

Why should I reduce my use of fertilizer containing phosphorus?

Water runoff from fertilized residential lawns is the primary source of phosphorus contaminants entering the Huron River. During normal lawn watering or natural rain storms, unnecessary phosphorus washes into the storm drains. These empty into local streams and the Huron River, without filters or treatment processes. By reducing the unnecessary application of phosphorus to lawns, we can reduce pollution in the river.

Why is phosphorus bad for the Huron River?

Once the excess phosphorus is in the river, it promotes the rapid growth of algae which, in turn, invades and overtakes beneficial water plant growth. As the algae dies off, the decay process depletes the water's oxygen, which is harmful to fish and insects. In severe cases, the river becomes clogged with "algae soup" and scum, and fish kills can result.

If I do not live along the Huron River, why should this matter to me?

The Huron River is a major source of the water we use every day, for drinking, cooking, bathing, laundry, gardening, household and recreational activities. The land and many creeks that drain into the Huron are part of its watershed. The Huron River in turn drains into Lake Erie and is part of the Great Lakes Basin. When you help to protect the health of the Huron River, you are protecting a critical natural resource.

When is it ok to apply fertilizer containing phosphorus?

The objective is to prevent water pollution by avoiding the unnecessary application of fertilizer containing phosphorus. The following applications may be acceptable:

- Flower and vegetable gardens, and trees.
- Newly seeded lawns or new sod. Limit the application to the first four mowings, or to the first growing season.
- In cases where soil testing demonstrates a phosphorus level less than or equal to ten parts per million, phosphorus can be applied safely in the amount and ratio specified by the test.

Where can I get more information?

The Washtenaw County MSU (Michigan State University) Extension office offers help with questions about lawn care, phosphorus use, and soil testing. Call the Master Gardener Hotline at (734) 997-1819.

You can learn more about the Huron River and its tributaries by visiting the website of the Huron River Watershed Council, www.hrwc.org or by calling (734) 769-5123.

Thanks to the City of Ann Arbor for funding this brochure.



Protecting the river since 1965

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protecting our rivers
begins in
your yard...
use fertilizer without
phosphorus

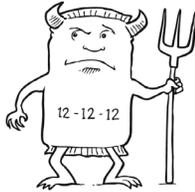


What is phosphorus?

Phosphorus is a nutrient that stimulates root growth in plants. Phosphorus is naturally abundant in the soils of southeast Michigan.

If phosphorus occurs naturally, and we do not need to add it to our lawns, why is it in fertilizers?

Along with potassium and nitrogen, phosphorus is one of three necessary macronutrients for plants. Most fertilizers are made for national distribution, so phosphorus is included without regard for the specific phosphorus content of soils.



How do I identify a phosphorus free fertilizer?

Check the packaging. On the outside you will see a sequence of three numbers. The first number indicates nitrogen content, which promotes top growth on plants. The middle number indicates phosphorus, for root growth. The last number indicates potassium, producing strong stems and resistance to disease. If you are looking for a phosphorus-free fertilizer, the middle number must read "0". As a general rule, look for turf grass fertilizers with zero phosphorus and avoid lawn and garden fertilizers, which are very high in phosphorus.



What should I know about lawn fertilizers?

Once you have selected the phosphorus-free product you prefer, remember to:

- Store fertilizer in the original container, and in a cool, dry place.
- Keep fertilizer on the lawn and off hard pavement. Immediately sweep up any spills, especially on sidewalks and driveways, and clean those surfaces with a broom, not a hose. Never apply fertilizer right before a rain storm. Fertilizer that washes away from your sidewalks, driveway, and lawn enters the storm drain system, which directly connects to local creeks and the Huron River.

- Apply less fertilizer, less often. If you fertilize your lawn once each year, fall is the best time. In the fall, fertilizer can help the grass repair and prepare itself for optimal growth in the spring.
- In all cases, only apply fertilizer during warmer months when your lawn is no longer subject to freezing temperatures, generally April 1-November 15.
- Avoid applying fertilizer within 25 feet of any wetland, stream, waterway or stormwater retention or detention basin.
- Take proper care of your lawn to reduce or eliminate the need for fertilizer. Maintain the lawn at a minimum height of three inches and, when you mow, cut no more than one-third of the height of the grass. Taller grass has a deeper, healthier root system, is more tolerant of drought, and resists weed infestation. When you mow, mulch the clippings back into the lawn. This adds nitrogen and organic matter to the soil, and prevents compaction (thatch).

By reducing my use of phosphorus am I making a difference?

Yes. Since the implementation of a city-wide ordinance in January 2007, residents of Ann Arbor, Michigan, have stopped using lawn fertilizers containing phosphorus. Tests conducted by the University of Michigan and the Huron River Watershed Council in 2008 indicate the phosphorus level at several sites along the Huron River has decreased by a range of 18 to 31 percent since 2005 depending on sampling times and sites.



Is phosphorus reduction a serious initiative for the long-term protection of our water resources?

Yes. An increasing number of local communities, municipalities, counties, and states have passed laws restricting residential use of lawn fertilizers containing phosphorus. Local and regional examples include the City of Ann Arbor and Pittsfield Charter Township in Washtenaw County, Hamburg Township in Livingston, and Commerce and West Bloomfield Townships in Oakland. Maine, Minnesota and Wisconsin have statewide laws banning the residential use of lawn fertilizer containing phosphorus. Similar legislation is under consideration in other states, including Florida, Michigan and New York. The protection of water resources has become a permanent item high on the agenda of public environmental concern.