

LEGACY PHOSPHORUS

There are many sources and causes of water pollution. In some waterbodies in Vermont, excess phosphorus affects water quality.

Phosphorus loading to waterbodies can come from external and internal sources. Phosphorus attaches to sediment, and can be transported to waterways by runoff. External loading happens when phosphorus from the land surface enters a waterbody. Sometimes, phosphorus from external loading doesn't get used and settles to the bottom of a lake. Internal loading occurs when phosphorus stored in sediment on the lake bottom is released back into the water.



We call the excess phosphorus stored in lake bottom sediments legacy phosphorus.

The existence of legacy phosphorus is linked to Vermont's land use history. Historical erosion and runoff have led to a build-up of legacy phosphorus in some lakes. The presence of legacy phosphorus contributes to internal loading and can lead to water quality challenges like cyanobacteria blooms.

Legacy phosphorus impacts Vermont's efforts to restore, enhance, and protect water quality. Clean water projects reduce the amount of external phosphorus entering waterbodies. After treating external loading, some lakes may require additional treatment to reduce internal loading caused by legacy phosphorus.

