



Figure 1: Fertilizers do more than you think¹

Fertilizer Water Contamination

Fertilizers are commonly used by agricultural farmers, as well as gardeners. While fertilizers can positively impact the growth of plants through their nutrients, they also contain harmful chemicals that can damage your water quality and nearby ecosystems. After fertilizers are spread on plants, any nutrients (nitrogen and phosphorus) that are not absorbed by the soil can be lost into nearby waterways. Once fertilizer chemicals enter your groundwater source, by means of snow melts or rain events, they can have an extremely negative impact on your household water quality and your health².

Why Does This Matter?

Excess levels of fertilizer chemicals, including nitrogen and phosphorus, can be detrimental in your personal health and the health of other animals.

- High levels of nitrogen and phosphorus can cause eutrophication, which can lead to hypoxia (“dead zones”) which kills fish and decreases overall aquatic life.

¹ Ross, Evan. *Fertilizers are Doing More than You Think? Debating Science*. University of Massachusetts, 2014. Web. Apr 2, 2020

² US EPA, O. W. "Nutrient Pollution." *US EPA*. -03-12T12:32:42-04:00 2013. Web. Apr 2, 2020
<<https://www.epa.gov/nutrientpollution/sources-and-solutions-agriculture>>.

- Algal blooms are another side effect of these chemicals³. These can harm fish, close beaches, and harm your personal water sources.

What Can You Do?

- Purchase and use a low phosphorus or phosphorus-free fertilizer⁴.
- Carefully follow the instructions on fertilizer packages in order to best protect the environment.
- Be sure to apply the right amount of fertilizer, at the right time of year, in the right placement.
- As an alternative to fertilizer, use grass clippings or lawn compost to fertilize your garden and grass.
- Restore field and stream banks by restricting animals' access to the banks, along with planting trees, shrubs, and grasses along the bank to prevent nutrient loss.

³ US EPA, O. W. "Nutrient Pollution." *US EPA*. -03-12T12:32:42-04:00 2013. Web. Apr 2, 2020 <<https://www.epa.gov/nutrientpollution/sources-and-solutions-agriculture>>.

⁴ "Fertilizer Fundamentals." *Fertilizer Canada*. Web. Apr 2, 2020 <<https://fertilizercanada.ca/about-fertilizer-canada/resources/faqs/>>.