



# Managing Large Lake Systems

## Lake Management Solutions to Help You Achieve Beautiful, Clean Water

Large aquatic ecosystems are complex and can be difficult to manage. You deserve to enjoy beautiful water, not stress over whether it looks good or is safe to use. At SOLitude Lake Management, we utilize science-backed solutions to help lake owners or managers achieve safe, clean water. Discover how partnering with SOLitude can help you achieve worry-free water management.



### Nuisance Weed and Algae Management

SOLitude operates a fleet of airboats, skiffs, and drone technology with specialized pump and spreader systems. This equipment allows us to easily navigate a variety of aquatic systems to perform treatments and other necessary management tasks.



### Harvesting

Harvesting is well-suited for clearing large areas of nuisance aquatic vegetation by cutting through dense floating plants to enhance access for swimming, boating or fishing.



### Bathymetric Mapping

Bathymetric mapping involves using integrated GPS and hydro-acoustic technology to create a three-dimensional model of your waterbody. This information is vital to maintaining healthy water quality and other aquatic life.



### Nutrient Remediation

Nutrient remediation products like Phoslock, Alum and EutroSORB help limit water quality imbalances by binding with excess nutrients. When water quality conditions are more balanced, nuisance aquatic weeds and algae are less likely to thrive.



### Biological Assessments

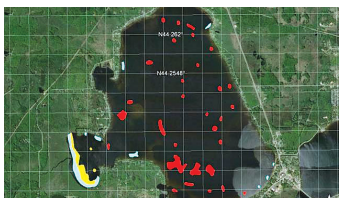
Biological assessments are used to identify the types of organisms in an ecosystem including aquatic plants and algae species. This information is utilized when developing a lake management program.



“The condition of our lake and the surrounding buffer area have improved significantly after just one year working with SOLitude. I appreciate their responsiveness to my inquiries and requests for meetings, and the monthly updates after their on-site visits are very informative. It's been a pleasure working with SOLitude.”

**Ed Colahan**

Chairman Environmental Committee



### Plant Mapping and Surveys

Utilizing GPS and GIS, we take plant samplings throughout the lake and create a map that shows distribution and density of the plant populations. GPS and GIS are then used to create treatment maps, which are followed during applications.



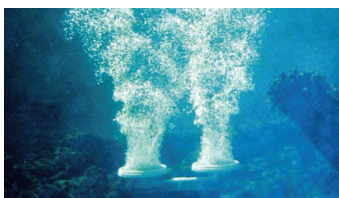
### Benthic Barriers and Containment Curtains

Benthic barriers cover the substrate of a waterbody, inhibiting aquatic weed growth beneath, and are usually installed around docks and in swimming areas. Containment curtains are employed to hold suspended sediment within a portion of a lake and used to contain herbicides within a targeted treatment area.



### Water Quality Monitoring and Testing

Whether your lake is enjoyed for swimming, fishing or simply its scenic view, it's important to keep the water clean and free of harmful bacteria. Regular water quality monitoring and testing helps aquatic experts identify imbalances before they become a problem. With the data collected, lake management professionals can make informed management decisions.



### Diffused Air Aeration Systems

To help supplement the amount of oxygen in your aquatic habitat, lake management experts recommend diffused submersed aeration systems. These systems utilize an on-shore compressor to pump air through subsurface tubing to diffusers that release bubbles from the bottom of the lake. This process helps oxygenate and mix the water column in deeper waterbodies.



### Fisheries Management

From fish population assessments and fish stocking to habitat management and fish removal, our fisheries management team can help you build a thriving fishery. Our Fisheries Biologists work closely with clients to design an individualized Fisheries Management Plan that is customized to their specific goals, budget and time-frame.

## Proven Results:

This lake cove was covered with water chestnut when treatment began. Through a combination of annual herbicide applications, and mechanical harvesting, the cove now supports less than 2% of its surface with water chestnut. With open water restored, residents can safely enjoy boating, swimming, kayaking, and fishing.

