

A FEW THINGS TO KNOW ABOUT...

AERATION TO RESTORE LAKES

Restore Lakes Naturally

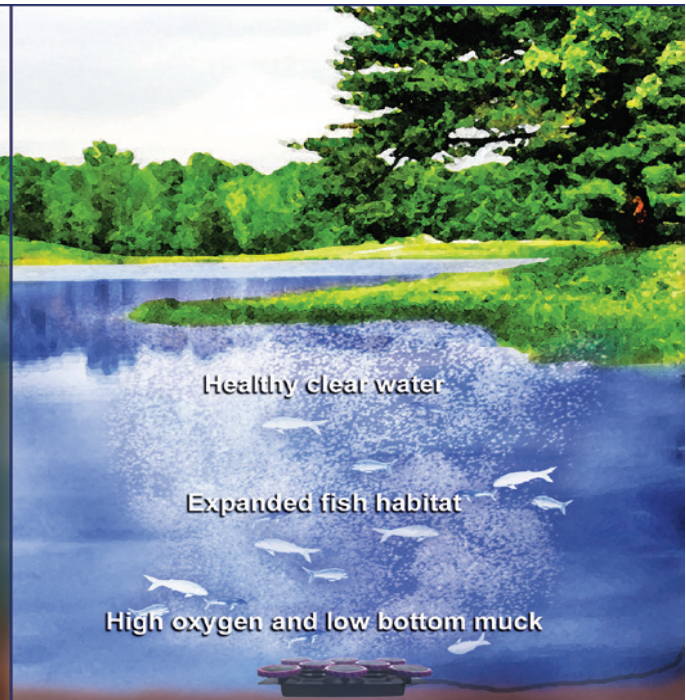
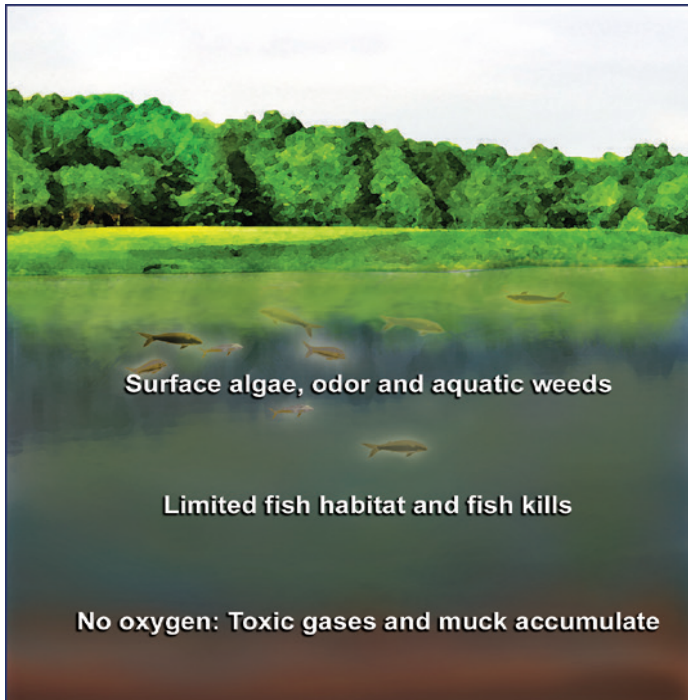
Dissolved oxygen is the most critical indicator of a lake's health and water quality. Oxygen is naturally added to aquatic ecosystems by aquatic plants and algae through the process of photosynthesis; and by diffusion at the water's surface and atmosphere interface. Animal, plant and bacteria respiration deplete oxygen. Water will show a number of negative symptoms when conditions within it are out of balance.

Symptoms

- Fish kills
- Algal blooms
- Poor water clarity
- Swarming Insects
- Foul odors
- Muck accumulation

Causes

- Low oxygen levels
- High nutrient levels
- Suspended sediments
- Stratification/Stagnant water/poor circulation
- Hydrogen sulfide/carbon dioxide gas build up
- Low levels of beneficial bacteria



Vertex's advanced diffuser design creates bubbles as small as 500 microns in diameter that form an ultra-wide column of upward moving water, "turning the lake over" and allowing oxygen to be absorbed at the lake's surface. Vertex diffusers continuously lift bottom water to the surface where poisonous gases are expelled and oxygen is absorbed. Stratification and all its resulting problems are eliminated. Colonies of beneficial bacteria once again flourish along the bottom while nutrient levels decline and water clarity increases. Oxygen related fish-kills are eliminated, sport fisheries are improved and fish can expand their territory into the formerly oxygen-deprived portions of the lake.

