**Michigan Waterfront Alliance Update for Thursday, September 1, 2022**
1 message

**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.**

Photo by Scott Brown

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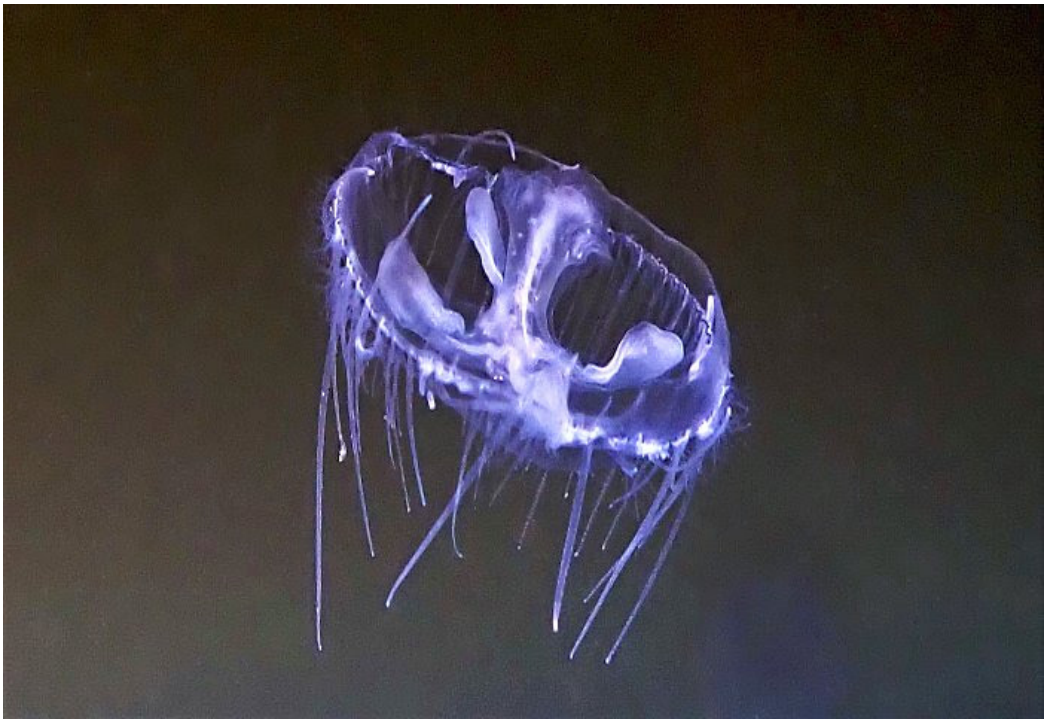

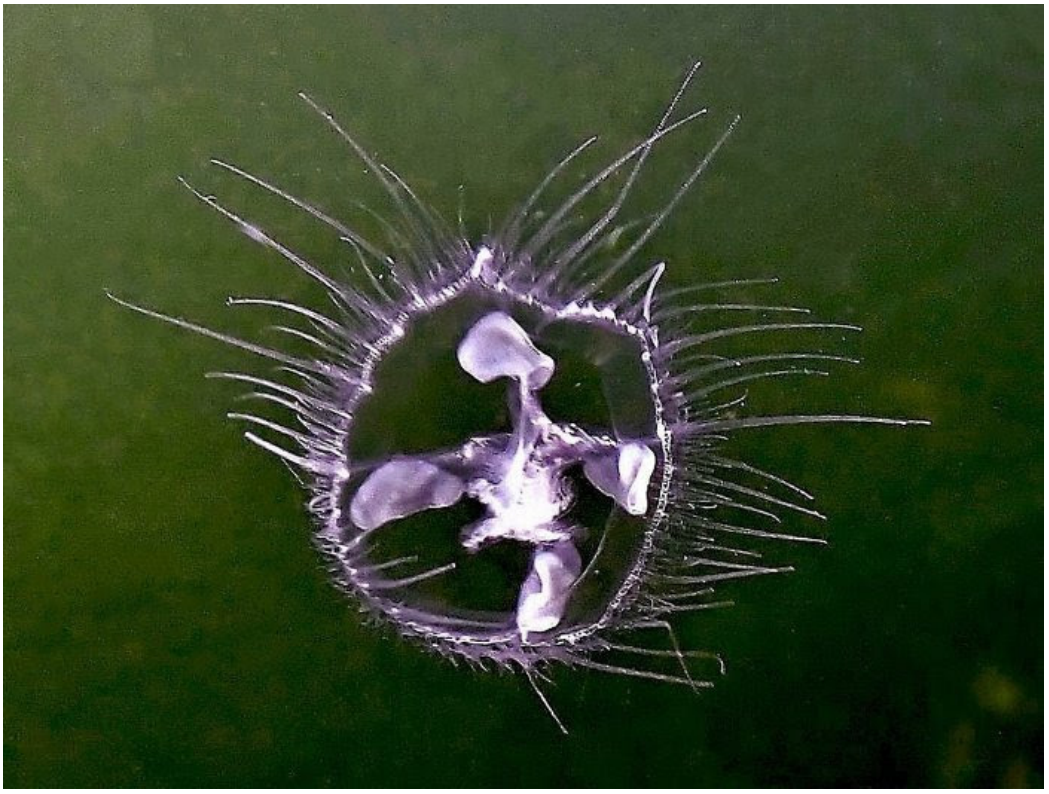

Photos by Scott Brown

## Late Summer Warm Water Temperatures Prompt the Return of Freshwater Jellyfish to Many Michigan Inland Lakes

**Editor's Note: This article focused on freshwater jellyfish originally appeared in this newsletter in the fall of 2019 - several reports of the appearance of the unique creature**
**in Michigan lakes over the course of the past couple of weeks have prompted us to re-publish for the sake of our many new subscribers.**

**Story and Photos by Scott Brown, MWA Board Member / E-Newsletter Editor**

**Evoking expressions of surprise and delight, the initial experience of observing an only sporadically occurring swarm of undulating freshwater jellyfish gracefully propelling themselves through the late summer warm waters of your favorite lake always seems to be a joyful one. Commonly referred to as "peach blossom fish" in their native China, words such as fascinating, graceful, elegant, ephemeral, and mysterious are often deployed by authors in their attempt to aptly describe the exotic freshwater jellyfish species known as *Craspedacusta sowerbii* that only occasionally appears in Michigan's inland lakes.**

**A native of China's Upper Yangtze River basin, the exponentially increasing pace of international trade that has occurred over the course of the past century has inadvertently led to the fact that *C. sowerbii* has now been successfully introduced to every continent except Antarctica, and has become the most widely distributed freshwater jellyfish on earth. *C. sowerbii* and the nineteen other species of freshwater jellyfish in existence are classified as hydrozoans, a class of small colonial or solitary predatory animals that are related to sea anemones and corals. *C. sowerbii* belongs to the Cnidaria, a diverse phylum of hydrozoans that contains over**

**11,000 marine and freshwater species whose exotic physical appearance is primarily defined by a unique umbrella-like radial symmetry. Catalogued in England by naturalists in the 1880's, *C. sowerbii* was first observed in Michigan waters in the 1930's.**

**Representing an extremely delicate and highly elastic gelatinous creature that is intolerant of intense wave action and fast-moving waters, the freshwater jellyfish species known as *C. sowerbii* that inhabits Michigan waters is most often observed floating or gracefully swimming near the sunlit surface of ponds, reservoirs, quarries, and quiet wind-sheltered areas of inland lakes. Lacking a brain, heart, respiratory system, skeleton, and even blood, the relatively simple, delicate anatomy of *C. sowerbii* is comprised of a translucent bell-shaped outer layer known as the epidermis; a middle layer consisting of a thick, highly elastic, grayish-blue in color gelatinous substance that is referred to as the mesoglea; and, representing a simple digestive system that acts as both a stomach and intestine with just one opening that serves as both mouth and anus, an inner layer that is referred to as the gastrodermis which includes a crude stomach-like structure that is referred to as the manubrium. Circulation of nutrients within the ancient organism is facilitated by the existence of four radial canals that originate along the edges of the manubrium.**

**Freshwater jellyfish are known to possess a sense of smell, are able to detect light, and are capable of sensing and responding to near-by stimuli such as motion due to the existence of an elementary network of nerve cells that are widely distributed throughout their gelatinous body. The rim of their translucent bell-shaped epidermis is adorned with up to 400 relatively long tentacles that each possess thousands specialized cells called cnidocytes that are deployed by the organism to capture and pass prey consisting of tiny zooplankton to the opening of their gastrodermis. Drifting in the water column with its tentacles fully extended, jellyfish waits for suitable prey such as a tiny daphnia to come into contact with a tentacle. Once contact is made, nematocyst cells within the tentacle fire into the prey, injecting a tiny quantity of a powerful toxin that acts to paralyzes the animal, with the tentacle then acting to secure the prey by wrapping itself around the immobilized animal. It is important to note that stings by small freshwater jellyfish such as *C. sowerbii* produce only minor pain and often go unnoticed by swimmers due the miniscule amount of toxin that is injected as a result of contact with a tentacle. Mature *C. sowerbii* are capable of growing to a diameter of approximately 19 millimeters (penny-size), responding to the detection of stimuli such as near-by motion, however, the highly elastic gelatinous species is capable of instantaneously expanding its translucent epidermis to three times its normal diameter.**

**Beginning life as a tiny polyp attached to aquatic vegetation, rocks, or coarse woody debris, *C. sowerbii* and other species within the Cnidaria phylum possess a complex life cycle that allows them to expeditiously take advantage of the return of environmental conditions that are favorable to their survival and sustainability. In rare populations of *C. sowerbii* that possess both female and male individuals, the species is capable of achieving sustainability by alternating with each generation between reproducing sexually, with free floating sperm cells fertilizing eggs, and reproducing asexually by cloning themselves. Freshwater jellyfish are dimorphic, depending upon conditions, such as water temperature, the amount of light penetrating the surface, and/or food availability, freshwater jellyfish such as *C. sowerbii* are known to alternate between a polyp phase, a larval phase, and a relatively brief life in late summer as a sexually mature free-swimming male or female**

**hydro-medusa. Freshwater jellyfish such as *C. sowerbyi* are known to spend much more time in existence as microscopic podocysts, frustules (larvae produced asexually by budding), planulae (larvae produced sexually by mature male and female hydromedusae), or as sessile polyps that attach themselves to stable submerged surfaces such as coarse woody debris and rocks. It is important to note that the vast majority of *C. sowerbii* colonies are comprised of all-male or all-female individuals, therefore rendering the species almost completely dependent upon asexual reproductive processes for long-term survival.**

**Intolerant of the cold-water temperatures that are present in northern temperate waters in late fall, winter, spring, and early summer, the most abundant colonies of mature hydro-medusa phase *C. sowerbii* are observed as late summer water temperatures reach their maximum in August and September. Most often observed floating or swimming near the surface on bright sunny days, the mature hydro-medusa phase of *C. sowerbii* comes to an end with the gradual emergence of cold-water temperatures. During the winter months when northern temperate water bodies are frozen over, *C. sowerbii* contracts and enters a long period of dormancy as resting bodies called podocysts. Once environmental conditions become favorable, they again enter the polyp phase that later in the summer leads to the formation of a mature hydro-medusa.**

**To view a short YouTube video of freshwater jellyfish swimming near the surface in one of our favorite inland lakes we recently posted, click here**

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**Michigan Waterfront Alliance is Proud to Be A Platinum Level Sponsor of the 2022 Michigan Inland Lakes Convention**

**For Those of Us Who Love Lakes the 2022 Michigan Inland Lakes Convention Represents an Incredible Opportunity to Learn More About and to Engage In a Celebration of Our Wonderful Inland Lakes**

**without Leaving the Comfort of Our Home!!!**

# REGISTRATION is Open for 2022 Virtual Michigan Inland Lakes Convention

**The biennial Michigan Inland Lakes Convention brings together lake scientists, policy makers, lakeshore owners, and conservationists to spark new ideas and inspire stewardship of inland lakes. This year's convention theme is "*Protecting Lakes Today for Tomorrow*", and it will take place virtually September 14-16 on Zoom.**

**The three-day event will include more than 45 engaging presentations and workshops focused on specific issues such as fish management, landscaping near shorelines, lake protection and governance, algal blooms, native freshwater mussels, communications, policy, invasive species, lake restoration, and much more. Wednesday and Thursday will also include keynote speakers who are regionally recognized for their contribution to the field of lake science and conservation.**

**The convention is a unique occasion for professionals and lakefront homeowners to learn from prominent lake management and conservation professionals. More importantly, it is an opportunity to learn best practices for the protection and preservation of Michigan's inland lakes.**

**Registration is open! Registration for the event is $60, $15 for students, and free for speakers. Registration deadline is September 11, 2022.**

## Mark your calendars!

## The Michigan Inland Lakes Convention: Protecting Lakes Today for Tomorrow

**will be held on-line on**

## Wednesday, Thursday & Friday
## September 14 - 15 - 16 2022

**REGISTRATION FOR THE 2022 MICHIGAN INLAND LAKES CONVENTION IS NOW OPEN!**

## REGISTER HERE

# Michigan Invasive Species Program 2021 Annual Report

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

DEPARTMENT OF NATURAL RESOURCES DNR MICHIGAN

Michigan Department of AGRICULTURE & Rural Development

**To view and/or download a copy of the Michigan Invasive Species Program 2021 Annual Report, click here**

Photo by Scott Brown





**Aug. 24, 2022**

**Contact: Sarah LeSage (EGLE), 517-243-4735 or Joanne Foreman (DNR), 517-284-5814**

# Didymo algal blooms found in the Boardman River

***Second river in Michigan's northern Lower Peninsula to experience nuisance didymo growth***

**The Michigan Department of Environment, Great Lakes, and Energy has confirmed the presence of didymo (*Didymosphenia geminata*), a nuisance alga also known as**

**rock snot, in a stretch of the Boardman River in Blair Township in Grand Traverse County.**

**Blooms of didymo, a microscopic diatom (single-celled alga), were detected on the Upper Manistee River in Kalkaska County in December 2021 and have been found in the St. Marys River in the Upper Peninsula since 2015.**

**A photo of suspected didymo posted Aug.17 on a Michigan Sportsman online forum was forwarded to EGLE and Department of Natural Resources staff the next day. Sarah LeSage, EGLE aquatic invasive species program coordinator, visited Shumsky's Canoe Launch and a bridge access off East River Road in Blair Township Aug. 22 to collect samples, which were verified the next day by the Great Lakes Environmental Center.**

**Points on the Boardman River, including Shumsky's launch, were surveyed in May as a part of a 12-river didymo survey in northern Michigan following the detection on the Upper Manistee. At that time, didymo was not found on the Boardman or any additional rivers.**

## Not a typical alga

**Unlike the harmful algal blooms that plague areas of the Great Lakes and some inland lakes due to warm temperatures and excess nutrients, didymo blooms form in**

**cold, low-nutrient streams generally considered pristine – the same streams prized for their sport fisheries.**

**Didymo mats can cover streambeds and reduce habitat for macroinvertebrates including mayfly and caddisfly nymphs, which are important food for fish.**

**“We don’t have a lot of historical samples to indicate whether didymo may be present but undetected in other Michigan waterways,” said LeSage. “It’s possible that environmental factors like changes in water chemistry or quality are causing it to ‘bloom’ or develop long stalks, making previously undetected alga cells now visible on hard surfaces in the streambed.”**

### What’s being done

**Since 2015, the Michigan Invasive Species Grant Program has supported researchers at Lake Superior State University’s Center for Freshwater Research and Education in an extensive study of occurrences of didymo in the St. Marys River and Upper Peninsula waters, the risk of spread and why nuisance blooms are increasing – a phenomenon being observed worldwide.**

**Information on didymo and LSSU’s ongoing efforts is available in the June 9, 2022, NotMISpecies webinar, Didymo: What you need to know, presented by Dr. Ashley Moerke.**

**Throughout the year, EGLE and DNR have increased outreach to partners including outfitters and bait shops serving the Upper Manistee River. These partners, in turn, have been encouraging boaters, anglers and others to adopt practices that prevent the spread of didymo via boats, gear and waders.**

**New signs reminding users to “Clean, Drain, Dry” are posted at access sites along the Upper Manistee. Similar outreach measures will be taken along the Boardman River.**

### Prevention is key

**Currently, there are no effective methods to eradicate didymo once it is established in a river or stream. To prevent spreading didymo and other aquatic invasive species to new locations, it is critical for recreational users to thoroughly clean, drain and dry waders, equipment and boats upon leaving a waterway.**

- **Clean by removing mud and debris from all surfaces.**
- **Drain water from all bilges, wells and tanks.**
- **Dry equipment for at least five days or disinfect with hot water or a diluted bleach solution.**

**Additional recommendations can be found on the didymo page at Michigan.gov/Invasives.**

**Identify and report didymo**

**Despite its slimy nickname, didymo has a coarse texture resembling wet wool. It can appear as small, cotton ball-sized patches or thick blankets with rope-like strings**

**that flow in currents.**

**If you observe didymo in the water, note the location and report it by using the Midwest Invasive Species Information Network, available online at MISIN.MSU.edu or as a downloadable smartphone app. The MISIN smartphone app will take a GPS location point if a report is made at the site; it also will allow you to upload photos with a report.**

**Find more information on didymo and how to identify it at Michigan.gov/Invasives.**

***Michigan's Invasive Species Program is cooperatively implemented by the Department of Environment, Great Lakes, and Energy; the Department of Natural Resources; and the Department of Agriculture and Rural Development.***

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Michigan Department of Natural Resources
Caring for Michigan's outdoor places and stories since 1921

## DNR NEWS

**Aug. 19, 2022**

**Media contact: Ron Olson, 517-243-1477**

### DNR's next round of state park infrastructure projects includes more than $108 million in ARPA investments

**Those who regularly spend time in Michigan state parks, trails and waterways know there is a lot to love: beautiful, natural spaces, room to roam, historic sites and so much more. With the Michigan Department of Natural Resources' second round of infrastructure projects starting to take shape, there is even more to look forward to – courtesy of record-breaking federal funding.**

**A total of $250 million in federal relief funding was made available to the DNR to help address its long list of critical needs in Michigan state parks. These American Rescue Plan Act funds are part of a $4.8 billion infrastructure package signed in March 2022 as part of Gov. Gretchen Whitmer's Building Michigan Together Plan.**

**"Michigan's beautiful, award-winning state parks are the backdrop of countless memories for millions of people every year," said Gov. Whitmer. "In April, I was proud to work across the aisle and sign the Building Michigan Together Plan, which made the largest investment ever in our state and local parks. The plan will fund improvements, renovations and upgrades, ensuring our parks remain great places to visit and continue to support tens of thousands of jobs and countless local economies. Pure Michigan is anchored by our state parks, and I will work with anyone to keep investing in them and powering tourism and recreation small businesses across the state. Let's keep working together to ensure our public parks can thrive for generations."**

**DNR Director Dan Eichinger said the federal relief funding is nothing short of a historic investment in Michigan's state parks and recreation system.**

**"Our staff puts in a tremendous effort to keep things running efficiently and offer quality outdoor experiences for everyone, but it has been a challenge, especially as we welcome record numbers of visitors," said DNR Director Dan Eichinger. "This is an unprecedented, one-time funding wave that allows us to direct vital resources toward a decades-long backlog of repair and maintenance needs."**

**This round includes more than a hundred projects, bundled into 40 contracts, for a proposed investment of $108.8 million. The funds will cover design, engineering and some construction. All projects, where possible, are sustainably designed to be environmentally sensitive and cost-efficient.**

**For ease in reporting and sharing information with the public, the DNR has grouped these ARPA-funded projects into seven broad investment categories. A few of the planned projects in each category also are identified below.**

- **Building projects**
- **Historical projects**
- **Major developments**
- **Operational structures**
- **Parking lots and roads**
- **Recreational structures**
- **Utilities**

### Building projects

**Such work typically includes efforts to ensure that structures – picnic shelters and beach houses, day-use buildings, toilet and shower buildings – are increasingly more accessible and updated with the clean, modern, home-away-from-home amenities and comforts that campers and daily visitors expect. These 29 projects include:**

- **Cheboygan State Park (Cheboygan County): Replace campground toilet and shower building.**
- **Interlochen State Park (Grand Traverse County): Modernize and improve accessibility in park's day-use building.**
- **Muskegon State Park (Muskegon County): Modernize beach building in day-use area.**

### Historical projects

**To help visitors gain a sense of place and a connection to the past, historical projects are an important preservation tool and generally include structural and aesthetic improvements to buildings with historical significance. The two projects in this round include:**

- **Hartwick Pines State Park (Crawford County): Renovate and help preserve historic Memorial Building.**
- **Ionia Recreation Area (Ionia County): Renovate and help preserve the historic Sessions Schoolhouse building.**

### Major developments

**These are larger-scale projects at a facility, often combining multiple components from the other, more targeted improvement categories. An example of a major development project would be a collection of renovations (new electrical, roads and toilet and shower buildings) at a campground loop. A total of six projects includes:**

- **Keith J. Charters Traverse City State Park (Grand Traverse County): Redesign and redevelop day-use area (beach front). Improve park entrance, contact station, sanitation station, vehicular circulation and accessibility.**
- **Young State Park (Charlevoix County): Modernize the Spruce campground with stormwater system improvements, road redevelopment and refresh of campsites.**

### Operational structures

**Operational structures are critical connection points for the support and maintenance of parks and recreation facilities. Investments in these structures support campground amenities like sanitation stations (RV pump-out) and lift stations that remove waste from where people recreate, and water control structures (or dams) that provide beautiful lakes for fishing, boating and swimming. These 15 projects include:**

- **Dam repairs at Bald Mountain Recreation Area and Holly Recreation Area (Oakland County), Metamora-Hadley Recreation Area (Lapeer County) and Brighton Recreation Area (Livingston County).**
- **Sanitation station enhancements at Hoeft State Park (Presque Isle County), Algonac State Park (St. Clair County), Pinckney Recreation Area (Washtenaw and Livingston counties) and Hoffmaster State Park (Muskegon County).**

### Parking lots and roads

**Parking lot and road projects involve the preventive maintenance, repair or replacement of internal park roads and parking areas. These projects help improve the visitor experience by eliminating potholes, creating a smoother ride and providing better turning capabilities for larger vehicles. These 16 projects include:**

- **Locations in Mitchell State Park (Wexford County), Port Crescent State Park (Huron County), Island Lake Recreation Area (Livingston County) and Sleepy Hollow State Park (Clinton County).**

### Recreational structures

**Investments in recreational structures like boardwalks, observation decks and fishing piers ensure broader, safer access to the beaches, playgrounds, lakes and other outdoor areas campers and day-use visitors want to enjoy. These eight projects include:**

- **Rifle River Recreation Area (Ogemaw County): Rehabilitate and replace cable pedestrian suspension bridge and observation tower.**
- **Van Buren State Park (Van Buren County): Redevelop beach access due to erosion from high lake levels.**
- **Waterloo Recreation Area (Jackson and Washtenaw counties): Replace the fishing pier with more universally accessible features in the Portage Lake Campground. The**

**project includes a federal grant and state fund match.**

### Utilities

**The repair or replacement of utility systems such as water, sanitary and electrical systems may not be as visible as other efforts, but they are necessary to both meet modern health and safety requirements and serve visitors' evolving needs and comfort expectations. These 38 projects include:**

- **Bewabic State Park (Iron County): Repair or replace on-site wastewater treatment facility for campground toilet and shower buildings and sanitation station.**
- **Clear Lake State Park (Montmorency County): Modernize campground sanitary system and lift station.**
- **Port Crescent State Park (Huron County): Replace and modernize existing water, sewer and electrical systems throughout the park and replace or repair campground roads.**
- **Tawas Point State Park (Iosco County): Replace and modernize campground electrical system.**

### Looking ahead

**DNR Parks and Recreation Chief Ron Olson said it's an all-hands-on-deck effort to move these projects through a thoughtful design and engineering phase, followed by bid letting and construction. It's a process involving multiple agencies, including the Michigan departments of Environment, Great Lakes, and Energy; Technology, Management and Budget; and Transportation.**

**"This is a massive team effort," Olson said. "Because we already had a pretty solid understanding of the many maintenance, repair and development projects we knew we wanted to accomplish – and some of that work was ongoing through normal operations – the influx of ARPA funding meant we had to work together, quickly, to prioritize which projects were most critical or nearest to implementation."**

**Olson said the first round of projects (announced in June), includes 11 "shovel ready projects." The first two projects at Straits and Cheboygan state parks will break ground as early as this fall. In future years, additional state park funding will help cover construction costs not addressed with this ARPA investment.**

**Additionally:**

- **ARPA funding also includes up to $30.2 million to develop a new state park in Flint.**
- **The third and final round of projects, to be announced later this year, includes projects that have already started in some form but require additional investment for completion. This includes $37.8 million for trails projects across the state, the majority of which have not yet been announced.**

**Federal funding requirements state that ARPA funds must be obligated (committed to a project) by Dec. 31, 2024, and spent on that project by Dec. 31, 2026.**

### Follow our progress

**To help the public and media stay up to date on these projects and learn more about the funding and decision-making, the DNR has created a website at Michigan.gov/**

**StateParksProgress, which includes:**

- **An interactive map identifying proposed project locations and details, including status (proposed, design/bid phase, construction started or project completed) of each project. (Please note: This map is specific to ARPA-funded projects; it does not include the variety of other work happening at state parks, trails and waterways.)**
- **Frequently asked questions.**
- **State parks facts.**
- **An evolving photo gallery, including many examples of the work needing to be done. As projects are completed, "after" photos will be added.**

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**Photos by Scott Brown**

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**July 22, 2022**

**Contact: Joanne Foreman, 517-230-3746**

# Have we got a treat(ment) for you! NotMISpecies webinars feature tips for

# tackling invasive species on land, water and places in between

***Plus, some great educational programs, too!***

**Treatment season for many invasive species is underway across the state, and the NotMISpecies webinar series is focusing on common questions about control and management. Whether you are thinking about tackling invasives on your land or wondering about the best ways to control phragmites or invasive aquatic plants, you'll find expert advice in these upcoming sessions.**

**The series is also taking time to showcase the array of Department of Natural Resources educational programs. While DNR interpreters and educators continue to enhance visitors' experiences at parks and in the classroom, they now offer a wide selection of online and virtual programs that incorporate invasive species information into broader natural resources education.**

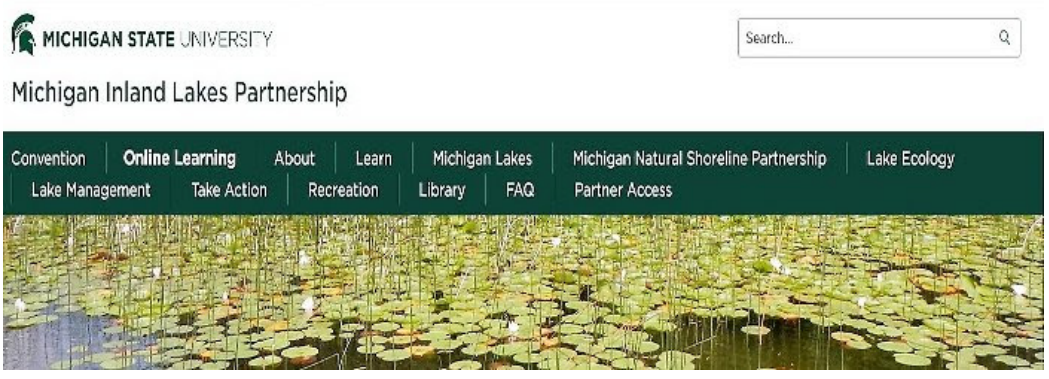
**Supported by the Michigan Invasive Species program, the monthly, hourlong webinars are designed to keep people informed about available programs, current research and emerging issues in the state and the Great Lakes region. Question and answer sessions and links to resources help attendees get the most out of each presentation.**

**Once you know what invasive phragmites looks like, it seems to be everywhere along Michigan's roadsides and shorelines, until you reach the Upper Peninsula. Yooper Troopers: Lessons Learned Controlling Phragmites in Michigan's U.P. (9 a.m. Thursday, Sept. 22) explores how a peninsula-wide collaborative effort has kept this invader in check. Join Nick Cassel, Executive Director of the U.P. Resource Conservation and Development Council, to learn how partners in the U.P. Phragmites Coalition are working together to find and control infestations, and how their work can help you, regardless of where you are in the state.**

**The Department of Natural Resources' education team connects Michiganders to the outdoors in many ways – providing a natural network for invasive species information. There's a Lamprey in my Classroom! Infusing Invasive Species Education into Statewide Programs (9 a.m. Thursday, Oct. 6) showcases the work of DNR educators across the state from visitor centers and campground programs to live virtual classroom sessions. Whether you're an educator, a parent or someone who enjoys learning, Tracy Page, DNR aquatic education coordinator, will explain how to take advantage of these programs no matter where you are.**

**Anyone who has wondered about what can - or can't - be done about aquatic invasive species will gain helpful information from Treat Me Right! Rules, Regulations and Best Practices for Controlling Aquatic Invasive Species in Michigan's Inland Lakes (9 a.m. Thursday, Nov. 10). Eric Calabro, Environmental Quality Analyst with the Department of Environment, Great Lakes, and Energy will explain state regulations and options for physical and mechanical aquatic invasive species control. Find out when a permit is needed, what to consider when choosing a control method, and best management practices to ensure a safe and effective treatment.**

Photo by Scott Brown




## Upcoming Inland Lake Focused Events

**September 13, 3:00 PM: Local use of volunteer-collected data: Spotlight on Long Island Sound and Oklahoma. Presented by Nikki Spiller, Harbor Watch; and Cheryl Cheadle, Oklahoma Blue Thumb. Register.**

**September 14-16: Michigan Inland Lakes Convention: Protecting lakes today for tomorrow. Host: Michigan Inland Lakes Partnership. More details. $**

**September 22, 9:00 AM: Yooper Troopers: Lessons learned in controlling *Phragmites* in Michigan's Upper Peninsula. Presented by Nick Cassel, UP Resource Conservation and Development Council. Host Michigan Department of Environment, Great Lakes, and Energy. More details.**

**October 25-27: Upper Midwest Invasive Species Conference. Hosts: Invasive Plants Association of Wisconsin, Midwest Invasive Plant Network, and Minnesota Invasive Species Advisory Council. Learn about online attendance options. $**

**November 10, 9:00 AM: Treat me right! Rules, regulations, and best practices for controlling aquatic invasive species in Michigan's inland lakes. Presented by Eric Calabro, Michigan Department of Environment, Great Lakes, and Energy. Host: Michigan Department of Environment, Great Lakes, and Energy. More details.**

**November 14-17: North American Lake Management Society's 42nd International Symposium. Learn about online participation options. $**

**April 24-28, 2023: 13th National Monitoring Conference. (*hybrid conference with limited virtual format*) Host: National Water Quality Monitoring Council. More details. $**

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# 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**

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

## Why You Should Join Michigan Waterfront Alliance?

**Do you care for your lake, river, or stream? Do you care enough to contact your state senator or representative about issues that affect your waterbody? Do you keep track of the bills that are important to your lake, river, or stream? The good news is that Michigan Waterfront Alliance (MWA) is doing this for you. MWA hires a lobbying firm to keep track of issues and bills which may affect Michigan's waterfronts, and remain in constant contact with senators and representatives. These lobbyists have relationships with those serving in our state legislature, willing to present bills that MWA would support to help protect Michigan's inland waterways, and help to defeat bills that may be detrimental to our waterways. There is an old saying that "you can't fight city hall." This may be true if you do not know how, but with the help of MWA's attorneys, MWA has the experts that know how to deal with legal issues. There have been laws interpreted incorrectly when it comes to our lakes, rivers, and streams. MWA, with its attorneys, has argued these cases when we believe the law has been misinterpreted.**

**While the MWA Board of Directors is made up of volunteers, it is expensive to hire lobbyists and attorneys. The Michigan Waterfront Alliance membership is made up of individuals, lake associations, and corporations who care about Michigan's lakes, rivers, and streams. Would you like to be more involved? You can by becoming a member of Michigan Waterfront Alliance and by becoming an active partner in MWA. Membership in MWA is inexpensive:**

### We rely entirely on 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**

**$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!!!**

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MICHIGAN WATERFRONT ALLIANCE

## 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**

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**Visit the Michigan Waterfront Alliance Web Site by Clicking Here**