



# Proven Solutions for Improving and Restoring Water Quality

Most of the issues lake or pond owners and managers face can be traced to an imbalance in the water quality. Knowing the chemical and biological constituents and demands on your waterbody is essential. Water quality monitoring, testing, and restoration are the backbone of an integrated lake or pond management program and the aquatic biologists at SÖLitude Lake Management® are ready to develop a prescription water quality restoration program that is tailored to your specific needs and goals.

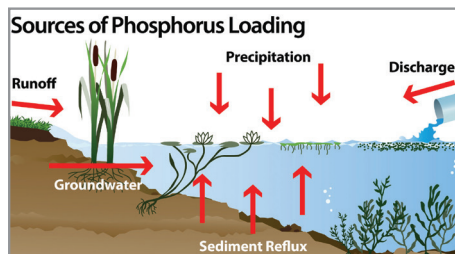
## REDUCING PHOSPHORUS POLLUTION IN LAKES AND PONDS

### What Happens as Ponds Age?

All lakes and ponds go through a natural aging process called eutrophication, which enriches the pond with chemical nutrients like phosphorus and nitrogen. Cultural eutrophication also occurs when human activity speeds up this aging process by allowing sewage and fertilizers to enter the ecosystem. The excess nutrients can cause algae blooms, poor water clarity and foul odors, while also being detrimental to aquatic life.



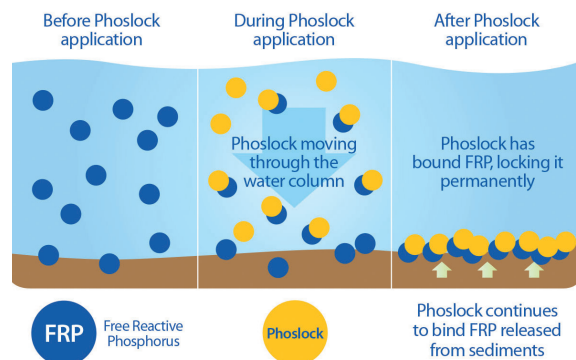
### Can Phosphorus be a Pollutant?



When excess phosphorus results in negative impacts to water quality, it may be considered a form of pollution. Even when sources of phosphorus have been curtailed by watershed management practices, such as reduced lawn fertilizer use, shoreline buffers and stormwater management, the years of accumulation of phosphorus in bottom sediments can continue to degrade water quality well into the future.

### What Can be Done?

Reduce phosphorus in your lake or pond and break the cycle of internal phosphorus loading with proven phosphorus locking technologies like Phoslock, Alum and Biochar. Phoslock (lanthanum-modified clay) rapidly binds and permanently removes free reactive phosphorous (FRP) from the water column shortly after application, clearing up the pond and returning it to a naturally beautiful state. It is also effective in locking up the phosphorus in the bottom sediments. For chronic nutrient loading or highly turbid water, treatment with Alum (aluminum sulfate) can also be an effective management strategy for restoring water quality and improving clarity in your lake or pond. Biochar is a highly adsorbent material, similar to activated charcoal, that is contained in a sock-like bag which allows water to flow through while pulling nutrients, metals and pollutants from the water. Once the bag is full, it is pulled from the water, physically removing the pollutions from the water column.



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### THE IMPORTANCE OF WATER QUALITY MONITORING AND TESTING

SOLitude Lake Management offers both field and laboratory testing services in order to provide accurate results, every time. These services are offered throughout the United States and can be tailored to fit the unique needs of each site. So whether you enjoy your water for fishing, swimming, or simply as a scenic view, it's important to have your water tested regularly so you can have the data you need to help keep your water clean and healthy.



#### On-site Water Quality Consultations

- We evaluate the physical state of your water to include key indicators such as water color and odor, algae presence, pH, temperature, dissolved oxygen, conductivity, and alkalinity.

#### Laboratory Testing

- In the lab we perform a deeper examination, also measuring ammonia, nitrates, nitrites, phosphates, hardness, iron, salinity, conductivity, and other properties. We can then advise you about what needs to be done to manage your lake or pond effectively.

### PROVEN RESULTS

#### Private Community | Success Story

*"We have five water features on the property and before SÖLitude Lake Management came, our ponds were full of algae and aquatic weeds, looking very unhealthy. In the past seven years, SÖLitude has cleaned out our ponds and got them back into shape making them look like amazing water features as they should be."*

**Aaron Tenley**  
Supervisor

#### Featured Pond Managed with Phoslock



Before



After

This stormwater management facility was plagued by algae blooms. The eutrophic pond was treated with Phoslock, which greatly improved the health of the pond.

Find the Right Water Quality Solution for Your Lake or Pond

Call 855.976.9569 to get a conversation started with one of our specialists.

**SÖLITUDE**  
LAKE MANAGEMENT

Learn more about water quality management by downloading  
"Nutrient Management Strategies" at [solitudelakemanagement.com/waterquality](https://solitudelakemanagement.com/waterquality)

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