

# Bear Lake News

Newsletter from the Bear Lake—Lake Board

Produced by PLM Lake & Land Management Corp.

## Bear Lake Accomplishments 2022

1. Elected New Officers
2. Developed and Approved BLLB First By-Laws
3. Completed Training of Board Members on the State of Michigan's "Open Meetings Act"
4. Developed and Adopted the 2022 Budget
5. Reviewed and concluded No Additional Assessments would be needed in 2022 from residents.
6. Invested excess improvement/assessment funds in a short-term CD.
7. Developed and adopted a new "Treatment Protocol" to allow faster reaction to Bear Lake treatment needs.
8. Reviewed and approved a local expert, AWRI/GVSU, as our Consultant (working with PLM) and water quality testing specialist to replace RLS.
9. Reviewed and approved a long-time lake improvement partner, PLM as our lake management and treatment consultant to replace RLS.
10. Obtained a Grant via Muskegon County Conversation District for the treatment of Phragmites in 2023 (estimated cost savings to residents \$3,500 to \$5,000). Two other grant requests are pending (i.e. lake front buffers, boat wash/signage).
11. Developed a New BLLB Website to improve communications and transparency with residents. All was done at no cost to the residents, as one of the Board members (Paul Pek) had expertise in this area. In addition, we partnered with the City of North Muskegon who really stepped up, paying for our site registration and web hosting, all at no additional cost to residents.
12. Partnered with the City of North Muskegon to utilize one of their existing employees to take minutes of meetings—no additional cost to residents.



## BLLB Important Updates 2023

- Renewed contract with GVSU/AWRI for water quality testing and consulting.
- Renewed contract with PLM for Lake Management and consulting.
- Renewed contract with PLM for Lake Treatments.
- BLLB finalized a new 2023 Budget and approved no additional resident assessments will be needed again this year
- Paul Pek to take the lead with PLM to authorize Lake Treatment when needed.
- Craig Howell to take the lead with the Conservation District to continue monitoring for Grant Opportunities.
- Resident Survey in development to request feedback on several important subjects.
- Lynne Fuller, City Clerk, joins in on Board Meetings to do Minutes and perform other needed administrative duties.

## *BLLB Survey to be Conducted*

The BLLB will be conducting a survey to seek input from residents on what is important to you and gather information on your thoughts on the condition and future of Bear Lake, and the BLLB. The survey will be emailed to residents we have on record. If you are not sure, **please click the "SIGNUP FORM" link in the menu** at our website [www.BLLB.org](http://www.BLLB.org).

## Get Added to the BLLB Contact List

Go out to [www.bllb.org](http://www.bllb.org) and click on the link to fill out a form to be added to the contact list.

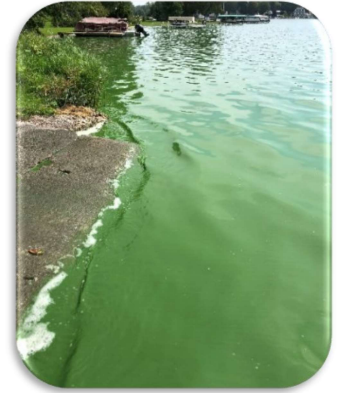
Email one of the BLLB board members with your name, address, email(s), and text number(s) (if you want text updates for treatments only). (See [BLLB.org](http://BLLB.org) for contact information).

## Harmful Algae Blooms, What You Need to Know

During the summer months, many Michigan lakes experience noxious blue green algae blooms. Cyanobacteria (cy-a-no-bac-te-ri-a), also known as blue-green algae, are a natural part of lakes, rivers, and ponds. Unfortunately, some species can produce toxins, called cyanotoxins that can make humans and animals sick. When conditions are right, these organisms can rapidly increase to form Harmful Algae Blooms, or HABs. These blooms can last a few days, weeks or longer and are considered harmful because they may contain toxins. A bloom can start small and become very large in size and can give off a foul odor.

### What You Need to Know:

- Not all algal blooms contain toxins, but it is difficult to tell by looking at a bloom if it is harmful.
- HABs can be a variety of colors such as blue, green, blue-green, brown, white, purple, or red.
- A bloom generally occurs when the water temperature is warm, conditions are calm, and the water has a high level of nutrients, like phosphorus and nitrogen.
- Blooms typically occur in Michigan from summer to fall. A bloom can last days to a few months. Blooms may disappear but then form again within the same season.
- Typically, symptoms of illness (e.g. rash, cough, eye irritation) from cyanotoxins appear within hours to days in humans. If symptoms do appear, the severity will depend on how long the exposure was, the type of cyanotoxin, and how the person was exposed.
- While there have been no confirmed deaths of dogs in Michigan due to exposure to algal blooms, there have been a few dog deaths where exposure to algal blooms may have been a contributing factor, but no definitive cause could be determined.
- If a HAB is suspected, do not swim, wade, or touch the water where algae are present. Humans and pets should be rinsed thoroughly in fresh water if there has been any contact with the water. Humans and pets should avoid the water entirely, including water sports like boating, if there is a large algal bloom spread out across the lake.



## Lake Board Members

**Darrell Van Fossan:** Chairperson, Riparian Owner Representative, [darrell.vanfossan.blb@gmail.com](mailto:darrell.vanfossan.blb@gmail.com)

**Paul Pek:** Vice Chair, Laketon Township Representative, [paul.pek.blb@gmail.com](mailto:paul.pek.blb@gmail.com)

**Craig Howell:** Treasurer, North Muskegon Representative, [craig.howell.blb@gmail.com](mailto:craig.howell.blb@gmail.com)

**Brenda Moore:** Secretary, Water Resources Commissioner, [moorebr@co.muskegon.mi.us](mailto:moorebr@co.muskegon.mi.us)

**Jessica Cook:** Muskegon County Commissioner [cookje@muskegoncounty.net](mailto:cookje@muskegoncounty.net)

## Board Financials

### Estimated 2023 Budget

Lake Management (PLM): \$2,025

Lake Monitoring and Consulting (GVSU): \$24,000

Lake Treatment (PLM): \$30,000

Attorney : \$2,000

Other Items: Fenner's Bayou Treatment - \$6,400

Grant Match/GVSU Plan Feedback - \$8,500

Total 2023 estimated expenses: \$78,200

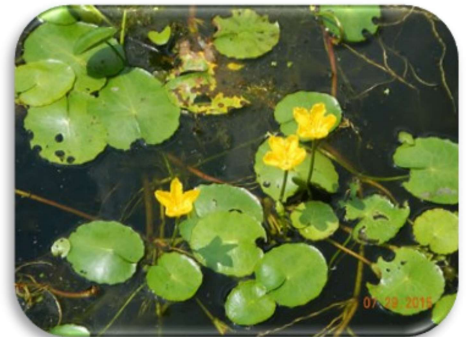
## Exotic Species Watchlist, Yellow Floating Heart

A new invasive exotic plant is beginning to make it's way into Michigan lakes. Yellow Floating Heart could be confused with other native floating leaf plants, such as lily pads or watershield. Please learn how to identify this noxious plant and notify your PLM Manager if you suspect it may be growing in the lake.

### Identification:

- Flowers are bright yellow with 5 petals, located above the surface of the water
- Leaves are circular or heart shaped
- Found in slow moving waters
- Leaves are alternately arranged on the stem but oppositely on the flower stalk
- Seeds are flat and oval, many seeds per capsule

**Local Concern:** Yellow floating heart can create dense mats that shade out native aquatic plants, decrease oxygen levels, increase mosquito breeding habitat, and impede boating activity, fishing, and swimming. Fragmented pieces of plants can establish new populations and seeds are engineered to disperse by attaching to the feathers of waterfowl.



## Improved Resident Communications

- **BLLB.org:** The BLLB now has it's own website! This site has board information like meeting and treatment dates, board packets, meeting minutes, and in the future will be enhanced to include lake education.
- **BLLB Facebook Group:** Used in conjunction with website for events and notifications.
- **Email Updates:** Residents to sign up to receive automatic communications.
- **Treatment Notification:** Residents of the City of North Muskegon will be notified via the Nixle system currently used by NM for urgent notifications. All City and Laketon Township residents can opt-in to email or text notifications for treatment.
- **Treatment Maps:** Maps indicating what areas of the lake are/ were treated.

## Lake Issue Reporting Protocol

- If you notice any issues with the condition of our Lake-front, please contact one of the following BLLB members: Darrell Van Fossan, Paul Pek, or Craig Howell. (See BLLB.org for contact information).
- The preferred method is an email with a description of your issue, a photo of it, as well as your address.
- The BLLB has a new treatment protocol which will allow the authorization of treatment quickly after reported issues start coming in, avoiding delays in treatment.

## Converting Seawalls into Natural Shorelines



Photo courtesy of MI Natural Shoreline Partnership

Converting seawall shorelines back to natural vegetation; plants, trees and shrubs along the water's edge has many benefits for the lake. Some of benefits of having a natural shoreline are erosion control, nutrient and pollution absorption, increase in wildlife and fish habitat and reduction of nuisance geese on lawns. If seawall removal is not feasible there are other options residents can do to improve and protect the lake. Placing rip rap in front of a seawall will help reduce wave action thus reducing lake scour. Rip rap can also create a suitable shoreline for animals to access the land and provide places for aquatic insects and plants to grow. Also, native vegetation can be planted within the rip rap, creating a more natural shoreline. Adding rip rap is an easy, affordable and effective way to help the lake.

Bioengineering, often called softshore engineering or lakescaping, is a method of using native plants, biodegradable products and other natural materials to provide a stable shoreline. The goal is to protect the property from waves and erosion, while improving ecological features and the integrity of the shoreline. Bioengineering methods are often used when creating a natural shoreline – which acts as a living buffer that changes throughout the seasons and years. Some of the benefits of bioengineering are; Natural vegetation serves as a filter between lawn and lakeshore, preventing pesticides and fertilizers from running directly into the water. Native plant roots filter more water than the turf grass varieties typically planted in Michigan. They help prevent flooding or standing water. Plants in the water and along the shore help absorb the wave energy, which helps keep soils and sands settled and makes for clearer (less turbid) water. If there is any Bear Lake resident that is interested in converting their shoreline, please contact PLM and their Certified Natural Shoreline Steward can help you get started.

## Be “Septic Smart” to Protect the Health of Your Waterfront, Terry Gibb and Bindu Bhakta, MSU Extension

When a septic system isn't working properly it can release excessive nutrients and disease-causing pathogens into soil and water. Pathogens such as *Escherichia coli* (E. coli) from malfunctioning septic systems can cause flu-like or gastrointestinal symptoms. Nitrogen and phosphorus can cause fast-growing algae and aquatic plants to grow out of check and can lead to reduced oxygen levels and water clarity in lakes, impacting fish and wildlife. Septic system maintenance is critical. Here are some simple tips to help you be Septic Smart:

Here are some signs that your septic system is experiencing trouble:

- Gurgling sounds in the pipes when water is being used or the toilet is flushed
- Drains that are slow running or backing up
- Sewer-type odors
- Soft, mushy ground over the drainfield
- Grass over the drainfield that is greener, more lush and/or faster growing than the grass around the drain
- Family members with frequent intestinal illness if a failed septic system contaminates well water that may be in close proximity
- Excessive aquatic plant growth or algal blooms in the near shoreline areas of the lake surface.



Local or regional health departments are great sources for information about your septic system and have records about its design and installation. They can provide advice on the type of system that will properly treat your wastewater. Learning how you can be Septic Smart will help ensure full enjoyment of all the things you love about your lake.