



***Michigan Chapter
North American Lake Management Society
P. O. Box 4812
East Lansing, MI 48826
Visit our website at www.mcnalms.org***

Promoting understanding and comprehensive management of Michigan's inland lake ecosystems.

Presidential Ponderings

by Michael Solomon, McNALMS President

It is an honor to serve once again as President of McNALMS for 2021. McNALMS, like all organizations, and the rest of us in government and business, has certainly had to adapt due to the world-wide Covid-19 pandemic. McNALMS continued to meet through ZOOM sessions in 2020, and February of 2021. I think we are all getting tired of ZOOM but it is one of the few ways we can continue to function safely.

We look forward to continuing to work on our Priority Projects for 2019 to 2021. The three top priorities are:

- Increase the capacity of the organization
- Drive and aid lake research in Michigan
- Continue to provide outreach for technical audiences

We made significant gains on these subjects during 2020.

Additionally, we continue to support our **Student Grant Program**, and had several exceptional proposals. A total of seven proposals were submitted for consideration, and two were selected for funding. These are **Lake Responses to Elevated Levels of Chloride and Phosphorous**, and **Impacts of Climate Change on Gene Expression in Stocked Walleye Populations**.

Our sister organization, **Michigan Lakes and Streams Association (MLSA)**, is sponsoring a virtual **Conference on Friday, April 30, 2021**. They have several interesting sessions including the collapse of the Edenville Dam, EGLE report of aquatic invasive species, volunteer monitoring, among others. For more information see the promotion for the MLSA virtual Conference that appears in a later section of this newsletter.

We will have at least one additional Board meeting by ZOOM scheduled for April 20 at 10:00 AM, and then hopefully, we can meet in person. We would also like to sponsor another **Lunch and Learn** by autumn, but we will have to see if that is safe to do.



The **Midwest Glacial Lakes Partnership (MGLP)** brings together resource agencies, non-profit organizations, and other stakeholders to protect, rehabilitate, and enhance sustainable fish habitats in naturally formed lakes of the Midwest. We foster collaborations on fish habitat science, education and outreach, and conservation. For more information, stop by our [website](#), follow us on [Twitter](#), or reach out to our coordinator, [Joe Nohner](#). If you aren't already on our newsletter email list, you can [SIGN UP HERE](#).



Michigan Chapter, North American Lake Management Society is a proud affiliate of the North American Lake Management Society, an organization that is dedicated to forging partnerships among citizens, scientists, and professionals in order to foster the management and protection of lakes and reservoirs...for today and tomorrow. To learn more about each organization, visit their outstanding websites located at :

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Michigan Department of Environment, Great Lakes, and Energy (EGLE) Restricts the Use of Copper-Based Nuisance Algae Control Products in Shallow Water Areas of Inland Lakes During the May—June Fish Spawning Period

Article and photo by Scott Brown, McNALMS Director-at-Large

A recent decision by the [Michigan Department of Environment, Great Lakes, and Energy \(EGLE\)](#) restricts the use of copper-based nuisance algae control products (copper sulfate and chelated copper) in shallow areas of inland lakes (potentially) hosting fish spawning areas within the May-June time period. As explicitly indicated in a recently released document entitled/subtitled **Standard Permit for Pesticide Application To Surface Waters of the State of Michigan - Permits required by Part 31, Water Resources Protection, and Part 33, Aquatic Nuisance Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)**, “except for waterbodies with a total surface area of less than 10 acres, and canals and marinas on the Great Lakes, and connecting waters, copper treatments for algae, macroalgae, and submerged macrophytes are **restricted to chelated copper products during May and June**. No more than a cumulative total of **25 percent of the potential spawning area** (the area of the waterbody within the 0-10 feet depth contours) may be treated with **copper products** during May and June.”

To download the Michigan Department of Environment, Great Lakes, and Energy (EGLE) originated document entitled **Standard Permit for Pesticide Application To Surface Waters of the State of Michigan** that is referenced in this article, [click here](#)

The EGLE ruling restricting the use of copper-based products, and in particular copper sulfate, stems primarily from a growing concern that relatively high concentrations of copper may be toxic to the juveniles of several fish species. Comprised of copper and sulfur, and available in both granular and liquid form, the overall toxicity of copper sulfate is dependent upon the amount of copper present in the compound. Due to its fast acting ability to effectively control most forms of nuisance algae, including exotic invasive starry stonewort, copper sulfate has been widely deployed by lake and pond managers for several decades, and has been registered as a pesticide for use in agriculture since 1956.



Exotic invasive Starry stonewort

The new EGLE rule also limits the use of **all copper-based products**, including chelated copper, in shallow waters on inland lakes during the May-June time frame “to no more than a cumulative total of 25 percent of potential spawning areas” as represented by areas of the lake’s basin that are within the 0 -10 feet depth contour. It is important to note that the new EGLE rule restricting the use of copper-based products in shallow areas of inland lakes during the May-June fish spawning period provides exceptions, for example, that allows lake managers to use chelated copper to treat starry stonewort in areas “that may exceed percent restriction of a cumulative total of 25 percent of the potential spawning area.” In the interest of protecting public health, the new EGLE rule also gives managers

within the agency the flexibility to approve alternative treatment plans that may be submitted by lake managers in response to the need to expeditiously manage extensive harmful algal blooms.

MICHIGAN LAKE AND STREAM
LEADERS INSTITUTE PRESENTS

EFFECTIVE COMMUNICATION FOR LAKE AND STREAM ORGANIZATIONS

FREE WORKSHOP
JUNE 8, 1:00-4:00PM
[HTTPS://EVENTS.ANR.MSU.EDU/2021LSLI](https://events.anr.msu.edu/2021LSLI)



MICHIGAN STATE UNIVERSITY | Extension



Jenn Wright

Executive Director
Grass River Natural Area



Dr. Michael Everett

Professor of Practice
Michigan State University

Effective Communication for Lake and Stream Organizations

Tuesday, June 8, 2021 1:00 - 4:00 PM EST Online (Zoom)

In this free, interactive online workshop, we will explore effective communication techniques for advancing lake and stream stewardship and conservation. We'll look at both external communication (how we talk about water resources and our work with outside audiences) and internal communication (how organizations share and discuss goals and values internally). You'll leave with ideas, tools, and inspiration on how to improve communication for your organization. We will be joined by two experts in organizational success for natural resource organizations: **Dr. Michael Everett**, faculty member in the **Department of Community Sustainability at Michigan State University**, and **Jenn Wright**, Executive Director of the **Grass River Natural Area** in Bellaire, Michigan.

This workshop is presented by the [Michigan Lake and Stream Leaders Institute](#), a leadership development program benefiting Michigan's lakes, streams, and watersheds. Michigan Lake and Stream Leaders Institute is a cooperative effort of **Michigan State University Extension**, the **MSU Department of Fisheries and Wildlife**, the **Michigan Lakes and Streams Association**, and the **Michigan Department of Environment, Great Lakes, and Energy**.

Register here: <https://events.anr.msu.edu/2021LSLI/>

Two Student Grant Proposals Selected for Funding

by Lois Wolfson, McNALMS President-Elect

The **Michigan Chapter, North American Lake Management Society (McNALMS)**, and the **Michigan Lakes and Streams Association (MLSA)** are pleased to announce the recipients of the **2021 Lake Research Student Grant Program**. They are Ellen Foley, a master's degree student at the Annis Water Resources Institute at Grand Valley State University, and Scott Jackson, a doctoral candidate in the School for Environment and Sustainability at the University of Michigan.



Ellen's research titled **Lake Responses to Elevated Levels of Chloride and Phosphorus** will focus on the impacts of excess chloride and phosphorus on an urban lake located in Grand Rapids, Michigan. Her research will focus on the questions of whether elevated chloride reduces lake turnover, and increases anoxia and accumulation of reduced chemical substances in the lake bottom. She will also investigate internal phosphorus loading, and subsequent phosphorus release from the sediments under anoxic conditions, and the direct and indirect effects from high chloride concentrations. She hopes that her research findings will offer insight into lakes experiencing both high chloride and phosphorus concentrations due to human inputs, and help strengthen citizen involvement in lake management decisions due to these inputs.

Scott's research focuses on the **Impacts of Climate Change on Gene Expression in Stocked Walleye Populations**. Walleye distribution is limited by temperature, and studies have noted that these fish populations are declining in inland lakes, possibly due to climate change. Scott's research will investigate how gene expression varies among walleye populations, and link their differences in traits to walleye growth and survivorship. He will also measure acclimated responses to increases in temperature to determine impacts from both short and long-term exposure, the latter being associated with climate change. He hopes his research will benefit walleye stocking and management in inland lakes in Michigan. His approach will also provide methods for assessing other fish species' response to climate change.

McNALMS and MLSA congratulate this year's recipients and look forward to their research results over the next year.



McNALMS Corporate Member Spotlight



Our Philosophy...

A healthy and sustainable lake begins with a blend of sound science, and a well-informed community. While we recognize that **sound scientific methods are crucial for accurately understanding natural ecosystems**, it is also **critical to include the element of community engagement and education**. The true meaning of sustainability is for a system to continue to provide services to us while assuring that future generations will also be able to experience those benefits. Sustainability is at the very core of conservation and we aim to make all of our lakes sustainable.

To learn more about **Restorative Lake Sciences**, visit their website at <https://www.restorativelakesciences.com/>

MWA Mission Statement "This corporation is formed to protect, preserve and promote the wise use of inland waters – lakes, streams, rivers, creeks and the waters and bottomlands of the State of Michigan.

[Michigan Waterfront Alliance](#)

[Membership Application](#)

Please help us in our efforts to be a legislative "Watchdog" to protect Michigan's Inland Lakes & Streams.

Annual dues:

Individual membership \$50 Lake Associations \$100
Corporations \$200

Please print:

Name _____

Date: _____

Street _____

City _____ State _____

Zip _____ County: _____

Phone: _____

Email: _____

Make checks payable to: Michigan Waterfront Alliance

Send dues and contributions to: Michigan Waterfront Alliance

P. O. Box 369, Fenton, MI 48430

McNALMS Corporate Members 2021



Aquaweed.com



clarke.com/aquatic-services



Complete Water Management

LakeProInc.com



Helpmylake.com



Phycotech.com



Plmcorp.net



Progressiveae.com/water-resources



Restorativelakesciences.com

WetlandsNursery

aquaticplantlady@gmail.com

McNALMS Board Members 2021

President: Mike Solomon

(Wexford County Drain Commissioner)

President Elect: Lois Wolfson

(MSU Extension / Institute of Water Research)

Secretary: Roger Carey

(Retired Riparian)

Treasurer: Jason Broekstra

(PLM Lake & Land Management Corp.)

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(Retired Riparian)

Past President: Erick Elgin

(Michigan State University Extension)

Directors-at-Large

Ralph Bednarz (EGLE Retired)

Melissa DeSimone (MLSA)

Joe Nohner (MDNR)

Scott Brown (Riparian)

Michigan Inland Lake Partnership's Virtual Lake Learning Event Listing

Many organizations offer on-line learning opportunities throughout the year. For your convenience in helping to identify and track on-line events that may interest you, the **Michigan Inland Lake Partnership** has created a continually updated virtual event list that serves to highlight many current inland lake and water resources related on-line events. These organizations welcome participation by lake and water resource professionals, and the general public.

[Check it out today!](#)



MLSA60 Virtual Conference Friday, April 30, 2021

Join us for compelling sessions, networking opportunities,
and a celebration of 60 years!

Confirmed Sessions:

- ◆ Political Report – Michigan State Representative Gary Howell
- ◆ Edenville Dam Failure: No loss of life, many lessons – Jenifier Boyer
- ◆ Riparian Rights Update – Cliff Bloom
- ◆ EGLE report on AIS – Teresa Seidel
- ◆ Insurance for Associations – Mark Teicher
- ◆ Volunteer Monitoring on Michigan Inland Lakes and Streams – Ralph Bednarz, *et al*
- ◆ Michigan Environmental Council – Conan Smith
- ◆ Special Assessment District Case Study – Evan Pratt, *et al*
- ◆ Rivers and Watersheds, the bigger picture – Matt Meersman
- ◆ New Lake Management Process – Jason Broekstra

To register for the Michigan Lakes and Streams Association Virtual Conference
point your internet browser to <https://mymlsa.org/register/403-01-conference-registration/>