

Remove Phosphorus. Restore Water Quality.

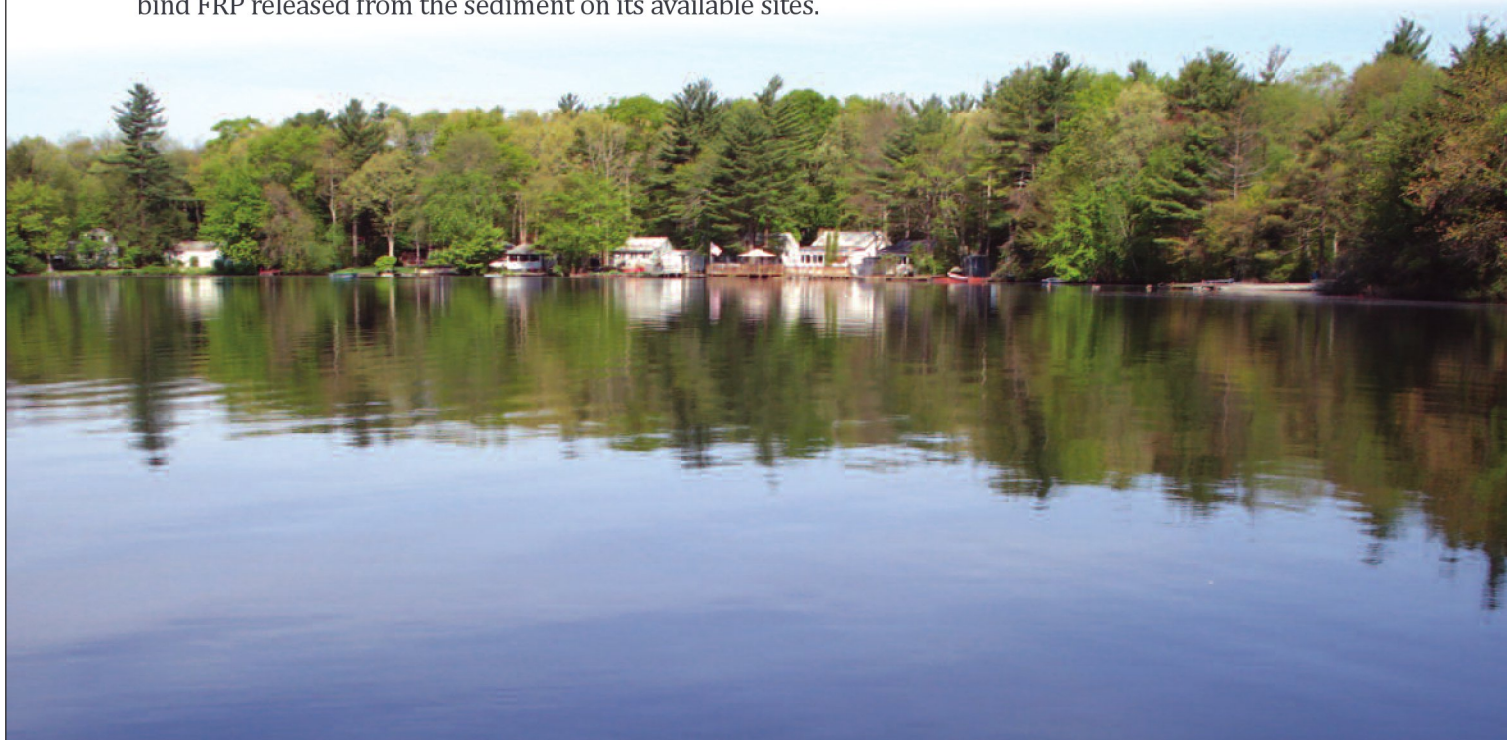
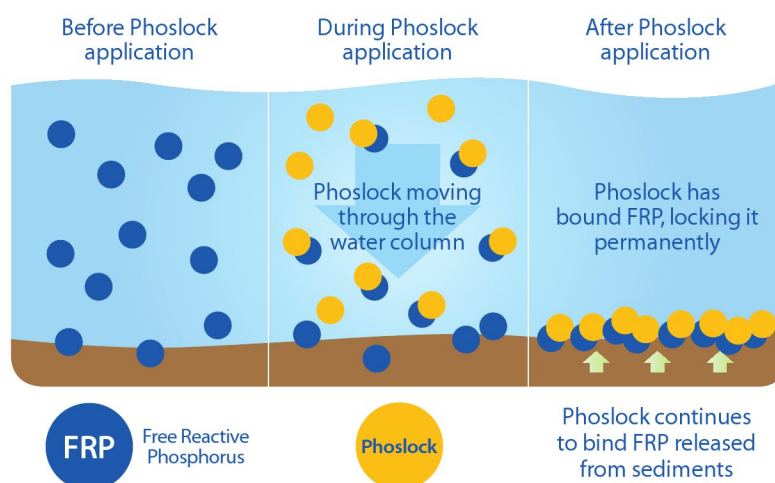
Excessive levels of phosphorus in water and sediments alter the balance of an aquatic ecosystem and degrade water quality. Even when external sources of phosphorus have been curtailed by watershed management practices, the internal recycling of phosphorus in waterbodies can continue to degrade water quality.

Water Quality Restoration

Phoslock (lanthanum-modified clay) provides an unmatched technology to reset the eutrophication clock (aging process) of waterbodies by removing free reactive phosphorus (FRP) and restoring water quality. Phoslock allows water resource managers a new solution to *Reset the Clock* by specifically targeting and removing phosphorus inputs.

Rapid and Permanent Phosphorus Removal

Phoslock has a high affinity to rapidly bind and permanently remove FRP from the water column shortly after application. As Phoslock settles at the sediment—water interface, the lanthanum in Phoslock continues to bind FRP released from the sediment on its available sites.



Effective in Variety of Waters

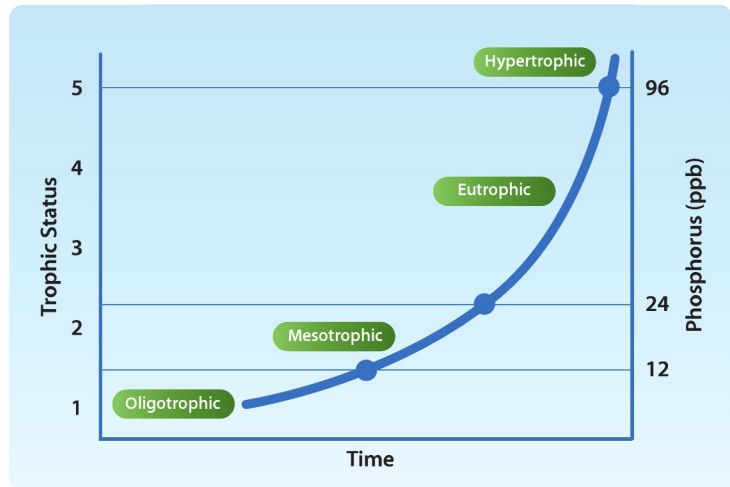
Phoslock is an environmentally compatible and effective solution over a wide range of water chemistries in ponds, lakes and reservoirs. Phoslock programs require no buffer to protect water quality and aquatic life during and after application. The removal of phosphorus from the water by Phoslock is attributed to lanthanum that binds to phosphate molecules and forms a highly stable mineral $\text{LaPO}_4 \cdot n\text{H}_2\text{O}$ (*Rhabdophane*). This mineral integrates within the sediments and is not bio-available.

Restoration Solutions

Program design and implementation strategies are based on site specific conditions such as; water quality parameters, water quality management objective and phosphorus sources (internal and external).

Recovery Solution: Strategic process of phosphorus removal from the water column.

Reset Solution: Reset the trophic status of the waterbody with targeted removal of phosphorus from water and sediment.



Effect of increasing phosphorus concentration on the trophic status of a waterbody.

The Results

Significant reduction in internal phosphorus levels and water quality restoration. Phoslock is rapidly emerging as the new standard to *remove phosphorus and restore water quality* in ponds, lakes and reservoirs.

PHOSLOCK[®]
Phosphorus Locking Technology

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