



Michigan Chapter North American Lake Management Society

Fall 2014

P.O. Box 4813
East Lansing MI 48823
www.mcnalms.org

Presidential Ponderings....

By: Mike Solomon, McNALMS President, 2014

Here we are at the end of a busy field season and we need to take inventory and ask ourselves: Are the lakes we manage, play on or own property on in better shape than they were last year or in previous seasons? Do we have new invasive species? Are the invasive species that we have managed reduced from previous areal coverage or density? Are native species in good balance with other native species? Where are we going in future years as an association, a lake improvement board or a township authority? Is our consultant doing the best job possible to balance the lake's needs within the budget available?

I always believe it is good to take inventory of where we are and where we are going or need to go. It is good for lake boards and associations to ask themselves what are their goals and objectives. Or has your organization taken the time to establish their goals and objectives? If you have, have you then prioritized those objectives and developed measureable standards that determine if you are moving to accomplish these goals and objectives? Sometimes it is easier to blunder along unsure of what an organization wants to accomplish than to take the time and spell out the goals and objectives.

McNalms has established goals and objectives:

Goal: Promote local government involvement in lake management.

Objective: Provide training opportunities to communities throughout the state.

Project: Plan and produce a conference to enhance the effectiveness of Lake Improvement Boards.

Goal: Combat invasive exotic aquatic species.

Objective: Help in getting funding earmarked for a rapid response program for invasive species.

Project: Develop a workshop with MDEQ Office of Great Lakes on addressing Hydrilla problems.

Goal: Reduce impacts of nonpoint sources/loadings to lakes.

Objective: Encourage the upgrade of riparian septic systems.

Project: Provide information leading to a policy for upgrading current septic systems and/or installing alternative on-site systems.



We as an organization participated fully in the Michigan Inland Lakes Convention meeting the goals of McNalms. Within this conference there was discussion of nonpoint loadings, septic systems and invasive exotic species. So we probably did a pretty good job of meeting our membership's needs. There are a lot of other needs that our lakes have. Get involved and help us meet them.

McNalms Lunch and Learn Seminar Series

December 5, 2014 - Brody Hall, Michigan State University Campus

Save the Date!

Registration is now open to attend the McNALMS Fall Lunch and Learn program. Scheduled for Friday, December 5, 2014 in East Lansing, MI, the luncheon will feature Dr. Jeffrey M. Reutter from the Ohio Sea Grant College Program. He will share his research and thoughts on Harmful Algal Blooms and the problems that have been occurring in Lake Erie and other water bodies.

An agenda and link to register is available at www.mcnalms.org. The cost is \$20 (\$15 for full-time students) and includes a buffet luncheon and dessert. You may also register or obtain further information by contacting Lois Wolfson at (517) 353-9222; email:wolfson1@msu.edu. The meeting will be held in Room 136 at Brody Hall, Michigan State University campus.



Dr. Jeffrey M. Reutter is the Director of the Ohio Sea Grant College Program, and the Director of Stone Laboratory, Center for Lake Erie Area Research, and Great Lakes Aquatic Ecosystem Research Consortium, The Ohio State University. His research interests focus on development and synthesis of research priorities and facilitation of multi-investigator, interdisciplinary projects to address priorities; synthesis, interpretation, and presentation of results for scientists, managers, decision makers, and the public. He has been a major spokesperson for the problems associated with Harmful Algal Blooms, one of the major issues affecting Lake Erie and the recent shutting down of the drinking water supplies in Toledo, OH.

Thousands of residents of the city of Toledo, along with parts of southeast Michigan, recently experienced a loss of water supply. The taps are back on now, but could it happen again?

The recent contamination of drinking water supplies drawn from western Lake Erie was caused by what aquatic scientists refer to as a [Harmful Algal Bloom \(HAB\)](#). Most algal blooms that occur in aquatic systems are green planktonic algae – true plants that are fed upon by fish and other aquatic organisms. Though sometimes nuisance, green algae blooms are harmless to human health. But the Lake Erie HAB that shut down [drinking water supplies](#) in Toledo and parts of southeast Michigan were blue-green algae.

http://msue.anr.msu.edu/news/toxins_in_toledos_drinking_water_supply

The Toledo water supply shut down. Why “boil water” advisories were not enough.

Unlike other public water supply interruptions, municipalities affected by the Harmful Algal Bloom in western Lake Erie were dealing with something more than bacterial contamination.

Recent events in Toledo and parts of southeast Michigan may have water customers wondering why the usual “boil water” advisory was not issued. If the problem was blue-green algae (technically cyanobacteria) which are living organisms, then wouldn't boiling your tap water kill them? The answer is “yes” but killing the organisms **would not make the water safe**.

http://msue.anr.msu.edu/news/the_toledo_water_supply_shut_down_why_boil_water_advisories_were_not_enough

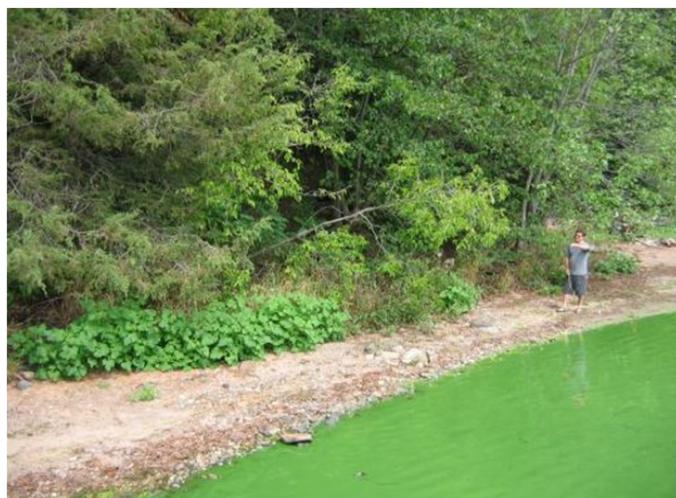
Lake Erie harmful algae bloom threatens drinking water supplies. What happened? What caused it? What can you do? Your questions answered.

Lake Erie is no stranger to algae blooms, including blooms of blue-green algae ([cyanobacteria](#)), which can produce [toxins that pose health threats](#). Blue-green algae are toxin producers, also known as Harmful Algae Blooms (HABs). This past weekend, the city of Toledo, Ohio and a number of municipalities and townships in southeast Michigan lost their normal source of drinking water – Lake Erie – due to Microcystin, the toxin produced by *Microcystis* that was detected in water samples. Microcystin is the most common HAB species in the Great Lakes.

http://msue.anr.msu.edu/news/lake_erie_harmful_algae_bloom_threatens_drinking_water_supplies



Satellite image of 2011 bloom, the worst bloom in recent years, which impacted over half of the lake shore Photo credit: MERIS/ESA, processed by NOAA/NOS/NCCOS



A harmful algal bloom (HAB) along an inland lake shoreline

Why is My Lake Turning Colors?

Harmful algal blooms (HABs) can pose risk to people and pets. Learn to recognize HABs when recreating on Michigan inland lakes.

Most lakes and [ponds](#) support planktonic algae – the tiny, single-celled plants that float in the water column and form the base of the lake food web. They occur naturally and can grow rapidly with increasing water temperatures, lots of sunlight and excess nutrients such as phosphorus and nitrogen, entering the lake from lawns and other sources. A recent [Michigan State University Extension](#) article explains how rooted [aquatic plant control](#) efforts may also contribute to algae growth in shallow lakes.

Green planktonic algae are true plants and are fed upon by fish and other aquatic animals. But blue-green algae are technically not algae. They are cyanobacteria that possess chlorophyll and photosynthesize like plants. When either kind of algae multiplies so rapidly that they can be seen with the naked eye it is called an algal bloom. Most green algal blooms are harmless, but a bloom of cyanobacteria is referred to as a harmful algal bloom (HAB) and should be avoided. This is because, in high concentrations, cyanobacteria can produce toxins that can pose health risks to people and pets.

http://msue.anr.msu.edu/news/why_is_my_lake_turning_colors

Research Update– Lake Research Grant Program

Shikha Singh, PhD Candidate in the Department of Fisheries and Wildlife at Michigan State University was the inaugural recipient of the McNALMS “Lake Research Grant Program.” The funds helped her further her research in investigating topic of different policies used by local governments in several watersheds to minimize freshwater resource degradation. Singh’s study area included local governments in the Betsie-Platt, Manistee, Muskegon, Pere Marquette, Pine and Grand River watersheds. With the funding support by McNALMS she was able to advance her research in two ways, namely by speaking with local government officials and by diversifying data collection methods.

This past May, Singh also attended the Michigan Inland Lakes Convention where she was able to interact with local government officials, lake associations and various other stakeholder groups, helping her to increase awareness about her research within the survey target audience (local government officials) in the hopes of increasing survey response rates. She was also able to listen to local government officials, members of the public and various watershed and lake associations talk about some of the challenges they faced when it came to protecting inland lakes, rivers and streams from water quality impairments and invasive species. The grant also helped her to diversify data collection methods to include a mailed survey, which led to an increase response rate of 14.6% thus far. Singh is still awaiting the return of more surveys after which she looks forward to the next phase of her research which includes data analysis and subsequently dissemination of research results.

Singh added, “In addition to the monetary support, I really appreciate the opportunity this grant gave me in being able to interact with members of McNALMS organization to further my knowledge and to give back to the community in some small way via my research.”

The next round of funding for Lake Research Grants will be announced this December. Check out the [McNALMS](http://www.mcnalms.org) web site for further information.

Corporate Members Corner

Experience the LakePro Difference

LakePro opened in 2001 to provide aquatic pesticide applications to ponds and lakes. Since then, LakePro has grown and expanded our services. LakePro now offers complete water management that includes many different options to improve and enhance your waterbody. LakePro strives to provide excellent customer service through our motto “The LakePro Difference: Personal, Prompt, and Professional.”



Experience the LakePro Difference
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LakePro offers algae & weed control, biological augmentation, aeration, lake management, water quality testing, Truxor harvesting, and natural shoreline restoration. Each waterbody and every customer is unique, so we customize a plan that combines these services to create the best solution for your aquatic problems. LakePro travels anywhere in lower Michigan to offer free consultations and quotes.

At LakePro, we constantly strive to learn more about aquatics and improve our services with that knowledge. We have excellent relationships with manufacturers, suppliers, distributors, and other firms to ensure we have the best information available. LakePro is also a corporate sponsor of many organizations including McNALMS, MAPMS, MLSA, RISE, and AERF. We believe these organizations provide invaluable support to all riparians and stakeholders. We attend many conferences each year to learn more about aquatic ecology, management methods, treatment products, and regulations.

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