

Phosphorus Concerns with Grass Clippings and Leaves

Phosphorus is one of the most troublesome pollutants in storm water runoff. Phosphorus comes from many sources, and it is the primary cause of water quality problems in our lakes and streams.

Everything that is or was living contains phosphorus. It is in leaves. It is in lawn clippings. It is in animal wastes. It is an ingredient in most lawn fertilizers. It is even attached to soil. When leaves, lawn clippings, animal wastes, fertilizers, and soil are picked up by storm water runoff and are carried directly to our local lakes and streams, they provide the lakes with excess phosphorus. This excess phosphorus causes increased algae growth. Algae are small green plants that live in lakes and streams. Increased algae growth is observed as green algae blooms or scums on lakes. Too much algae is harmful to a lake system. It blocks sunlight and prevents other plants from growing. When it dies and decays, it also takes much needed oxygen away from fish. Limiting phosphorus reduces algae blooms.

You can reduce the amount of phosphorus entering a lake or stream by keeping your leaves and lawn clippings out of the streets and gutters. Leaves and lawn clippings are a major source of phosphorus. When they are swept or washed into the nearest street or storm sewer, they end up in your local lake or stream. Keeping your leaves and lawn clippings out of the streets and gutters will have significant benefits for your local lake or stream.

A soil test will tell you how much-if any-fertilizer your lawn needs. Excess fertilizer may harm your lawn or pollute surface water. Fertilizer applied to your streets or sidewalks will get into the nearest lake or stream. Phosphorus from fertilizers can cause algae blooms. Use only low-phosphorus or phosphorus-free fertilizers.

When soil is left bare, rainwater will run quickly over it. The moving water picks up soil particles. These soil particles have phosphorus attached to them. Some soils are high in phosphorus and are another source of phosphorus in storm water runoff. The soil in storm water runoff will end up in your local lake or stream and contribute to algae growth.