



The P Project

Reducing Phosphorus in the Finger Lakes



What is Phosphorus? Phosphorus is an essential nutrient for plant growth but too much can have a devastating impact on lakes and streams. Increased amounts of phosphorus entering waterways can stimulate algae blooms and plant growth. As these plants die and decompose they reduce the amount of oxygen available to fish and other aquatic life.

How Does Phosphorus Affect Me? Excess plant growth stimulated by high phosphorus inputs can impair many uses of waterways. Boating, swimming and fishing become difficult and lakes and streams look, smell and taste bad. Public water systems must work overtime to make water palatable.

Where Does Phosphorus Come From? Phosphorus has many sources. Some exists naturally in lakes and streams but human activities from residential, urban and agricultural areas contribute a significant amount of phosphorus. Storm water, or runoff, travels across land and picks up phosphorus from fertilizers, eroded soil particles, septic systems and pet waste and discharges it into nearby lakes and streams.



MOW YOUR WAY TO CLEAN WATER
Lawn care practices can have a big impact on water quality.



MORE PHOSPHORUS, LESS FISH
Excess phosphorus increases plant growth. As plants and algae die and decay, they rob the water of dissolved oxygen. This can devastate fish populations.



GREEN AND GOOEY Excess phosphorus leads to an explosion of plant growth and algae blooms in lakes.



PHOSPHORUS EXPRESSWAY Storm drains are designed to prevent flooding, but they also provide a direct route for phosphorus and other pollutants to enter lakes and streams.

What can you do to protect water quality?

Test Your Soil Test your soil before applying fertilizers. Soils in many parts of the Finger Lakes have an adequate amount of phosphorus to grow a healthy lawn. Testing your soil will save you money and will prevent applying excess phosphorus. Contact your local **Cornell Cooperative Extension** office for more information or to purchase a soil test bag.

Fertilize Responsibly Use only 0-phosphate fertilizer unless a soil test indicates the need for a low phosphorus fertilizer. Only apply lawn fertilizer in the fall when grass needs the nutrients to develop a strong root system. Time the application when the forecast is rain-free. Sweep up any spillage immediately and avoid fertilizing near storm drains or waterways.

Pick Up Pet Waste Pet waste contains phosphorus that can run off into streams and lakes with storm water. Pick up pet waste promptly and flush it in the toilet or place in the garbage. Never drop pet waste in streets or ditches.

Properly Dispose of Yard Waste Yard waste such as leaves and grass clippings can contribute significant amounts of phosphorus to water ways. Keep these wastes out of ditches, streets, storm drains and streams. Leaves can be composted and grass clippings provide a natural fertilizer if left on the lawn.

Plant Bare Areas Exposed soil, and the phosphorus attached to soil particles, is easily washed away with rain. Keep soil covered with vegetation or mulch. Plants reduce the chance that phosphorus will reach waterways because grass, shrubs, and trees slow the speed and decreases the amount of water runoff.

Maintain Your Septic System Wastewater contains phosphorus. An improperly maintained septic system can contaminate nearby waterways. Good maintenance includes regular system inspections by a certified professional and pumping at least once every three years.

Avoid Cleaners and Detergents that Contain Phosphates Phosphates were banned from most household cleaning products in 1976 but some products like dishwasher detergent and car and boat washes may still contain phosphates. Check labels before you buy cleaning products and choose phosphate free brands. And remember, biodegradable doesn't mean the product is low in phosphorus.



CLEAN SWEEP Sweep excess fertilizer and grass clippings back into your lawn so nutrients don't enter ditches and storm drains.

PLAY THE NUMBERS GAME

Every bag of fertilizer has a string of three numbers on its label. These numbers represent the percentage of nitrogen, phosphate, and potash in the fertilizer. In most cases, a fertilizer with a **0-percentage** of phosphate should be selected. Using a higher percentage could degrade water quality and is usually unnecessary to maintain a healthy lawn. 0-phosphate fertilizer can be purchased from **Cayuga County Soil & Water Conservation District**. Call 315.252.4171 for details.



More Information

- ◆ **Cornell Cooperative Extension of Cayuga County** offers periodic workshops on maintaining a lake-friendly lawn. Call 315.255.1183 or visit www.cce.cornell.edu/cayuga.
- ◆ **Cayuga County Water Quality Management Agency:** www.co.cayuga.ny.us/wqma. From the home page click on "Ways You Can Help". While there, check out the **Green Thumbs for Blue Waters** website.
- ◆ **Cayuga Lake Watershed Network:** www.cayugalake.org. From the home page click on "Resources", then on "Features—Managing Phosphorus".
- ◆ **Cayuga County Division of Environmental Health** can provide guidelines for maintaining septic systems. Call 315.253.1405.
- ◆ **Cornell University's Department of Horticulture** Gardening website: www.hort.cornell.edu/gardening.