



# Oxygen Saturation Technology

## The Premium Water Quality Management Solution

One of the biggest challenges in lake and pond management is maintaining sufficient oxygen levels throughout the water column and in the sediments. Dissolved oxygen is arguably the single greatest driver of healthy water quality by preventing and eliminating the development of common water quality issues such as nuisance algae, toxic cyanobacteria, fish kills, bottom muck, foul odors, and other undesirable conditions. By taking steps to cultivate the balance and beauty of oxygen-deficient waterbodies, we are investing in our own health and happiness.

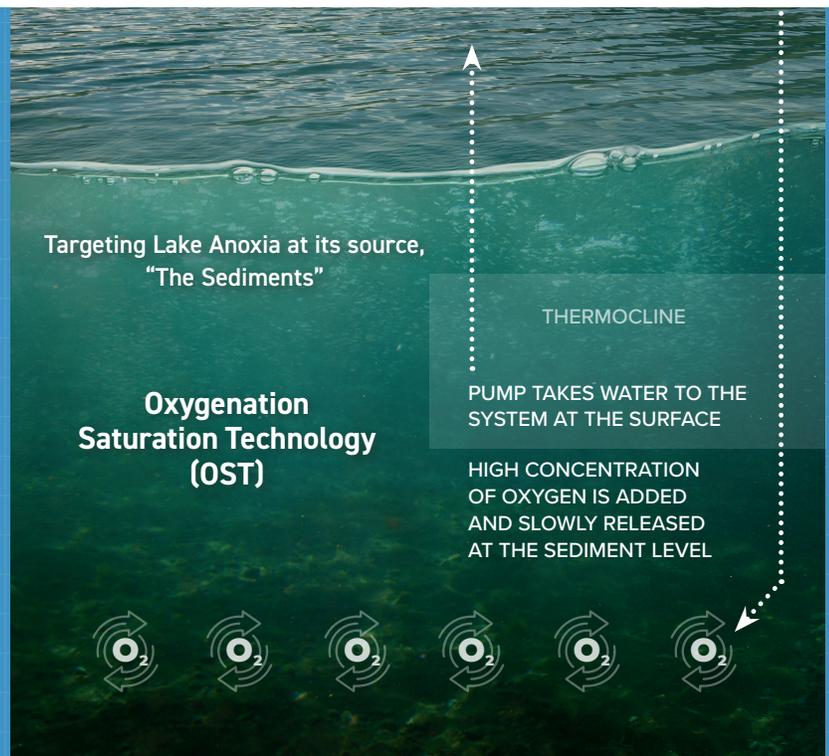
To support this mission, we are proud to offer Oxygen Saturation Technology (OST), a premium water quality management solution that targets lake anoxia and water quality problems at the source – the sediment. OST is a patent-pending innovation that blankets lake sediments with high levels of oxygen. No other lake and pond aeration solution is capable of achieving comparable oxygen concentrations in this area, making OST the most advanced water quality management solution on the market today.

## Why Oxygen Saturation Technology Is a Game Changer:

- Maintains ideal oxygen levels throughout the waterbody's layers
- Saturates bottom sediment with oxygen with the potential to remove all organic muck build-up
- Creates balanced water quality conditions that are less conducive to algae, cyanotoxins, weeds, and bad odors
- Reduces the reliance on chemicals, with the potential for no chemical use over an entire season
- Has a "supercharge effect" on combating bottom-loading of nutrients (often the major source of algae)
- Supports beneficial bacteria, microbes, and native plant and animal life
- Introduces oxygen without destratifying layers or circulating water
- Will improve the health, capacity, and productivity of any fishery

## How Does Oxygen Saturation Technology Work?

OST systems are equipped with suction and discharge lines that pull water into an on-shore chamber. Inside, oxygen is injected at low pressure to fully dissolve and incorporate it into the water. The enriched water is then dispersed across and into the bottom sediments, where it will remain without flowing up and down or altering thermal stratification.



# Is My Waterbody A Candidate for Oxygen Saturation Technology?

All waterbodies are different, which is why a professional examination is necessary prior to implementing any service. To determine if OST is the right solution for your water resources, aquatic specialists may utilize different types of information and data gathering techniques.

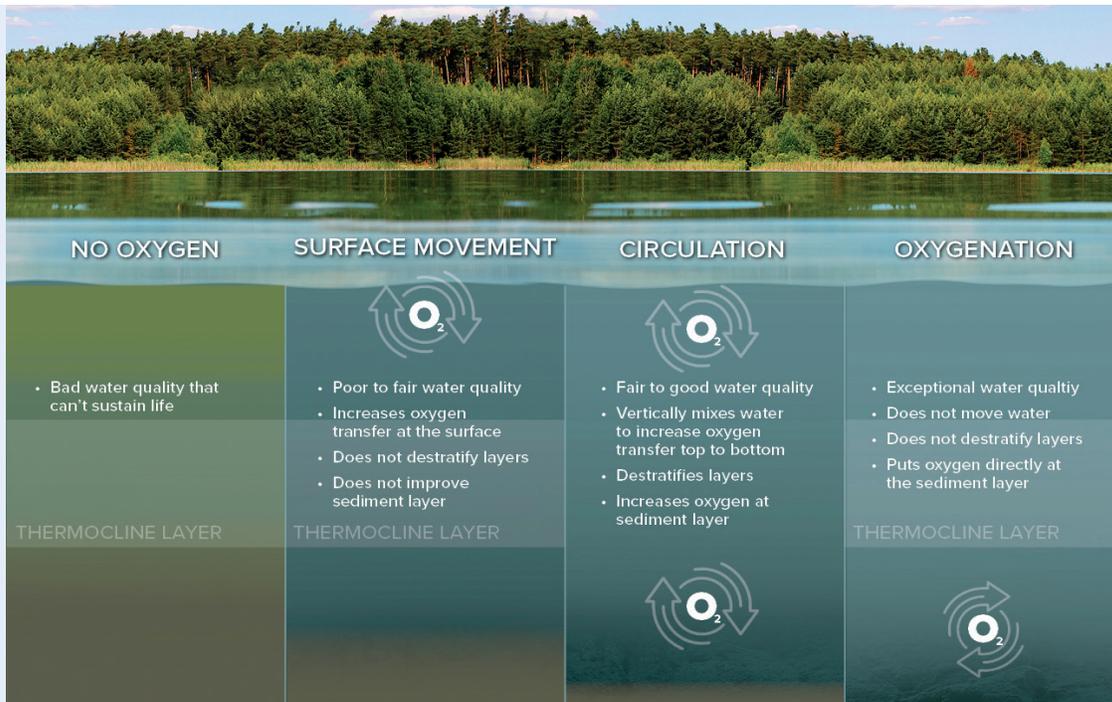


- **Water quality testing** – testing parameters like dissolved oxygen levels and nutrient concentrations can aid in understanding the Biological Oxygen Demand (BOD) and developing a site-specific prescription solution
- **Bathymetry/Lake Mapping** – a survey of waterbody depth and bottom contours helps to determine target areas and proper equipment placement
- **Surface Area** – OST systems are modular, making them a suitable solution for waterbodies of all shapes and sizes
- **Budget** – while this technology is a more costly upfront investment than other aeration solutions, especially in smaller waterbodies, it typically provides the best value at the lowest cost relative to long-term results
- **Goals** – defining your goals will help aquatic specialists choose strategies that ensure your expectations are exceeded

If OST is not a fit for your waterbody, consider alternative oxygenating solutions like submersed aeration or floating fountains. These aeration systems function differently than OST, but are still excellent tools used to introduce oxygen into the water column.

## Integrated Management

Oxygen Saturation Technology is just one part of the equation. All waterbodies are unique and require a management approach that is completely customized to the unique problems and characteristics of the aquatic ecosystem. Ultimately, a combination of many tools and techniques is necessary to achieve lasting success. As part of a SOL Pro Annual Management program, lake and pond professionals can design a tailored plan to meet your waterbody goals while maximizing your budget over time.



At Sarah's Pond in Orleans, MA, we tried multiple aeration solutions over the course of one year. Due to the unique challenges the pond faced, we could not achieve the desired dissolved oxygen levels and began seeking an alternate approach. OST got us there in three days.

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& Director of Technical Services