LAKE TIDES

A newsletter for people interested in Wisconsin's lakes

Volume 50 No. 2 | Summer/Fall 2025

Setting the Foundation for Future Lake Stewards

Youth Education Around Lakes

By Grace Hasse, Extension Lakes Student Assistant, University of Wisconsin-Stevens Point

The Power of Environmental Education

Ever since I was young, spending time outdoors has been a meaningful part of my life. I would often find myself examining every organism I came across, whether it was a beetle scurrying across my driveway, a grasshopper leaping to get to the nearest blade of grass, or a monarch butterfly laying eggs on milkweed. Once I knew where these creatures called home, I understood why these places need to be protected. Teaching our children about these places and feeding their curiosity about our natural wonders is essential in making sure our shared water resources are protected.

For the longest time, I dreamed of becoming a research entomologist – a natural path given my fascination with insects. But everything changed in eighth grade during our water quality unit. My science teacher introduced us to the topic through hands-on learning. We collected macroinvertebrate samples, conducted chemical tests, and analyzed data from Jarrett Creek in Menomonie, Wisconsin, which was conveniently a short walk from our middle school. Because he had been teaching for many years, we had access to decades of data, allowing us to observe long-term trends and environmental changes. What truly inspired me was the opportunity to take our learning beyond the classroom. A few students from each class were invited to present our findings at the Red Cedar Watershed Conference (which I attended this year as a professional with Extension Lakes). Sharing our data with the public and engaging with professionals made me realize that what we were doing was real science. That sparked a new dream. I decided I wanted to become a science teacher, not just any teacher but one who establishes real-world

(Continued on page 6)

Young and curious, Grace often found interesting plants and animals in nature.

Provided by Grace Hasse

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Let's Make Healthy Lakes & Rivers Together!

Healthy Lakes & Rivers

PHOTO CATEGORIES

Healthy Transformations: Before/After

Ex: disturbed shoreline/restored shoreline with native flowers, shrubs, and trees; eroded shoreline/fortified with long-rooted native plants; erosion from runoff or runoff headed straight for the water/diverted and captured before getting to the lake or river

Wildlife Enjoying Habitat

Ex: heron in a native planting, frogs in a rain garden, fish swimming among the branches of a submerged tree

People Making Healthy Lakes & Rivers Together

Ex: planting a rain garden, fishing near fish sticks, enjoying your natural shoreline

Enter Photo Contest to Celebrate 10 Years of Healthy Lakes & Rivers!

The Healthy Lakes & Rivers (HLR) Program is celebrating 10 years of improving habitat and water quality using five simple best practices. In honor of this milestone, we are hosting a photo contest and want to see how you are helping to keep lakes and rivers healthy! Please share this photo contest opportunity with local champions, shoreland neighbors, and anyone who is passionate about HLR.

Photos do not need to be from HLR grant-sponsored practices and can include DIY practices or existing natural shorelines.

Winners in each category (plus the most clever caption) will enjoy prizes including Healthy Lakes & Rivers swag, a free workshop at the Wisconsin Lakes and Rivers Convention, inclusion of photo(s) in a future Wisconsin Lakes and Rivers Partnership publication, and bragging rights!

DEADLINE: SEPTEMBER 30, 2025

healthylakeswi.com

Find the link to the photo entry form here!

Amy Kowalski

A few members of the Healthy Lakes & Rivers Team celebrated some new HLR projects in Sauk County this summer. Standing (L to R): Arthur Watkinson (Wisconsin DNR), Eric Olson (Extension Lakes), Mitchell McCarthy (Sauk County Land Resources and Environment Department), Kneeling (L to R): Pat Brown (Barron County Soil and Water Conservation Department), Scott VanEgeren (Wisconsin DNR), Lauren Haydon (Wisconsin DNR)

Mike Engleson, outgoing Executive Director of Wisconsin Lakes, graciously accepts a parting gift from the HLR Team at a recent Wisconsin Lakes and Rivers Partnership meeting in Sauk County.

Emily Heald

Feedback Opportunities for Wisconsin DNR Aquatic Plant Management Rules

The Wisconsin Department of Natural Resources (DNR) Aquatic Plant Management (APM) program is in the process of pursuing permanent rule changes to NR 107 and NR 109. This past June, the DNR hosted public input opportunities across the state regarding these proposed updates. If you didn't get a chance to attend, you still have an opportunity to provide input.

The proposed rules are intended to create a more effective and transparent regulatory program for the control of aquatic plants and other aquatic organisms, including aquatic invasive species. Consistent with the Environmental Protection Act and aquatic plant management industry's best management practices, these proposed changes include consistency in planning requirements for APM permitted activities, streamlining permits for private ponds, as well as a permit fee increase to improve customer service and support the program.

To read DNR's preliminary draft of the APM rule being developed, view a plain-language presentation which outlines the operational changes proposed in the draft rule, and sign up for GovDelivery updates to receive news about 'APM Rule Updates', go to https://dnr.wisconsin.gov/topic/lakes/plants/rules. The draft Economic Impact Analysis and Board Order will be released for formal comment this fall/winter.

WI State Statutes - Natural Resources Rules

NR 107 - procedures for the management of aquatic plants or other aquatic organisms with chemicals registered and labeled by the U.S. Environmental Protection Agency and Wisconsin Department of Agriculture, Trade, and Consumer Protection.

NR 109 - procedures and requirements for the protection and regulation of aquatic plants by manual removal, burning, use of mechanical means or plant inhibitors.

A balanced aquatic plant community is recognized to be a vital and necessary component of a healthy aquatic ecosystem.

Want to Keep Receiving Lake Tides? Contact Us!

As we continue to celebrate the 50th year of your free *Lake Tides* newsletter, we are still faced with budget shortfalls and reduced staff. To help with postage costs, we will be cleaning up our mailing list. If you enjoy *Lake Tides*, but haven't updated your contact information with us in the last 10 years, we need to hear from you! Please let us know if and how you would like to continue receiving the free *Lake Tides* newsletter in any of these ways:

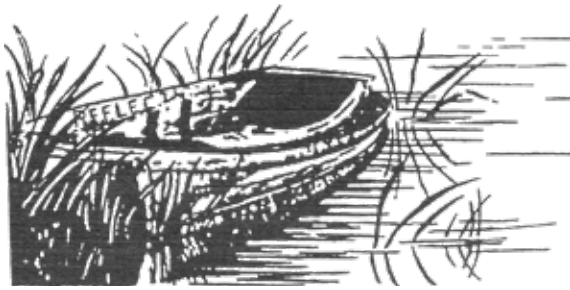
Enjoy *Lake Tides*, but haven't updated your contact information with us in a while? We need to hear from you!

> Fill out the super-quick form using this QR code or URL: https://forms.gle/3hhAtCBb2BN7dwqS6
> Email us at lakes@uwsp.edu with your **ID#, name**, and **address** as they appear on the back of this paper copy with needed changes
> Call us at 715-346-2116 with updates or questions

Although we have had to reduce the number of *Lake Tides* issues from four to three per year, our dedicated staff are now offering a new bi-monthly E-news service called *Lake Ripples* that offers more frequent and up-to-date online content. If you receive *Lake Tides* online, you're already on the list! If not, it's easy to subscribe – just go to uwsp.edu/uwexlakes and click on 'Newsletters' in the navigation bar. This newsletter page also has ways for you to contact us about article ideas, search past articles in our extensive database, and view past issues of *Lake Ripples*.

We remain committed to providing high-quality news about lake ecology, laws and regulations, and related water resource opportunities.

Happy 50th, *Lake Tides*! Notice the retro look and feel of this issue along with several commemorative drawings.



Reinvesting in Wisconsin

Funding Help for Lake Districts from the Board of Commissioners of Public Lands

By Eric Olson, Director and Lake Specialist, Extension Lakes

In 2025, over $70 million in BCPL earnings was distributed to school libraries all across Wisconsin!

Learn more at bcpl.wisconsin.gov

The Board of Commissioners of Public Lands is a small government agency that has existed ever since Wisconsin first became a state. With less than 10 full-time employees BCPL manages over $1.4 billion in Trust Fund assets and 77,000 acres of School Trust Lands. These financial assets derived from the sale of public lands shortly after the State of Wisconsin was formed. BCPL also holds tens of thousands of acres of public land, much of which is managed for sustainable forestry production. If you drive through Lake Tomahawk on Highway 47, you might have noticed the modest sign indicating the Board's northern office that houses their forestry and land management operations.

Helping Wisconsin Communities

Lake district leaders might be interested in the BCPL because they make loans to every form of local government in Wisconsin. Borrowers appreciate that the BCPL application process is extremely simple and there are no application fees, prepayment penalties, or any other fees.

BCPL interest rates are competitive with the bond market and other financial institutions. But what really makes the BCPL loan program special is that all of the interest paid on State Trust Fund loans is returned to Wisconsin communities in the form of aid to public school libraries. In 2025, over $70 million in BCPL earnings was distributed to school libraries all across Wisconsin!

BCPL also provides funding to the Universities of Wisconsin through its University, Normal School, and Agricultural College funds. A portion of these dollars also helps fund the statewide Environmental Education specialist in the Wisconsin Department of Public Instruction. This person promotes and supports environmental education in all of Wisconsin's K-12 schools. Funding from BCPL is also being used to support a graduate research project at UW-Stevens Point's College of Natural Resources, being led by Dr. Austin Holland. This research is kicking off in fall of 2025 and will examine the ways that lake organizations and land trusts are collaborating to protect and restore Wisconsin watersheds. Reach out to Austin to learn more about this work: auhollan@uwsp.edu.

Map Key

Tribal Lands circa 1800

Present-day Native Nations

*Brothertown is not state or federally recognized

https://wisconsinfirstnations.org/map/

The BCPL Funds could not have been established or sustained were it not for state and federally sponsored settler colonialism that dispossessed and displaced American Indian nations and communities across our state. Today, Wisconsin confronts the outcomes of unjust land treaties and the harm caused by the state's past complicity with policies of cultural and physical genocide as we seek reconciliation with Indigenous nations and communities of Wisconsin. UW-Madison's Center for Campus History has shared new "Indigenous Lands Dispossession In Wisconsin and Beyond" education modules on their website, including PowerPoint slide sets and teaching guides for anyone seeking to learn more about this history and its implications for the present and future. https://campushistory.wisc.edu/education/indigenous-lands-dispossession-in-wisconsin-and-beyond-education-modules/

Funds for Surface Water

DNR Accepting Pre-Applications For 2026 Surface Water Grants

From Wisconsin Department of Natural Resources press release

Is your local water group looking for financial help to protect and improve surface water? The Wisconsin Department of Natural Resources (DNR) will award more than $6 million in 2026 to eligible organizations through a competitive surface water grant process. A pre-application must be submitted by Sept. 15 to compete for the final grant deadline in November.

The DNR's Surface Water Grants Program leverages money from the water resources account of the state conservation fund to help local communities accelerate water protection and restoration efforts across Wisconsin. The funding can be used to support a wide range of locally driven projects that invest in watersheds and surface waters.

Activities eligible for funding include:

- Organizational capacity building
- Educational programs on surface water
- Data collection and ecological assessments
- Lake and river management planning
- Water quality improvement
- Habitat restoration projects
- Aquatic invasive species prevention and control
- Conservation easements and land acquisition

Eligible Organizations

Counties, municipalities, local units of government, lake and sanitary districts, natural resource agencies, tribal governing bodies, colleges and school districts, lake associations, nonprofit conservation organizations, river and surface water management organizations, and producer-led groups are all eligible. Individuals are not eligible for grants (with a few exceptions) but may partner with an eligible organization willing to sponsor a project. Search for "environmental grant specialist" on the DNR website to find your local specialist and confirm your organization's eligibility.

For More Information

Visit the DNR's Surface Water Grants Program webpage for more information on applying and managing a grant project. Make sure to read the recently-updated DNR Surface Water Grant Applicant Guide to navigate the grant program from application to closing:

- Section 1: high-level introductory information
- Section 2: summary of each grant type
- Appendix A: evaluation criteria used for ranking

Available Funding

The amount of funding available varies by project:

- Education projects - up to $5,000
- Planning grants - up to $10,000
- Larger management plan implementation grants - up to $200,000

Grants operate on a reimbursement basis and require matching funds from 25% to 33% of the total project cost.

How To Apply

Submit a pre-application by Sept. 15. This will connect you to local assistance and ensure you are eligible to submit a final application by Nov. 15.

Pre-application forms can be found under the "Applying" tab on the DNR's Surface Water Grants Program webpage. Right-click the link to Surface Water Grant Application Form 8700-284 and download or "save as" to create a copy of the form on your computer. Open the form from your local drive and fill out the sections labeled "pre-application."

Email the form by Sept. 15 to DNRSurfaceWaterGrants@wisconsin.gov. The department will be in touch with more information following your submission.

(Youth Education Around Lakes, continued from page 1)

Sara Windjue

Field-based learning is far more impactful, offering students the chance to engage with concepts in meaningful, memorable ways.

relevance into the classroom and helps students see the value in caring for our environment.

Fast forward and I am now a student at the University of Wisconsin-Stevens Point. I am a natural science major, working to obtain a broad field science teaching license. In my methods class last fall, I was required to obtain 50 hours in a classroom. I was fortunate enough to be placed with Brian Swenson at Stevens Point Area Senior High. He teaches a unique class for most of the afternoon known as the Wisconsin River Academy. It's an immersive, half-day, outdoor education program centered on environmental learning and community service. Although I was active in 4-H, frequently went camping, and spent countless hours outside, I had never encountered an opportunity to spend so much time outdoors in a formal education setting until I co-taught with Mr. Swenson.

It's not just about teaching facts; it's about sparking wonder.

Learning by the Water: My Experience with the Wisconsin River Academy

Wisconsin River Academy, more commonly known as WRA, includes curriculum from social studies, science, and physical education and is taught by three teachers who are experts in those subjects. The class is open to juniors and seniors who like the outdoors and enjoy being active. One of the teachers of WRA says, "Having a love for the outdoors is also a key element in WRA since we spend so much time outside for class." The class is held outdoors at least two days each week. During my time in Mr. Swenson's classroom last fall, I had the opportunity to canoe, hike, and practice orienteering, which is just a glimpse into the wide range of hands-on experiences his students enjoy throughout the year. This dynamic year-long curriculum is designed to immerse students in outdoor adventure, environmental awareness, and practical skill building.

I am a firm believer in hands-on learning. It allows students to shape their understanding by participating in the processes and activities they are learning about in class. Instead of just learning about orienteering, why not go out and learn how to chart courses? Field-based learning is far more impactful, offering students the chance to engage with concepts in meaningful, memorable ways. The Wisconsin River Academy provides unique opportunities where students gain real-world skills while developing leadership, problem-solving abilities, independence, and collaboration. Programs like this should be accessible to all students, giving everyone the chance to connect with nature and learn through experience.

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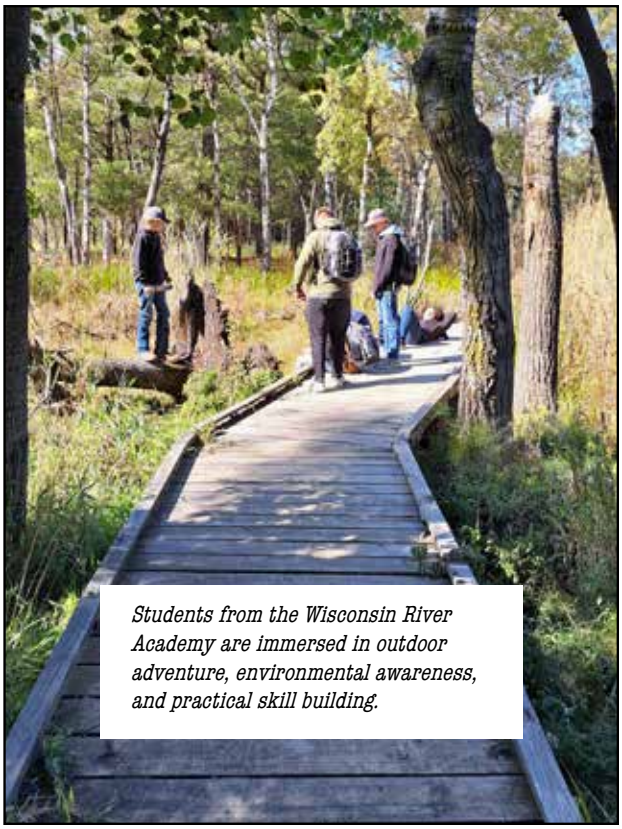
Sara Windjue



Students from the Wisconsin River Academy are immersed in outdoor adventure, environmental awareness, and practical skill building.

WAMSCO: A Community Effort

Another group that agrees with this sentiment is the Waterways Association of Menominee and Shawano Counties (WAMSCO), a citizen-led, watershed-focused nonprofit in northeast Wisconsin. Representing the lakes, rivers, and streams across both counties, WAMSCO brings together smaller lake and river groups under one powerful mission, "to protect and enhance our local water resources through community-driven conservation." Year after year, WAMSCO continues to be a driving force for environmental progress. From restoring shorelines and streambanks to planting native species at schools and parks, their work is both visible and lasting.

Shanda Hubertus, WAMSCO's president, says, "In the short 10 years since its formalization, WAMSCO has seen the mindset change in the youth and community members in this area."

They've tackled invasive species, monitored water quality, and built partnerships that span local lake associations, conservation departments, the Menominee Tribe, the Wisconsin DNR, and schools in northeast Wisconsin. Since 2017, WAMSCO has collaborated with a variety of partners to create a strong network of people who all want one thing: healthy water!

Perhaps the most inspiring part of WAMSCO's work is their focus on youth. They believe, as I do, that the future of our environment is in the hands of the next generation. We are dependent on their curiosity and care. Through a mix of online and in-person programs, WAMSCO helps students unearth this curiosity.

Hubertus adds, "WAMSCO has a very successful and busy conservation education program complete with its own mobile classroom! The buy-in and support we see from our local businesses and community is amazing!"

Their mobile classroom – an innovative, hands-on learning space – brings science to life. With interactive displays and engaging workshops, it transforms environmental education into something memorable and fun. It's not just about teaching facts; it's about sparking wonder, which is exactly what Shanda Hubertus, and the board of directors aim to do!

Provided by Cris Neff

LEEP Co-Founder Cris Neff helps students accurately collect critical habitat data, while practicing their canoeing skills.

LEEP: Place-Based Learning

Another standout initiative making waves in youth water education is the Lake Ecology Education Program (LEEP). Since 2009, LEEP has partnered with school districts across northwest Wisconsin to bring lake science to life for students. What sets this program apart is its blend of standards-aligned curriculum with hands-on learning experiences. Volunteer educators, alongside science and language arts teachers, guide students through exciting topics like water quality, fisheries management, and shoreline restoration. Each classroom lesson is tied to the ecosystems that students have in their own backyard.

The program includes ten thoughtfully designed modules focused on lake ecology and environmental stewardship. Each module includes an instructor guide, lesson plans, lab materials, and presentation slides. As a future educator, I think this combination is awesome! It's the kind of resource that empowers teachers to feel confident and well-prepared while delivering meaningful, hands-on science education.

Students don't just learn about lake ecology, they experience it. Not only do they get to deepen their understanding, but students are able to form a personal connection because it's their ecosystem in their community! Each year, LEEP includes two field trips paired with in-class modules that allow students to apply their knowledge in a real-world adventure setting. One

(Continued on page 13)

Programs like this should be accessible to all students, giving everyone the chance to connect with nature and learn through experience.

Expanding Access to Nature in WI

The Wisconsin Association for Environmental Education is a community of individuals and organizations with diverse backgrounds that provides tools and resources to address environmental, health, and social injustices through environmental education to expand access to nature for all people. Find out more at https://waee.org.

European Frog-bit

An Unlikely Partner Builder

By Amanda Smith, Northeast Aquatic Invasive Species Biologist, Wisconsin DNR

Paul Skawinski

Amanda Smith, AIS Biologist, with a boat load of frog-bit during a workday at Long Tail Point, Brown County.

"Frrooogg!" That's what I hear Matt Puz, Wetland Invasive Plant Specialist and my trusty coworker, exude at least twice – maybe four times on an extra lucky day – when we're out and about doing fieldwork. For the past three growing seasons, Matt and I have been donning our waders, dragging around kayaks, slathering on gallons of sunscreen, and packing endless supplies of protein bars and electrolyte water to get ourselves into some of the most elusive, unique, and flat-out beautiful coastal wetlands and tributaries in the Bay of Green Bay. We're out there looking for European frog-bit. Ever heard of it? (No, it's not a frog – and no, it doesn't bite – but it's always an exciting moment to come across a frog friend during fieldwork adventures!)

Amanda Smith

Matt Puz, Wetland Invasive Plant Specialist, marveling at the mats of EFB in Dyers Slough, Marinette County.

European frog-bit, commonly referred to as EFB, is an aquatic plant. It's petite (think mini lily pad), free-floating, and the latest newcomer to Wisconsin. While we love and appreciate plant diversity, EFB is listed as an NR40 Prohibited invasive species meaning it is only in a few places, can cause environmental and/or economic harm, and is illegal to possess or transport. EFB's ability to clone itself into large dense mats is why it is listed as an NR40 invasive species. These mats are truly impressive, but can shade out native plants, decrease open water habitat for friends like waterfowl, and make it especially difficult for recreation. It thrives in slow moving water, usually along shorelines or emergent vegetation, so places like wetlands are the ideal habitat in addition to tributaries and even drainage ditches. The Bay of Green Bay, the world's largest freshwater estuary, is prime habitat for EFB and has become Matt's and my outdoor office for four years.

In response to EFB being discovered in the Bay in 2021, a collaborative team of 15+ organizations, local governments, volunteers and DNR programs have implemented countless hours of early detection surveys, inventories, manual removal, broadcast and drone herbicide treatment, outreach, and pre/post-treatment monitoring. The fieldwork is not for the faint of heart with much of it consisting of wading miles upon miles in deep muck or paddling through thick vegetation, since even the nimblest of jon boats can have a tough time reaching these sites. Still, we have managed to host numerous workdays with many of the same colleagues and partners coming back year after year to help with manual removal. There is something therapeutic about plucking these free-floating plants out of the water and embracing the nuance of these habitats that one might never have had the chance to experience or may have just paddled by.

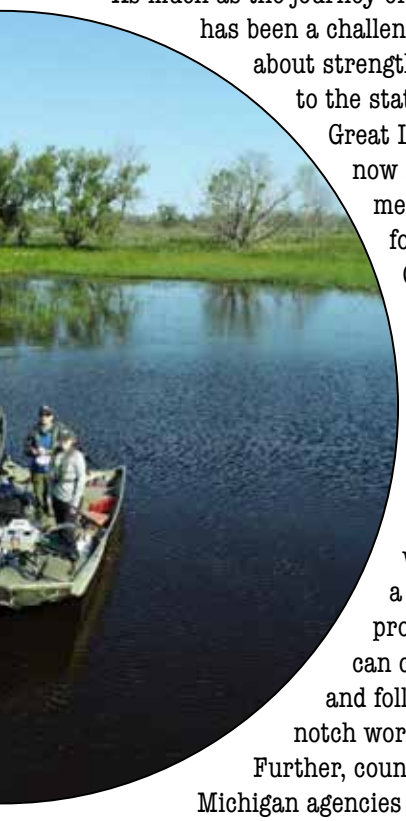
Samantha Loutzenhiser

DNR staff and c
Herbie the herbi
West shore of G

Seeeger Gray

See if you can spot some of the Extension Lakes team in this group from a workday on the Peshtigo River in Marinette County.

Challenges Lead to Strong Partnerships



ontractor pose with icide drone along the reen Bay, Oconto County.

As much as the journey of frog-bit in Wisconsin has been a challenge, it's also brought about strengthened partnerships to the state and throughout the Great Lakes region. Matt now serves as a board member on the recently formalized EFB Collaborative, hosted by the Great Lakes Commission (GLC). This Collaborative has deepened Wisconsin's connection with the GLC staff who we've learned are a stellar group of professionals that you can count on to show up and follow through with top notch work and leadership. Further, counterparts from Michigan agencies and organizations made the trip here to teach us about their EFB experiences and evaluate our situation, having worked with this species much longer than we have (Wisconsin hospitality in the form of fresh cheese curds were offered, of course).

More locally, partners who hadn't ever encountered an opportunity to work together were soon learning the names of each other's pets while helping each other get unstuck from muck or load bags upon bags of EFB into the truck to be composted. Partners from all five counties that make up the Bay were working together – there's no better way to strengthen partnerships than getting stuck in the muck.

Overall, the results of these partnerships have shown through, especially this past winter when the team had to facilitate some tough discussions surrounding prioritization and shifting the strategy from response to long-term management. Despite the inevitable establishment of EFB in the Bay, the team has developed a wealth of knowledge and strong foundation to set up successful response approaches when EFB reaches inland waters.

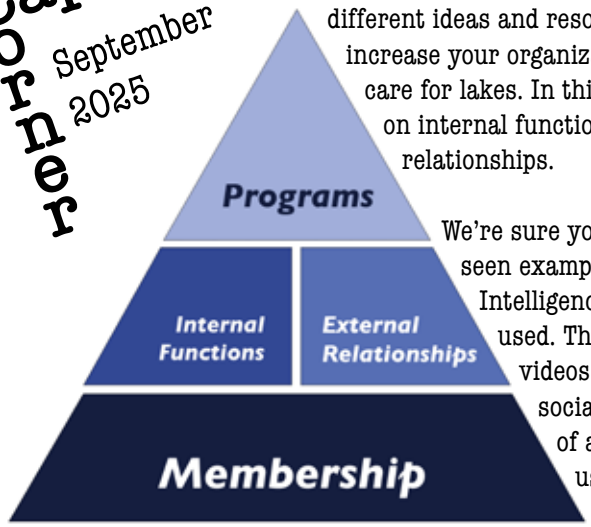
As much as the journey of frog-bit in Wisconsin has been a challenge, it's also brought about strengthened partnerships to the state and throughout the Great Lakes region.

Capacity Corner

Using Artificial Intelligence (AI) to Benefit Our Lakes

By Sara Windjue, Leadership and Capacity Development Specialist, Extension Lakes

Capacity Corner September 2025



In each issue of *Lake Tides*, we introduce different ideas and resources to help you increase your organization's capacity to care for lakes. In this issue, we're focusing on internal functions and external relationships.

We're sure you've heard about and seen examples of how Artificial Intelligence, or AI, is being used. There are many creative videos being shared on social media and students of all grade levels are using it to "help" with their homework.

Helena Lopez - Pexels

While AI can be used negatively, it also offers many positive options. We'd like to shine some light on how AI can be used to benefit our lake organizations, and ultimately, our lakes.

What is AI?

AI is the ability of computers to perform complex tasks that historically required human intelligence, such as reasoning, learning, or solving problems. AI encompasses a wide range of technologies, including machine learning, deep learning, and natural language processing. One of these technologies is ChatGPT – an artificial intelligence chatbot from OpenAI that enables users to "converse" with it in a way that's meant to mimic natural conversation. As a user, you can ask questions or make requests through prompts, and ChatGPT will respond. The intuitive, easy-to-use, and free tool has already gained popularity as an alternative to traditional search engines and a tool for AI writing, among other things.

How can this help lakes?

AI is being used effectively to reduce the time and effort required to do somewhat menial or tedious tasks. Few people get involved in lake organizations to spend hours at their computer typing up minutes or reading long, complex reports. Here are some suggested ways we can use AI to make our lake work more efficient and effective:

Meeting Minutes

It is still a best practice to have a real person charged with recording minutes during meetings; however, if you record the meeting via video or audio and feed the recorded file into AI using a tool such as Google's NotebookLM, it will summarize the main points, organize the information, and remove all the extraneous pieces. When meeting

Data Centers and Natural Resources

Most AI depends on large data centers that are basically enormous supercomputers carrying out complex algorithms. They require energy to operate and often use water evaporation to cool the processors so that they do not overheat. New data centers, like those currently being built in Wisconsin, incorporate closed-loop water cooling systems that can dramatically reduce water consumption. Wind turbines and solar panels are now the least expensive way to produce electricity, and these power sources are rapidly replacing plants that burn coal and gas, which also consume large amounts of water.

Free AI Tools

The tools we mention in this article are free to use at this time:

- ChatGPT from OpenAI is used for natural language processing tasks like answering questions, generating creative text formats, and assisting with writing/translating needs.
- NotebookLM from Google combines note-taking with large language models to help users learn, research, and write more effectively.

online with Zoom, you have an option to turn on an AI tool that automatically summarizes the meeting for you. If you do this a couple of times and compare it to the secretary's notes, you may find that the summary from AI is just as accurate! It may even be put together in a better, more organized way. And, it only takes seconds to do what can take a person much more time. Now you can spend that time planting more native trees, shrubs, and flowers around the lake!

Lake Management Plans

Does your lake have a management plan? How long is the document? How many people around the lake do you think have read it? Instead of asking residents to read this large document, you could feed it into NotebookLM and turn the text into a podcast! Google's tool has a way to summarize complicated material into relatively concise, radio-style conversations. The discussion will only draw from the content you provide – you can upload just about any file type, including youtube videos. The AI voice actors are surprisingly realistic, even mimicking human vocal tics. A podcast of your plan allows people to learn more about your lake while walking, driving, cooking, or planting natives along the shoreline.

Refining Mission and Vision Statements

Let's revisit our Capacity Corner article from the summer of 2021 about mission and vision statements. A few tips to creating an effective mission statement include:

- Keep it short and concise but don't make it too limiting
- Think long term (i.e. future generations)
- Get feedback from others
- Don't be afraid to change it in the future

Does your organization have a mission statement? Does it tell your supporters/community why you exist as an organization? Could it be better? Get a boost from AI to develop or revise your mission statement.

One lake organization in Wisconsin decided it was time to revise their mission statement so they chose four key words representing their group and used ChatGPT to create a mission statement as a starting point. Now, they can tweak it as needed.

Few people get involved in lake organizations to spend hours at their computer typing up minutes or reading long, complex reports.

Here are other ways you might use AI to benefit your lake organization:

- Develop policies, position descriptions, and other documents
- Analyze documents from other organizations to pull out key statements
- Help write emails and newsletter content

Have other ideas? Email lakes@uwsp.edu and let us know how you use AI so we can share your example with other lake organizations.

Example of Text to Podcast Transformation

Extension Lakes used Google's NotebookLM to generate a podcast that summarizes the DNR's Surface Water Grant Guidance in combination with two recorded presentations from DNR staff giving advice for writing good grant proposals. We've posted a snippet of the AI conversation on our YouTube channel, along with a link to the audio file. Just go to https://www.youtube.com/uwexlakes and search for "Surface Water Grants Advice: An AI Audio Overview".

The Giant Water Bug

Hunter of the Shadows

By Paul Skawinski, Citizen Lake Monitoring Network Statewide Educator, Extension Lakes

Paul Skawinski

In the shallows of most Wisconsin lakes, streams, and wetlands lives an impressively large and confident bug. One of the "true bugs" belonging to the taxonomic order called Hemiptera, the giant water bug lies in wait just under the water's surface, pointed downward. It can lie motionless for hours, quietly breathing through a slender tube on its backside that reaches above the surface to capture atmospheric oxygen. At the other end, Schwarzenegger-grade forelegs are poised to grab and squeeze any reasonably small creature that stumbles by. This is typically another aquatic insect, but could be a small fish, a tadpole, or even an adult frog! Once their prey has been nabbed by those bulging forelegs, the giant water bug pokes its sucking mouthparts into it and escape becomes very unlikely.

The giant water bug will defend itself if it gets squeezed or stepped on, which has earned it another common name – the toe biter.

Pexels - vellmlr

To be fair to the insect world, there is more than one "giant water bug". This common name is given to a whole family of related insects, with the "common giant water bugs" in the genus *Belostoma* and the "American giant water bug" (*Lethocerus americanus*) being the most likely to be observed in Wisconsin. The American giant water bug can grow to more than four inches long, making it a formidable predator in the aquatic world.

Does the giant water bug hunt dogs, cats, and children? No. But it will defend itself if it gets squeezed or stepped on, which has earned it another common name – the toe biter. It has been known to give human feet a quick poke to say, "Hey! Watch where you're walkin'!" This feels somewhat like a bee sting, and the frightened water bug will most likely scramble away.

The males of the common giant water bug (*Belostoma*) carry their broods of eggs on their backs. This is a great way of protecting their eggs from predators, who will have to tango with Dad if they want to mess with his eggs. The larger American giant water bugs have it a little easier – their eggs are laid on aquatic vegetation near the surface, and Dad simply hangs close by to defend the eggs as needed.

As air-breathers, they can also tuck a bubble of air under their wings and dive underwater for extended periods of time. The oxygen from the bubble slowly diffuses into their body and allows them to "breathe" using their own tiny self-contained underwater breathing apparatus!

Giant water bugs can also fly, and may take short flights to water gardens or swimming pools at night, attracted by moonlight or residential lighting. This brings up yet another common name for these bugs – the electric light bugs. If you want to see a giant water bug in the wild, take a stroll into shallow water with abundant floating or emergent vegetation. Bring a small net, scoop through the vegetation, and wear boots on your feet!

(Youth Education Around Lakes, continued from page 7)

Lori Matthew

The WAMSCO mobile classroom provided engaging hands-on education at Youth Conservation Day in Shawano County this past spring.

memorable example took place on September 26, 2023, when 28 middle school students explored lake ecology on Carol LeBreck's property – Carol is a member of the Friends of the Eau Claire Lakes Area and a former teacher. During the field trip, students gained confidence in their canoe skills by paddling across the water, venturing into wetlands to study the unique ecosystem, and investigating the underwater world of plankton and aquatic plants. Afterward, one student shared, "LEEP made me realize the importance of the lakes." That kind of reflection is exactly what programs like LEEP are all about!

By integrating science with local environmental issues, LEEP helps students see the direct impact of human activity on ecosystems and empowers them to think critically about solutions.

Christine Neff, co-founder and volunteer manager of LEEP couldn't have said it better, "LEEP is near and dear to the hearts of many, not the least mine. It has been, and we hope it will continue to be, a real force for good in the future of our natural resources!"

Why it Matters: Building the Next Generation

Programs like LEEP and WRA do more than teach science. They cultivate curiosity, responsibility, and a lifelong connection to the natural world. By engaging students in hands-on, locally relevant environmental education, these programs help shape informed individuals who are prepared to take action in their communities.

The ripple effects are obvious. Students learn to identify organisms, conduct environmental tests, and understand how nutrient cycling works. Beyond science, other life skills are cultivated. Students build social skills and teamwork by collaborating with peers and more importantly, they gain confidence in their ability to make a difference. These experiences often spark a deeper interest in science and conservation, planting seeds for future careers and lifelong stewardship. I can attest to that!

Community involvement is also a huge component. Whether through partnerships with local conservation departments, tribal organizations, or nonprofit groups like WAMSCO, students see firsthand how collective action can lead to meaningful change. They're not just learning about ecosystems; they're becoming part of a community that protects and cares for these natural wonders.

Positive experiences outdoors influence how likely students are to continue engaging with the outdoor environment in the future.

Looking Ahead

As we look to the future, the importance of environmental education has never been clearer. Programs like WRA and LEEP, as well as the work of organizations like WAMSCO, demonstrate the transformative power of connecting students with nature. Positive experiences outdoors influence how likely students are to continue engaging with the outdoor environment in the future. Through these interactions we can give our youth the tools they need to become environmental stewards that care to make a difference.

Collaboration is key. Educators, community members, conservation professionals, and local organizations all have a role to play in building a culture of stewardship. By working together, we can expand access to outdoor learning opportunities and ensure that every student has the chance to explore, question, and grow through environmental education.

K-12 Aquatic Education Collaborative at UW-Stevens Point

The UWSP K-12 Aquatic Education Collaborative is a coalition of organizations that work together to increase awareness and improve water quality education in Wisconsin. Learn more at https://www.uwsp.edu/wcee/wcee/aquatic-collaborative/.

Wisconsin Lakes

Welcoming a New Executive Director

Provided by Ben Wojan

Wisconsin Lakes is proud to announce the hiring of Ben Wojahn (pronounced Woah-yahn) as its next Executive Director!

Ben will take over fully from current Executive Director Michael Engleson starting in October, working a part-time training schedule through the rest of the summer.

I love everything about Wisconsin. I am honored to have the opportunity to develop and strengthen partnerships, to serve the Board, the people, the land, and especially the lakes of Wisconsin.

Ben comes to Wisconsin Lakes with a deep history largely rooted in county land and water conservation departments. He has served primarily as the County Conservationist for Vernon County, and also has experience in Taylor, Ashland, and Bayfield Counties.

He has been active on the board and integral in the successful redevelopment of Wisconsin Land+Water since 2010. Wisconsin Land+Water is a statewide nonprofit organization that serves county conservation departments similar to how Wisconsin Lakes serves Wisconsin lake organizations. Ben also served on the Legislative Committee for Wisconsin Land+Water, and has experience testifying in support of conservation initiatives.

"We were excited to see his experience working with farmers and conservation projects, his strong partnerships and experience throughout the state, and most importantly, his passion for the lakes of Wisconsin," stated Susan Trier, Board Chair of Wisconsin Lakes.

Rising out of his experience early in his career as an Americorps VISTA Alumni serving the Bad River Reservation on Lake Superior, he became an avid wild rice harvester, a "hobby" (he may describe it as an obsession) he continues to take part in each fall.

Wojahn also has developed knowledge and experience with nutrient management planning, managed grazing, habitat restoration, GIS mapping, and watershed modeling.

Ben resides on his farm between Viroqua and La Crosse Wisconsin where he raises vegetables, fruits, herbs, and flowers. He has three children, with his oldest daughter attending UW-Eau Claire and his younger two in high school.

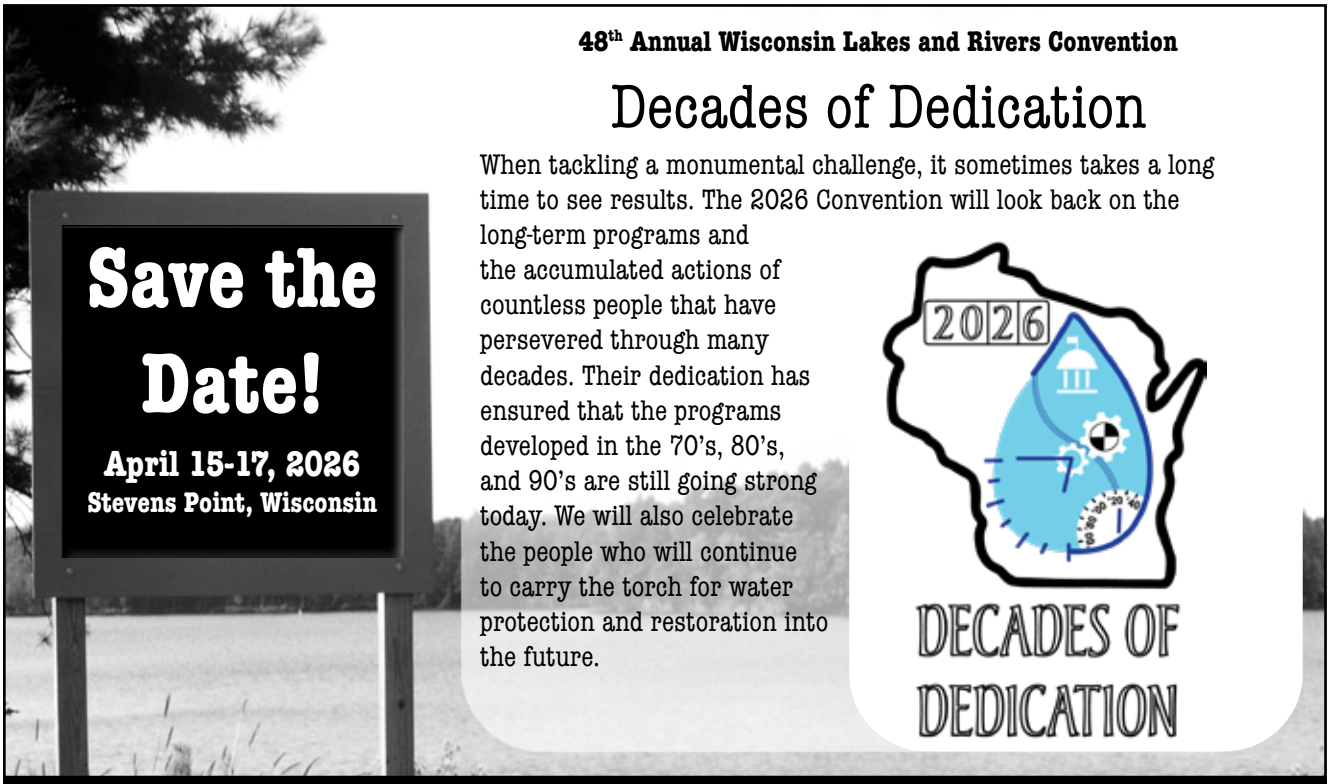
"I love everything about Wisconsin. I am honored to have the opportunity to develop and strengthen partnerships, to serve the Board, the people, the land, and especially the lakes of Wisconsin," Ben enthusiastically expressed.

With his passion for conservation, clean water, and deep connections to the state, Wisconsin Lakes Board of Directors is extremely excited to usher in this new era with Ben at the helm of the organization. Welcome to Wisconsin Lakes, Ben!

Connect with Ben at
bwojahn@wisconsinlakes.org

Provided by Ben Wojahn

WISCONSIN LAKES



48th Annual Wisconsin Lakes and Rivers Convention

Decades of Dedication

When tackling a monumental challenge, it sometimes takes a long time to see results. The 2026 Convention will look back on the long-term programs and the accumulated actions of countless people that have persevered through many decades. Their dedication has ensured that the programs developed in the 70's, 80's, and 90's are still going strong today. We will also celebrate the people who will continue to carry the torch for water protection and restoration into the future.

2026 DECADES OF DEDICATION

wisconsinwaterweek.org

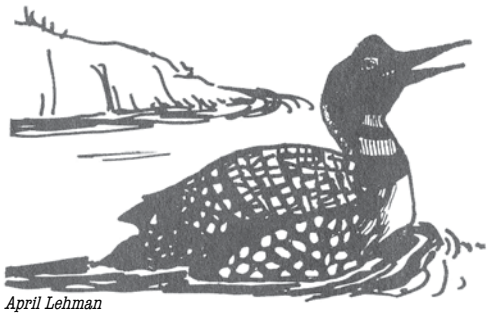
- **Reserve your lodging**
  Rooms at the Holiday Inn Convention Center fill quickly.
  Make your hotel reservation now!

- **Submit a presentation proposal**
  Share your project, research, success story, or expertise.
  Workshop proposal deadline: October 1, 2025
  Concurrent Sessions proposal deadline: October 1, 2025
  Lightning Talk proposal deadline: March 1, 2026 (or until filled)
  Poster proposal deadline: April 1, 2026 (or until filled)

- **Nominate someone for a Lake Stewardship Award**
  Do you know an outstanding person or group who dedicates time and talent to our state's water resources? Nominate them today!
  Deadline: December 1, 2025

"As a first time attendee I was blown away with the quality and organization of this convention. The vendors were top notch and the networking was endless. I learned new skills, gained knowledge and made new friends! Thank you!"
- 2025 Convention attendee

C A L E N D A R


April Lehman

Check out our Online Calendar at uwsp.edu/uwexlakes

Stay up-to-date with water-related events across the state, region, and beyond with our online calendar. Don't see your event listed? Let us know by clicking "Add an Event" at the top of the page and fill out the short form!

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Like reading *Lake Tides*?

April Lehman

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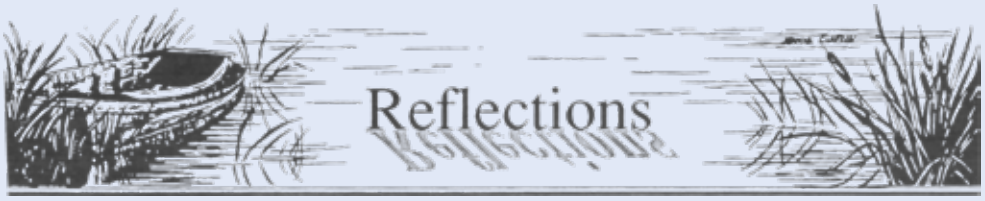

"Lakes are an indispensable thread woven into the tapestry of land and water that makes Wisconsin an exceptional place to live. Our history of oblivious abuse and overuse of Wisconsin's lakes is a flaw in that tapestry. Our growing awareness, our capacity to weave partnerships, and our collective wisdom will help remove past imperfections."

— Robert Korth

Carol Watkins