

2024 August Annual Meeting
Water Quality Report by Deb Eisenbeisz

Hello I'm, Deb Eisenbeisz, the LPA Water Quality Coordinator. I organize volunteers and schedule the summer water sampling on Lake Poinsett, Albert, and Dry Lake. Since 2021 the LPA has partnered with the state DANR Volunteer Monitoring Program to gather consistent data on the health of our lakes. Our state-trained Water Quality volunteers have become a respected source in producing high quality data. These dedicated volunteers are Tammie Jorgensen, Mark Kelsey, Cal-a Hogue, Kim and Shon Ward, and Lesa Lee.

We sample for phosphorus, nitrogen, ammonia, nitrates, and nitrites, E.coli -a bacteria from human and animal waste, Microcystins – a toxin found in harmful blue-green algae, and CHL-a - the green algae mass in lake water. We collect water samples from shorelines, outlets, and center of the lake once a month from June to September. These samples are shipped to the state lab for analysis and recording. This summer our lab and shipping fees will total \$6200 dollars which is funded by the EPA Clean Water Act Grant. The LPA purchases needed water sampling supplies and supplements our fuel cost.

The state tracks the lake's health trends from our sampling data to identify existing problems. Any persistent issues occurring over consecutive years are reported to the EPA and a restoration plan is formulated and implemented thus qualifying our lake for federal funding.

Currently Lake Poinsett, Albert, and Lake Norden are on EPA's impaired list for CHL-a - indicating high levels of algae. This means our lake is more likely to develop HARMFUL ALGAL BLOOMS also known as HABs. When water becomes: Warm, slow-moving, and full of excessive nutrients, such as nitrogen and phosphorous it sets off a vicious cycle.

- First stage,** common algae feeds on phosphorus and nitrogen then rapidly grows out of control or blooms, like a super algae, that forms dense green or blue-green colored water, scum, mats, foam and bad odor.
- 2nd stage,** Super Algae cannot maintain this abnormally high bloom population for long and will rapidly die and disappear.
- 3rd stage,** If conditions remain favorable, another bloom can quickly replace the previous one. Successive blooms may overlap so that it appears as if one continuous bloom occurs for up to several weeks.
- 4th stage,** As algae die, harmful toxins are released. Microcystin is a toxin that makes algae blooms a serious health risks to humans, pets, and livestock. We sample for this toxin.

We sampled for microcystin, a toxin, at the Lake Albert public access. The standard safe level is 8 micrograms per liter. The test result from our sample was 29,000 micrograms per liter, which is off the charts.

Cabin renters, visitors and lake property owners need to know how to stay safe around a harmful algae bloom. We were contacted about concerns on whether the lake water was safe for pets to swim. Some people have ordered off of Amazon a home kit called Blue Green Algae test strips to detect toxins on their shoreline. (*Show poster.*) Currently our state and EPA do not endorse this product.

I have an information sheet on Protecting Your Dog from HABs. It is on our website too. (*Show posters*). Personally, I would like an informational sign posted at the public lake Access about Harmful Algae Blooms.

A suspicious Algae bloom doesn't need to ruin lake time fun. You probably have alternative activities for your visitors when an algae bloom is on your shoreline. Some people drive to an algae free public lake access, or the State Recreation Area or Oakwood State Park or off to a public pool. Do our lake renters know that?

The responsibility for caring for lakes and preserving them is primarily borne by lakeshore property owners. We are the best advocates for a healthy lake, and County and State agencies are more responsive when we aggressively pursue programs, ordinances, and actions that protect the lake. Our state DANR HABs contact, Josh Strobel said Lake Poinsett has the most active participants who call to report blooms or ask questions.

We take care of things we value and a healthy lake is something we highly value. Thank you.