecd.org
- Visit the NZMS Collaborative website,

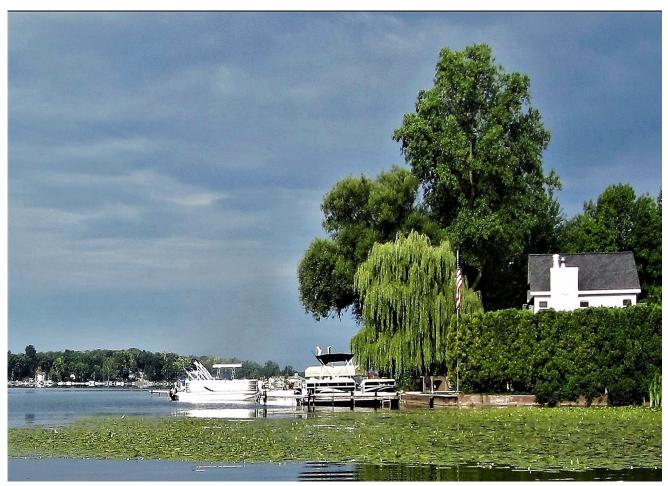


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If not **YOU**, then who? We need **YOU!**

Michigan Waterfront Alliance (MWA) is the only all-volunteer non-profit organization in Michigan that is dedicated to reaching out on a daily, pro-active basis to our state representatives and senators in regards to their on-going need to act now to protect our precious inland lakes, wetlands, rivers, and streams.

Please do not expect other lake associations, other individuals, and other corporations to fund MWA's efforts in Lansing.

If **you** want your voice to be heard in Lansing **you** need to be the other lake association, the other individual, and the other **corporation** to make a generous contribution to helping fund our on-going efforts in Lansing.

Please don't count on others to support the only organization in Michigan that is completely dedicated to voicing your legitimate concerns to our state legislators in Lansing.

We hire professional lobbyists - Karoub Associates - who understand the intricacies of dealing with state government - to reach out to our legislators. As you might imagine, the cost of hiring a professional, highly respected Lansing-based lobbying firm whose downtown Lansing office's are located within a literal stone's throw of Michigan's state capitol building is expensive - we believe, however, that to have someone in constant contact with our state senators and representatives it is more than worth the significant ongoing expense.

To put it in blunt "no ifs, ands, or buts" terms, without **YOUT** generous support we will be unable to continue our erstwhile efforts in Lansing.

Please also remember that with the exception of a few relatively minor expenses related to keeping our website updated, and on-line, and a few relatively minor costs associated with distributing our e-newsletter, all of our membership and donation derived income goes to paying our downtown Lansing-based lobbying firm, and our attorneys. No exorbitant employee salaries or fringe benefit packages to pay!!!!!!!!!

It is also important to note that last year **Michigan Waterfront Alliance** lawyers took a case all the way to the Michigan Supreme Court in order to get the State of Michigan to do it's job in protecting our lakes, rivers, streams, and wetlands.

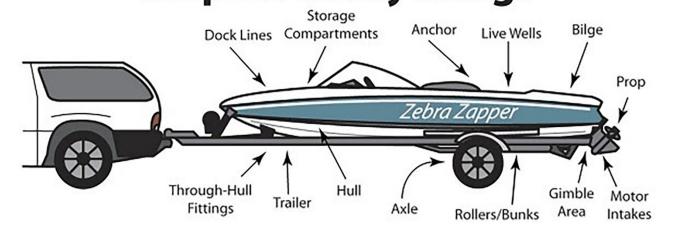
Thank you for reading and considering this hopefully convincing appeal for donations - no amount is considered too small - all donations of money are happily received and acknowledged within the context of the generous spirit that prompted them!!!!!!!

Click here to become a dues paying member of MWA

Click here to make a generous donation to MWA



Before leaving and before launching... inspect everything!





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."

Thursday, August 10, 2023, 9:00 a.m. to 10:00 a.m.

Why, Oh Why Won't They Clean, Drain and Dry? Understanding Impediments to Boater and Angler Behavior Change

Aquatic invasive species continue to be spread by boaters and anglers, primarily by those who travel between waterways without cleaning their equipment. Well, why aren't people cleaning when we know the risks of spread? Daniel Hayes from the MSU Department of Fisheries and Wildlife and students from his lab interviewed a thousand boaters and anglers to understand just that. Hayes will share what they've learned about motivations and barriers to equipment cleaning, perceptions of invasive species spread and other interesting results.

Tuesday, October 3, 9:00 a.m. to 10:00 a.m.

Where the Sidewalk Ends: Choosing Resilient Trees for Tomorrow's Urban Environments

Ash, elm and chestnut trees once were as common in cities as the streets that bear their names. Our canopy today is much less diverse due to insects, disease, invasive species and poor species selection. Lawrence Sobson, DNR urban forester and partnership coordinator, will share examples of ideal tree species, how to assess urban sites and provide the information you need ensure the trees you choose can live for the next 100 years.

Tuesday, November 7, 9:00 a.m. to 10:00 a.m.

<u>Must You Find Another Shrubbery? Understanding the Impacts of Invasive Box Tree Moth in Michigan</u>

Box tree moth (*Cydalima perspectalis*) was first detected in Michigan in fall 2022. This invasive pest, native to East Asia, poses a major threat to the boxwood plant, an ornamental shrub that is a valuable part of the U.S. (and Michigan) nursery and horticultural industry. Join Susie lott, MDARD invasive species program specialist, to learn more about identification, impacts and the state's response to limit the spread of this invasive pest.



Michigan Chapter North American Lake Management Society

The purpose of McNALMS is to promote understanding and comprehensive management of Michigan's inland lake ecosystems

Join McNALMS

If you share an interest in protecting and restoring Michigan lakes, we invite you to join the Michigan Chapter, North American Lake Management Society (McNALMS) and add your voice to our growing and active effort. With membership, you receive our informative newsletter; access to our parent organization's newsletter (national NALMS); reduced registration to our biennial Lunch and Learn meeting; eligibility to apply to our Student Grants and other financial assistance programs; information on other grants, courses, fact sheets, and announcements; and becoming a part of a network of individuals and corporations interested in lake conservation.

Click here to join McNALMS

<u>Click here</u> to download and read the Spring 2023 McNALMS Newsletter



Events Listing

All times Eastern. "\$" indicates there may be a cost to participate.

August 10, 9:00 AM: Why, oh why won't they Clean, Drain, and Dry? Understanding impediments to boater and angler behavior change. Presented by Carrie Meier and Dan Hayes, Michigan State University. Host: Michigan Invasive Species Program. More details.

August 17, 1:00 PM: Conservation planning in municipalities: Case studies of urban wetlands and waterways. Presented by Ronda Burnett, Missouri Department of Conservation. Host: Society of Wetland Scientists. More details.

August 20-24: 153rd American Fisheries Society Annual Meeting, Grand Rapids, Michigan (hybrid event: virtual and in-person options). Host: American Fisheries Society. More details. \$

September 6: Understanding algal blooms: State of the science conference (*hybrid event: virtual and in-person options*). Host: Ohio Sea Grant. <u>More details</u>. \$

September 18, 9:00 AM: Knowing your septic system - SepticSmart 2023. Presented by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Onsite Wastewater Program. Host: Michigan EGLE. <u>More details</u>.



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

Why <u>You</u> 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 <u>your</u> 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 <u>your</u> 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 <u>Michigan Inland Lakes</u> <u>Partnership???</u>

Did you know that Michigan Waterfront Alliance was a 'platinum' level sponsor of the <u>2022 Michigan Inland Lakes</u> 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 <u>United States House of Representatives</u>, the <u>United States Senate</u>, and to the <u>United States</u>

<u>Environmental Protection Agency</u> 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

>>>> <u>MEMBERSHIP PAGE</u> <<<<<

Annual Dues are:

\$50 for an individual;

\$100 for a lake association; and

\$200 for a corporation

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 emails 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