

## **Lincoln Lake End of Season Report 2023**



McCloud Aquatics Lake and Pond Management for 2023 is in the books. While it wasn't the hottest season this year, we had streaks of hot weather that brought along large temperature swings in the waterbodies. The overall season was a drought in comparison to the previous seasons of record-breaking rainfall. Many ponds and lakes experienced a significant decrease in depth, some losing all their water completely for a brief time. Shallow waters will hinder how we manage your pond. Not to mention, the increased chance for vegetation growth. This is because with hotter temperatures, nutrient release from pond sediments is increased; with increased rates of nutrient release, the pond will experience higher rates of nuisance growth. This paired with shallow conditions will allow for UV light to quickly penetrate through the water column and accelerate the process of photosynthesis. When the rain finally did come, it created runoff and in combination with shallow depths, many ponds experienced Duckweed/Watermeal issues and planktonic algae blooms this season - some of them containing cyanotoxins. Blooms like these are why we always stress the importance of nutrient management. Reducing nutrients helps reduce unwanted vegetation growth. Please help us manage nutrients in your pond or lake. Below are some of the ways that nutrient runoff can be minimized.

- Remove landscaping debris Plant matter like grass clippings, fallen leaves, and downed sticks can create algae blooms as they decompose, and sticks and logs act as an anchor point for algae.
- Plant a buffer zone or create a "no mow" zone Buffer zones around the water create a natural
  filter for your pond or lake. These areas consume nutrients before they reach your water. These
  can be native plants like tall grasses or wildflowers.



McCloud Aquatics will continue to work hard for you because we genuinely care for the health and beauty of your water body. Please stay vigilant with your duties as lake and poind owners too. Please fertilize responsibly, utilize natural buffers, and be open to proactive recommendations from your LMS. Our goal is to help you create a more sustainable lake/pond. Therefore, we look to have a balanced ecosystem containing the RIGHT weeds and a small amount of additional vegetation. We have started to use a new nutrient management tool and we are proud to say that we are having impressive results! Please reach out to us with any questions regarding aeration equipment, nutrient management, bathymetry mapping, boat ramps, dredging, cattail/phragmite work, fish habitats and fish stocking. These services are scheduled on a first come-first serve basis and we tend to fill up fast in the off season.

The season with Lincoln Lake was in our opinion was a great one. The lake looked fantastic for the entirety of the season. The lake was clear on the surface in basically every area with minimal areas of algae that required only a few services. All the main boating areas and strips were free of nuisance growth to allow for the best boating experience even in the heat of the summer. The dominant plant species encountered on Lincoln Lake was Curly Leaf Pondweed. The main areas where we saw Curly Leaf were in the bay areas along the main channel as well as in the northern bays of the lake. A few of these areas were retreated for Eurasian Water Milfoil as well. Although regrowth was detected it was easily managed before it reached the surface. With such a low growth rate in this Lake we are recommending a similar treatment plan for 2024. Communication was extremely helpful from Dave this season. A set of eyes on the lake really assists us as applicators by giving us an idea as to how extensive the growth is prior to arriving on site. In 2023 we have added Bio Base mapping data for Lincoln Lake, as well as a full season of experience on the water, which will be another asset when treating a water body. Growth levels on Lincoln Lake indicate the nutrient content within your water body is balanced. Water testing is necessary to confirm this, but with low levels of plant growth a safe conclusion is that your nutrients are in a safe spot.

In conclusion, we recommend a continuation of the program implemented during the 2023 season. Products used were effective, and seeing the lake on a regular basis is helpful for applicators to determine species present/growth levels. It is important for us to stay on top of invasive plant growth, so the populations do not increase from season to season. Early applications will kill plant growth off prior to seed development and provide native species a more prosperous environment to grow. To ensure a balanced ecosystem, beneficial bacteria applications are recommended. These bacteria will assist with the natural decomposition of organic matter as well as help consume nutrients that would otherwise be available for plant consumption. We are very excited to get the 2024 season started on the right foot. Thank you for trusting McCloud Aquatics with the health of your water!