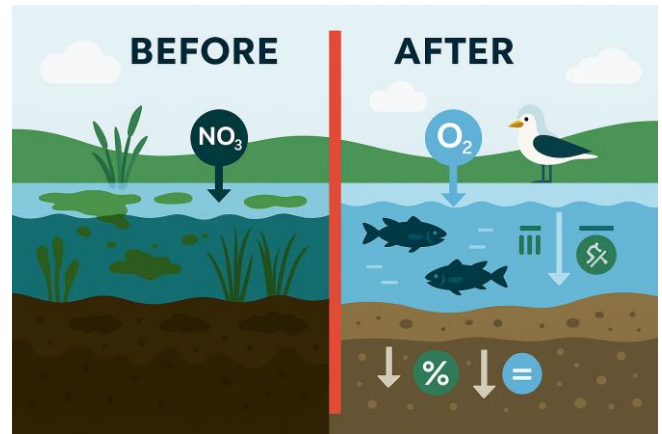


Biological Treatment of Lakes and Ponds

The challenge

Urban and agricultural runoff often causes poor water quality in lakes, ponds and stormwater basins:

- Excess nutrients (nitrogen, phosphorus)
- Thick layers of organic sludge
- Algae blooms, foul odor, and low oxygen – resolved by removing unwanted bacteria.
- Risk of eutrophication and biodiversity loss



How the technology works

Addition of bacteria

A safe, non-pathogenic mix of natural bacteria is added directly to the water or sediment.

Colonization and biofilm

Bacteria colonize both aerobic and anaerobic zones and form biofilms on surfaces and sediment layers.

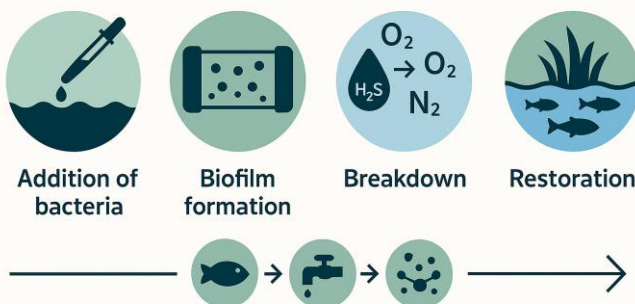
Decomposition and nutrient control

Organic sludge is broken down and nutrients such as nitrogen and phosphorus are captured and removed from the cycle.

Algae and odor suppression

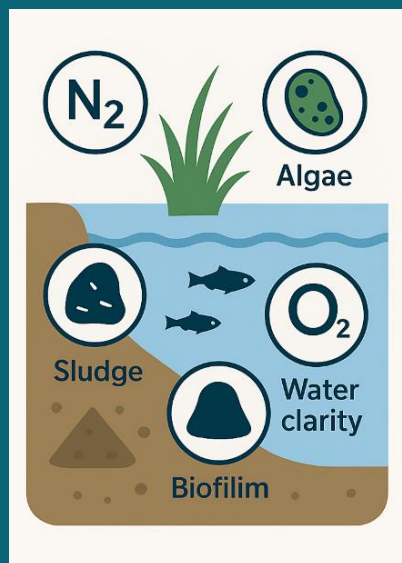
The healthy bacteria outcompete unwanted species, prevent H_2S and eliminate the conditions for algae overgrowth.

How the technology works



Documented results

- ✓ Reduced total nitrogen levels from 12 mg/L to 0 mg/L
- ✓ Algae presence cut by 75%
- ✓ Sludge thickness reduced by more than 12 cm
- ✓ Odors and H₂S eliminated within 1–2 weeks
- ✓ Improved water clarity and oxygen levels



Key benefits

- ✓ Natural and chemical-free
- ✓ Fast visible effects without excavation
- ✓ Harmless to people, animals and aquatic life
- ✓ Works in all seasons, including low-temperature periods
- ✓ Ideal for urban lakes, ponds, and wetlands – safe for nature and wildlife.

Application and flexibility

- Applied as a liquid
- Scalable for any size of lake or basin
- Supported by expert guidance and site-specific treatment plans

MBS treatment can be scaled and adapted to fit your specific setup, regardless of size or application. Contact us for advice, pilot projects, or full implementation.

