

Information about Blue Green Algae LLPOA Water Quality Committee 2025 Updates

The LLPOA Water Quality Committee monitors the water quality of the main lake by testing for e-coli at the recreational beaches twice a month from April through August. In addition to testing for e-coli, we monitor dissolved oxygen levels and water clarity. Since 2020, there have been occasional instances of Blue Green Algae, (Cyanobacteria) blooming in the lake during exceptionally hot days or when the water is stagnant for a period of time. This happens in end coves, in particular, shallow areas of the lake.

WHAT IS A HARMFUL ALGAE BLOOM (HAB)?

According to the Ohio Department of Natural Resources, since 2016, every water body in the state of Ohio is presumed to have some level of cyanobacteria, but recreational waters need to be especially cautious since high levels of toxicity can be harmful. Below information was provided by the US EPA in April 2020 :

Cyanobacterial Harmful Algal Blooms (CyanoHABs) in Water Bodies - Certain environmental conditions in water bodies can intensify algae growth, causing algal blooms. Blooms with the potential to harm human health or aquatic ecosystems are referred to as harmful algal blooms or HABs. In freshwater systems, cyanobacteria (also called blue-green algae) are microorganisms that can produce HABs. Some cyanobacterial HABs, or cyanoHABs, can produce toxins. CyanoHABs and their toxins can harm people, animals, aquatic ecosystems, the economy, drinking water supplies, property values, and recreational activities, including swimming and commercial and recreational fishing.

WHAT DOES A HARMFUL ALGAE BLOOM (HAB) LOOK LIKE?

Active blooms are best seen from the shore line or waters' edge. They resemble bright green paint spilled across the top of the water, although a bloom is never just on top of the water, it resides in the water column as well. As the bloom accumulates in one area it might also look blue, brown or even red. As the bloom dies, it releases toxins, and often has a strong ammonia smell. Blooms move with current and wind. They can sink and re-appear. Here are some pictures of previous blooms from Lake Lorelei:





WHAT SHOULD I DO IF I SEE A HARMFUL ALGAE BLOOM?

First, be sure to stay out of the water where the bloom is occurring, and keep pets from swimming in or drinking the water. Second, send an email with the location and a picture if you have one to water quality committee member Peggy Platz so it can be shared with the Committee for tracking purposes: theplatzfamily@gmail.com. As the summer rolls on, and days become hotter, expect a surge in blooms. Lastly, pay attention to the updates about Water Quality posted on the LLPOA website and Facebook page. If necessary, advisories will be posted.

WHAT ARE THE RISKS OF EXPOSURE TO A HARMFUL ALGAE BLOOM?

The danger to humans is 6 and can include skin irritation, throat irritation and nausea. Historically, Lorelei waters have never tested above 2. However, blue green algae, even at lower levels, can be very harmful to pets, especially if ingested. Local health organizations and veterinary organizations have been encouraged to “screen for green” meaning they should survey patients who present with symptoms for appropriate treatment.

WHAT CAN BE DONE TO PREVENT HAB's IN LAKE LORELEI?

We can never completely eradicate the bacteria from our water, but we can take measures to control toxic levels.

Planting riparian zones and allowing the growth of natural vegetation on shorelines and end coves filters the runoff entering our lake and cuts back on the amount of pollutants that enter our water from resident's yards and adjacent farm fields. Currently we have one riparian zone and LLPOA maintenance has been limiting the amount of chemical and mechanical weed control in recreation areas and end coves to allow some filter vegetation to grow.

Turbidity or turbulence is important. Good strong rains over a series of days dilutes the algae enough to lower its toxicity. Unfortunately, rain also causes the influx of farm field runoff. Waves generated by boat traffic also helps, but once the lake becomes still, and as the summer heats up, blooming resumes. Greater Lake Lorelei Water Improvement Corporation has hosted an information session and sponsors a reimbursement program for members who install aerators to keep water moving around private docks. Learn more about aeration and the program at [GLLWIC Facebook page](#).

RESOURCES USED AND TO LEARN MORE ABOUT HAB's:

GREAT EDUCATIONAL BOOK FOR KIDS!!! [Monster in the Water - Fighting Harmful Algal Blooms](#)

EPA website on HAB's: <https://www.epa.gov/cyanohabs>

Ohio Department of Natural Resources:

<https://ohiodnr.gov/wps/wcm/connect/gov/Ohio+Content+English/odh/know-our-programs/harmful-algal-blooms>

Ohio Department of Health:

<https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/harmful-algal-blooms/welcome/>

[Ohio HAB Response 2020:](#)

HABRI and Ohio Sea Grant: <https://ohioseagrant.osu.edu/>