

New State Law Restricts Phosphorus Use

A new fertilizer law (NYS Dishwasher Detergent and Nutrient Runoff Law, Chapter 205 of the laws of 2010) became effective on January 1, 2012. Through restrictions on the use of dishwasher detergents and fertilizers that contain phosphorus, the law will help to improve water quality in Onondaga Lake and other lakes, rivers, and streams throughout New York State. In addition to improved recreation and other benefits, lower phosphorus levels will help to reduce expenditures by local governments and private entities that are required to remove excess phosphorus from stormwater and wastewater. The Dishwasher Detergent and Nutrient Runoff Law amends section 35-105 and adds a new Title 21 to Article 17 of the Environmental Conservation Law.



Why This New Law is Important

According to the NYSDEC over 100 waterbodies in New York State are impaired due to high levels of phosphorus. The list includes Onondaga Lake, portions of Lake Ontario, Lake Champlain, New York City drinking water reservoirs, the Chesapeake Bay watershed, and many additional ponds and lakes throughout the state. "Impaired" means that use of the waterbody for drinking water, fisheries, or recreation is negatively affected by a pollutant.

This new law is designed to reduce the level of phosphorus in lawn fertilizer. In many areas of New York State soils naturally contain a sufficient amount of phosphorus to support the growth of turf grass without the need for additional fertilizer. In addition, the law prohibits the sale of phosphorus-containing dishwasher detergent for household use. Starting on July 1, 2013 the law will also prohibit the sale of phosphorus-containing dishwasher detergents for commercial use.



In addition to homeowners and businesses, many other groups are affected by the phosphorus law, including manufacturers of automatic dishwasher detergents, manufacturers of lawn fertilizer products, retailers and distributors of dishwasher detergents and lawn fertilizers, pesticide applicators, organic lawn care businesses, landscapers, and lawn management businesses.

Phosphorus Sources and Environmental Impacts

Phosphorus can originate from wastewater treatment plants, failing septic systems, agricultural runoff, decomposing yard waste, soil particles, and pet waste. High levels of phosphorus can damage the aquatic environment by accelerating algae and rooted plant growth which make the water look and smell bad. When the plants and algae die and decompose, the oxygen concentration in the water decreases. This condition harms fish and other aquatic organisms.

By reducing phosphorus use in lawn fertilizer and dishwasher detergents, we are helping to create a healthier aquatic environment for people, fish, and wildlife.

New State Law to Improve Water Quality



Phosphorus Levels and the Care of Onondaga Lake

A New State Law Restricts the Use of Lawn Fertilizer

Phosphorus is a nutrient that is essential for plant growth, but high levels can degrade water quality, making it unhealthy for people and aquatic life. Phosphorus is often transported by stormwater runoff and flows into lakes, streams, and wetlands during spring snowmelt and rain events. As of January 1, 2012 a new state law is helping to improve water quality by reducing the use of phosphorus fertilizer. Better water quality will improve recreation and other uses of our freshwater resources. The law will also reduce costs to local governments and private entities that are required to remove excess phosphorus from stormwater and wastewater.

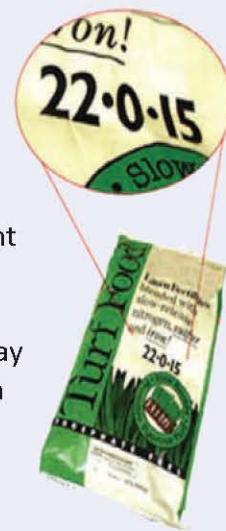
The new phosphorus law restricts the use of lawn fertilizer in the following ways:

- The use of phosphorus lawn fertilizer is prohibited unless establishing a new lawn or a soil test shows that the lawn does not have enough phosphorus.
- The application of lawn fertilizer is prohibited on impervious surfaces. The law requires that fertilizer applied or spilled onto impervious surfaces be picked up.
- The application of lawn fertilizer is prohibited within 20 feet of any surface water except where there is a vegetative buffer of at least 10 feet, or where the fertilizer is applied by a device with a spreader guard, deflector shield or drop spreader at least three feet from the surface water.
- The application of lawn fertilizer containing nitrogen, phosphorus, or potassium is prohibited between December 1st and April 1st.
- Retailers are required to display phosphorus containing fertilizers separately from non-phosphorus fertilizers, and to post an educational sign where the phosphorus fertilizers are displayed. Additional information is available at the New York State Department of Environmental Conservation (NYSDEC) website at www.dec.ny.gov.

The law applies to the use of phosphorus fertilizer that has more than 0.67% phosphorus by weight (even if it was purchased out of state) and includes organic phosphorus fertilizer. The provision does not impact the use of agricultural fertilizer or fertilizer for gardens.

Selecting the Correct Fertilizer for Your Lawn

Labels on fertilizer bags contain three bold numbers. The first number is the amount of nitrogen (N), the second number is the amount of phosphorus oxide (P₂O₅), and the third number is the amount of potassium oxide (K₂O). A bag of 10-5-10 fertilizer contains 10 percent nitrogen, 5 percent phosphorus oxide and 10 percent potassium oxide. The law limits the amount of P₂O₅ to less than 0.67%. Therefore the phosphorus oxide (the middle number) should be less than 0.67 for the product to meet the phosphorus lawn fertilizer restriction. Lawn fertilizer with phosphorus levels of 0.67 or lower is not restricted. Products with a number higher than 0.67 may only be used if a new lawn is being established or if a soil test indicates that phosphorus levels in the soil are low.



Options for Testing Your Soil

Nutrient levels in the soil can be determined by using a home test kit or by having the soil tested at a laboratory. The NYSDEC recommends that soil tests be done at a laboratory because the results tend to be more accurate and most labs will provide helpful recommendations on fertilizer application rates. You can find a soil testing laboratory by checking with your County Cornell Cooperative Extension office.

Vegetative Buffers Protect Water Resources

The new phosphorus law refers to the use of shoreline buffers. A buffer strip is a piece of land with trees, shrubs, legumes, or grasses located along the shoreline of a lake or stream. The buffer reduces nutrient runoff by increasing water filtration into the soil. This process reduces the flow of nutrients and other pollutants entering the water. Vegetative buffers also stabilize soils with plant root systems, reduce shoreline erosion due to wave action, and improve wildlife and fish habitat by providing food, shelter, and shade.



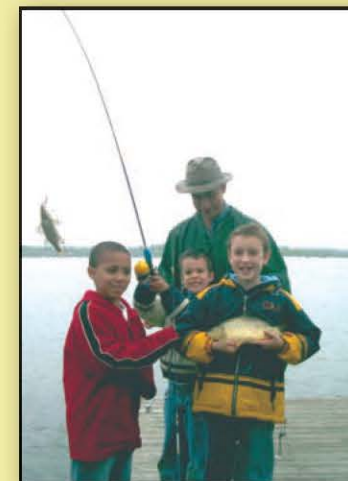
Additional Ways To Reduce Phosphorus Runoff

- Test your soil before applying fertilizer and use the results to determine the correct application rates.
- Never apply fertilizer before a rain storm.
- Pick up after your pet. Pet waste contains phosphorus that can be transported by stormwater runoff.
- Never dispose of pet and yard waste in storm drains or ditches.
- Mow your lawn at regular intervals. Leave grass clippings on the lawn and use a compost pile for excess yard waste such as leaves.
- Cover exposed soil and mulch to prevent erosion during rain events.
- Plant a rain garden to slow the rate of stormwater runoff.
- Use native plants. They require less maintenance and rarely require pesticides or fertilizers.
- Plant a buffer strip along the shoreline of lakes, rivers, or streams to slow the volume of stormwater runoff, absorb excess nutrients, and reduce soil erosion.

Do you live in the Onondaga Lake watershed?

If you live within the green area outlined on this map, then you live in the Onondaga Lake watershed.

The watershed covers 285 square miles (738 square kilometers) and encompasses portions of two counties (Onondaga and a small portion of Cortland), the City of Syracuse, 18 towns, 6 villages, and the Onondaga Nation territory. Efforts to reduce phosphorus and other pollutants in Onondaga Lake include in-lake and land use activities throughout this entire region.



A watershed is the total land area that drains into a stream, river, or lake. Surface and groundwater from precipitation and snowmelt in the Onondaga Lake watershed drain into the lake and influence water quality, aquatic ecology, and recreational opportunities such as fishing and boating. Land use activities within the watershed, such as urban development and agriculture, can cause phosphorus and other pollutants to flow down the tributaries and into the lake. In the past several years, phosphorus levels in Onondaga Lake have been reduced and plant and animal diversity is now showing significant improvement.

This brochure was prepared by the Central New York Regional Planning & Development Board with funding from the Onondaga Lake Partnership. Information about the phosphorus law is presented as a reference tool only and should not be relied upon for legal interpretation. For additional information, check the following website: www.dec.ny.gov/chemical/67239.html or contact the NYSDEC Bureau of Water Resource Management at 518-402-8112.