The Massachusetts Legislature passed *An Act Relative to the Regulation of Plant Nutrients* in 2012. This law directed the Massachusetts Department of Agricultural Resources (MDAR) to develop regulations that ensure plant nutrients are applied in an effective manner for maintaining healthy lands while minimizing the impacts of the nutrients on surface and ground water resources, thus protecting human health and the environment.

The regulations, 330 CMR 31.00, impact anyone who applies plant nutrient materials to both agricultural and non-agricultural land, including lawn and turf. ***These regulations apply to individual homeowners***.

Details about the law are available at www.mass.gov/eea/docs/agr/pesticides/docs/plant-nutrient-regs-turf-and-lawns-factsheet.pdf.

Streams, rivers, wetlands and ponds within the Wachusett Reservoir Watershed ultimately flow to the Wachusett Reservoir, a drinking water supply for 2.5 million Massachusetts residents. Storm drains within the watershed flow untreated to nearby surface waters – and therefore to the reservoir.

Towns and individuals within the watershed also rely on the watershed's high quality ground water as a source of drinking water.

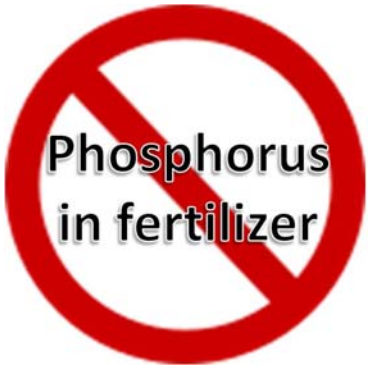
Following these newly enacted fertilizer regulations will help to reduce the chance of an over-abundance of nutrients from impacting surface and ground waters. The law will help provide high quality water for drinking and recreation.

Please pick up after your pets, as pet waste is also a source of nutrients.

Wachusett Reservoir Watershed
Department of Conservation and Recreation
Division of Water Supply Protection
180 Beaman Street
West Boylston, MA 01583
508-792-7806
www.mass.gov/dcr/watershed

November 2015

dcr Massachusetts



New laws in Massachusetts restrict the use of fertilizers containing Phosphorus on all non-agricultural turf and lawns in order to protect water resources

Algae bloom

Nutrient pollution, a form of water pollution, refers to contamination by excessive inputs of nutrients such as Nitrogen and Phosphorus.

The major sources of nutrients to streams and groundwater are precipitation, dissolution of natural minerals from soil or geologic formations, ***fertilizer application***, and effluent from sewage-treatment plants. Nutrients can also come from faulty septic systems and animal waste (so please pick up after your pets).

Stormwater – water from rain or snow storms – carries these nutrients directly into surface waters, or into storm drains which empty into nearby streams, lakes or wetlands.

Although Nitrogen and Phosphorus are natural parts of aquatic ecosystems, they can act as fertilizer, causing excessive growth of algae and weeds, when there is an abundance in surface waters.

Algae are relative short lived; when they decay, algae consumes the available oxygen in the water. This can lead to a die-off of fish and animals, cause water bodies to become cloudy and odorous, and limit recreational activities.

Some specific restrictions and requirements for use of nutrient application on turf and lawns:

- Phosphorus-containing fertilizer may only be applied when a soil test indicates that it is needed or when a lawn is being established, patched, or renovated.
- Do not apply plant nutrient materials to sidewalks or other impervious surfaces. Any material that lands on these surfaces must be swept back onto the grass or cleaned up.
- No applications of plant nutrients shall be made between December 1 and March 1, to frozen and/or snow covered soil, to saturated soil, or soils that frequently flood, within 20 feet of waterways if using a broadcast method, or 10 feet if using a more targeted application, within a Zone I of a public water supply well or within 100 feet of surface waters that are used for public drinking water supply.
- Plant nutrient amounts that may be applied shall not exceed UMass Guidelines for plant nutrient application rates to turf.
- Soil tests for nutrient analysis shall be obtained from UMass Extension Soil Testing Lab or a laboratory using methods and procedures recommended by UMass. A soil test is valid for three years.

Websites

www.mass.gov/eea/docs/agr/pesticides/docs/plant-nutrient-regulations.pdf. *A complete list of the restrictions and text of the regulations*

http://ag.umass.edu/turf/publications-resources/nutrient-management-information. *UMass turf guidelines.*

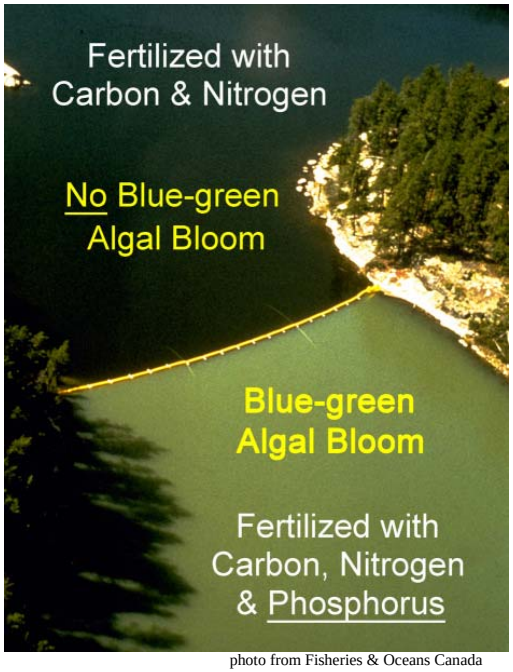


photo from Fisheries & Oceans Canada

The International Institute for Sustainable Development Experimental Lakes Area is one of the world's most influential freshwater research facilities. It features a collection of 58 small lakes and their watersheds in Northwestern Ontario, Canada.

The picture above shows the results of a decades long study that demonstrates the negative effects of yearly phosphorus addition to a freshwater system.

More information available at www.iisd.org/ela.

Too many nutrients in surface waters can result in algal blooms, which can be toxic to humans and animals.